SUPERIOR COURT OF THE STATE OF CALIFORNIA CONTRA COSTA COUNTY

v.

MSC12-00567

TENTATIVE DECISION ON REMAINING ISSUES

I. Introduction

through 50, inclusive,

PEOPLE OF THE STATE OF CALIFORNIA, ex

rel. CALIFORNIA AIR RESOURCES BOARD,

Plaintiffs,

Defendants.

BP WEST COAST PRODUCTS LLC and DOES 1

The People of the State of California ex rel. the California Air Resources Board (referred to in this opinion as "ARB") brought an action for civil penalties against BP West Coast Products LLC ("BP"). The Phase 1 trial began on May 4, 2015 and the Court rendered a decision on June 26, 2015.

The remaining issues came on for trial on March 27, 2017. Plaintiffs were represented by members of the Attorney General's office including Gary Alexander, Tiffany Yee, and Myung Park. Steve Brisby and Will Brieger of the ARB were in attendance. BP was represented by attorneys from Kirkland and Ellis, including Mark Holscher, Michael Shipley, Tanya Greene, and Steven Soule. BP's representative, Lisa Freeman was also in attendance.

This is the Court's tentative decision. Rule 3.1590(a). Pursuant to Rule 3.1590(c)(1) this tentative decision is the Court's proposed statement of decision, subject to a party's objection under Rule 3.1590(g).

This tentative decision includes rulings on the issues raised in BP's motion for nonsuit and its request for judicial notice.

The People shall prepare and serve a proposed judgment within ten days after the date of this order. Rule 3.1590(h).

Objections, if any, to this proposed statement of decision and to the proposed judgment shall be served and filed within 15 days after the proposed judgment is served. Rule 3.1590(g).

There has been no evidence concerning any Doe defendants; all are dismissed without prejudice.

II. The Motor Fuel Import Notifications

A. The Statute and Regulation

The parties dispute which regulation governs this matter. In its Phase 1 opinion, the Court examined that issue. Health and Safety Code § 43027 uses the same core language in each of its subparts: "Any person who...violates any provision of this part, or any rule, regulation, permit, variance, or order of the state board, pertaining to fuel requirements and standards, is liable for a civil penalty..." In the Phase 1 opinion, the Court explored how the facts alleged by the ARB, if proven, would demonstrate a violation of both 13 CCR 2265(a) and 2265(b). The question now is whether ARB has proven the alleged violations, and if so, what level of culpability attaches.²

As in the Phase 1 Opinion, for ease of reading, the Court will not always use "Health and Safety Code" and "13

CCR____." A reference to a section with five digits (e.g. § 43027) is to the Health and Safety Code. A reference to a section with four digits (e.g. § 2265) is to Title 13 of the California Code of Regulations.

² Although the Court finds that BP violated both § 2265(a) and (b), as discussed below in VI. The Penalty, the violation is for essentially the same act and therefore the Court does not assess a penalty for each.

The Court declines BP's invitation to revisit the Phase 1 rulings. It has considered the evidence cited by defendant and finds it does not alter the reasoning or the outcome of the issues decided in the previous phase of this case.

B. The Import Notifications at Issue and the Information on Them

Exhibit 2001 contains the parties' stipulations as to certain matters. Joint Stipulation #1 shows the ten ships in issue. It identifies 92 compartments of CARBOB carried on those ten ships.

Attachment A to the "People's Post-Trial Brief and Opposition to BP's Motion for Nonsuit or Judgment" ("PPTB") lists 100 compartments – citing the Joint Stipulation. (It lists 16 compartments for the OS Long Beach 0309, but the Joint Stipulation lists 12; and it lists 12 compartments for the OS Long Beach 0409, but the Joint Stipulation lists 8.)

Pages 15-16 of the PPTB show that plaintiff relies on Exhibit 112 to supplement the Joint Stipulation. Exhibit 112 shows 8 more compartments than were listed on the Joint Stipulation. See Exhibit 112, p. ARBCP000955 (4 compartments unloaded from the OS Long Beach at Richmond starting on February 10, 2009) and ARBCP000961 (4 compartments unloaded from the OS Long Beach at Richmond starting on February 24, 2009). Those documents are credible.

Therefore, the Court finds that there were 100 compartments of fuel subject to the Import Notifications at issue here.

Each Import Notification specified a percentage (by volume) of total aromatics contained in the CARBOB aboard that ship. On the Import Notifications at issue, the percentage ranged from 33.1 to 34.3. ARB says that in each case, the actual percentage exceeded that which was stated on the Import Notification. BP disputes that.

C. The Issues of Sampling and Analysis

1. The Issues

BP raises several issues about how ARB (or BP's contractor) sampled the CARBOB at issue, and how ARB analyzed the samples. (1) ARB did not analyze any of the samples in the manner prescribed by law. Thus, it says, there is no competent evidence of any violation. (2) ARB inspector Scott Underhill did not follow the proper sampling protocols when he took CARBOB from 24 compartments on 3 vessels on March 12, 18 and 19. (3) The ARB has failed to make a sufficient link between the retain samples provided by BP and the content of any of the individual compartments on shipments #1, 2, 3, 4, 5, 6 and 9.³ (4) Shipment #4 did not exceed the aromatics content stated on the Import Notification under ARB's method of proof. (5) The sampling of Tank 5 at Cherry Point did not meet the sampling standards and was not, therefore representative. That means that there is a failure of proof as to shipment #9.

The Court addresses each of these arguments.

2. The failure to chill the samples

There is little dispute as to the facts relevant to this argument. ARB did not chill samples of CARBOB before testing for total aromatic content. ASTM D5580 – the relevant test method – says that these samples should be chilled.

BP relies on § 2263, § 2296, and *People v. Mobil Oil Corp.* (1983) 143 Cal.App.3d 261 ("*Mobil*") to assert that all samples on which ARB relies for evidence of the aromatic content were prepared and analyzed in violation of the law and the applicable technical standards; therefore they should be disregarded.

In *Mobil*, the question was the validity of Reid vapor pressure measurements made by the ARB. The Court of Appeal explained,

³ These shipment numbers are taken from Joint Stipulation #1 on Exhibit 2001.

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Reid vapor pressure "... is an artificial construct which is the product of following the procedures specified in . . . ASTM D323-58. . . . The text of The Method contains the following caveat: Precautions [para.] 7. Gross errors can be obtained in vapor pressure measurements if the prescribed procedure is not followed carefully..." There is no room for variations, deviations, departures, and substitutions in such a procedure, whether based upon subjective preference or ease of performance.

People v. Mobil Oil Corp., supra, 143 Cal.App.3d at pp. 276-277.⁴ It is noteworthy that the trial court had found,

that the ARB had failed to follow the requirements of ASTM D323-58 in testing the vapor pressure of defendant's gasoline, that certain specified deviations by the ARB from the procedures prescribed by method ASTM D323-58 were substantial and meaningful, that there was "... a total failure of proof of any vapor pressure measurement as 'determined by ASTM D323-58';" and that plaintiff's evidence did not define the effect on the Rvp results which would flow from the deviations, alone or in combination, nor did it quantify what corrections would need to be made to its results to account for the combined effect of the various departures from the prescribed test method. People v. Mobil Oil Corp., supra, 143 Cal.App.3d at 266-267.

However, that is not to say that *any* failure to follow a given test method renders all results inadmissible. In *People v. Sangani* (1994) 22 Cal.App.4th 1120, the relevant statute required the analysis of materials to be performed by a certified laboratory. Nonetheless, the Court of Appeal affirmed a criminal conviction based on analyses from a non-certified laboratory. It said,

⁴ BP affirmed this description of Reid Vapor Pressure. (See, "Defendant BP West Coast Products LLC's Opening Brief for Phase 1 Trial on Units of Violation," filed April 1, 2015, p.8, n.10.)

we conclude the evidence would have been admissible even if certification were required. Failure to follow precise regulatory or statutory requirements for laboratory tests generally does not render the test results inadmissible, but instead goes to the weight accorded to the evidence. *People v. Sangani, supra,* 22 Cal.App.4th at pp.1136-1137.

See also *People v. Hale* (1994) 29 Cal.App.4th 730, 735-36:

The appropriate inquiry is whether the evidence was reliable to show hazardous waste disposal apart from whatever deviations there were from SW-846. That necessarily involves a case-by-case examination of the nature of any deviations from the EPA manual and the impact those deviations might have had on whether hazardous waste was, indeed, improperly disposed of.

Here, the issue is the percent, by volume, of total aromatics in a fuel. That is an objective measure. It is not (as Reid vapor pressure) an "artificial construct." So the question is whether there is sufficient evidence that the percentage of aromatics in a given sample was properly determined.

There was more than ample evidence of the reliability of the tests, despite the failure to chill the samples. ARB offered the testimony of Dr. Judson Cohan, a Ph.D. chemist who runs the ARB fuels laboratory in El Monte. He serves on ASTM committees that relate to petroleum products and analyses relevant to the issues in this case. His testimony was clear and credible.

Perhaps the best evidence of the reliability of the unchilled samples are the extensive results of ARB's participation in the ASTM Interlaboratory Crosscheck Program -- a validation process run by an outside, independent agency (the ASTM) to determine if a given laboratory is getting reliable results. The ARB laboratory has been participating in that program for twenty years. Each month, it has submitted to ASTM the results of its D5580 analyses (without chilling) of a sample provided by ASTM. Over that long span, it has consistently had an excellent record

for producing accurate results. As Dr. Cohan explained, the average of the difference between the ARB lab's results and the robust mean was near zero. (See also, e.g. Joint Stipulation #7.) In other words, even without chilling the sample, ARB obtained accurate results for total aromatics in its D5580 analyses.⁵

In addition, Dr. Cohan noted, many of the samples at issue were split with a laboratory (Caleb Brett) hired by BP. Caleb Brett chilled the samples; ARB did not. Yet the results of the two laboratories was quite consistent – most were within 0.1 percent (volume). That, he said, is "very close." (Compare Joint Stipulation #2 and 4.) Again, that is external validation of the accuracy of the ARB lab results. (Indeed, even if the Court were to disregard the ARB samples entirely, the Caleb Brett analyses evidence BP's violations.)

Dr. Cohan also explained how his (unchilled) results are further validated by participating in a program in which the ARB laboratory analyzes standard reference materials supplied by the National Institute of Standards and Technology. He reviewed quality control reports of those data for a three-year period centering on April 2009 and found the ARB lab's analyses for total aromatic hydrocarbons was off by approximately 0.011%. That is "extremely close" and another external validation of the ARB lab's practice.

Finally, Dr. Cohan testified that on occasion he has run the same D5580 sample in two aliquots: one chilled and one unchilled. In those instances, the two results show close agreement.

The principal witness called by BP on some of these points was Stuart Porter, a biofuels consultant from Canada. Although he is a qualified expert, his testimony was of limited utility and largely unimpressive. With regard to this issue, the Court found unhelpful his testimony about cooling samples and the (wholly unquantified) potential for degradation in unchilled samples. It was neither robust, useful nor persuasive.

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⁵ The Court is aware that an average may conceal wide swings in results. It has examined Joint Stipulation #7 carefully. There are no such wild swings. The results of the ARB laboratory analyses tend to be clustered close to the robust mean with only a few data points exceeding plus or minus 0.5. The ARB lab's z-scores were also within a reasonably tight range.

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In short, there was more than ample evidence that the failure to chill the samples did not affect the integrity of the results. Indeed, there was clear and convincing evidence that the ARB lab's results were accurate – despite the fact that the laboratory did not chill its D5580 samples.

3. The sampling of the on-ship compartments

An ARB air pollution specialist, Scott Underhill, sampled twenty-four compartments aboard three ships (#7, 8 and 10; *see* Joint Stipulation #5) on March 12, 18 and 19, 2009. BP says those samples are unreliable because they were not taken in compliance with § 2296 in two respects: one, he did not use the sampling apparatus described in § 2296(k)(1); and two, he did not properly clean the sample jars prior to taking the samples, see § 2296(d)(3). (*See* "Defendant BP West Coast Products LLC'S Phase II Trial Closing Brief" ("BPPTB") pp. 6-7.)

Mr. Underhill testified that the access to the compartments was configured in a way that would not allow insertion of the ARB's sampler. BP offered to permit him to use the ship's "MMC" sampler, which he did. There was no evidence that the use of the MMC sampler somehow affected the quality of the samples acquired. Moreover, it would be somewhat unjust for BP to import its CARBOB in compartments inaccessible to sampling with a device that meets all the specifications of § 2296 and thereby avoid a charge that its CARBOB did not meet the parameters described on its Import Notification.

BP also argues that Mr. Underhill testified that he did not clean the canisters into which he placed the collected samples. But that ignores his testimony that they were provided to him already cleaned.

The real question under § 2296 is whether the sample is "truly representative of the product." § 2296(b). Applying a preponderance of the evidence standard, the Court finds the samples were "truly representative." Indeed, there is no evidence that the use of BP's own sampling equipment led to any problem with the quality of the samples or that it was not "truly

representative." BP offered no persuasive evidence that the sampling procedures somehow impaired the integrity of the sample.

4. The use of the retain samples

ARB sampled three ships (#7, 8 and 10) in March 2009 and found that the CARBOB contained levels of total aromatic hydrocarbons in excess of that stated on the Import Notifications. So it asked BP if it had retained samples of the CARBOB shipped into California on other voyages. BP had 44 "retained" samples. ARB sent inspectors to Cherry Point, Washington to retrieve samples of those retains.

The question raised by BP is whether ARB has shown that the CARBOB in the retained samples fairly represents the CARBOB brought into California during voyages #1 through 6 and 9. BP raises two sets of questions: one, how the samples were collected, handled and stored; two, how ARB used the data from the retains to project what was in the compartments on the ships.

a. How the samples were collected, handled and stored

i. <u>Collection</u>

The samples were collected by a BP contractor, Matrix. The sampling of Tank #5 on March 9, 2009 (Exhibit 224) was different from all others, and is discussed below. But apart from that one episode, Matrix routinely took several samples from each tank. Mr. Bode testified that one of those samples was then set aside as the "retain" – having been taken as the "running average sample through the depth of the tank." (Bode PMQ Testimony, August 5, 2015, p. 268:2-8.6) In other words, the retain was an "all-level" sample which is representative of the

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⁶ Where deposition testimony is cited, see the parties' April 21, 2017 Joint Submission of Additional Evidence and Deposition Designations Offered by the Parties At Closing.

contents of the entire tank. BP uses those "all-level" samples to "final" the tank. (Bode PMQ Testimony, October 14, 2014, p. 37:21, 39:18-42:8.7) Mr. Bode testified,

[o]ur technicians are aware of proper sampling techniques and proper bottle fill levels. If there were a problem on any number of samples that were brought to us such that we were not able to perform the testing appropriately, our Cherry Point technicians are authorized and expected to have the Matrix sampler resample the tank.

(Bode PMQ Testimony, October 14, 2014, p. 50:7-13.)

He also conceded there was no reason to believe there was any infirmity in the sampling,

- Q. ...BP has no reason to believe that Matrix sampled incorrectly any of the lab sequence numbers that we've been talking about, correct?
- A. We've got no evidence to that fact, that samples were taken improperly. (Bode PMQ Testimony, August 5, 2015, p. 269:24-270:4.)

In short, except as to the March 9, 2009 sampling of Tank 5, there seems to be no credible evidence that the samples were not collected properly. Indeed, BP relied on them to "final" its tanks. It used those samples to determine the quality of its product.⁸

ii. Sampling – Tank 5

The sampling of Tank 5 on March 9, 2009 was different. There, Matrix did not take a "running sample" because there was so much snow on that day that it would have been unsafe to climb to the roof of the tank. (*See* Exhibits 224, 1239, 1241 and 1242.) Instead, Matrix took only a single tap sample.

Mr. Underhill testified that "a sample taken from a single tap on a refinery tank...would [probably] not be representative of the entire contents of that tank." (Trial Transcript, March 27,

⁷ It also has Matrix take samples from three locations in the tank (top, middle, and bottom), but those samples are not relevant to this discussion.

⁸ The results of this sampling are in evidence. (See Exhibits 209-226.)

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2017 [p.m.], Vol. 1, 145:9-15.) ARB submitted no further evidence on this point. It appears then, that the analysis of the sample taken from Tank 5 on March 9, 2009 is not sufficient evidence of the level of aromatics in that tank on that day.

That relates to the compartments on Shipment #9 (Overseas Long Beach 0609). 37,143 barrels of the 280,478 barrels on that ship came from Tank 5. ARB made no effort to parse the impact of those 37,143 barrels. Therefore, the Court cannot say what was in the compartments and finds the ARB has failed to carry its burden of proof with respect to shipment #9.

iii. Handling and Storage

BP questions whether the integrity of the samples was diminished in two ways. One, by the manner in which BP stored them between the time they were initially taken from the tanks and the date in mid-April 2009 on which a sample was given to ARB. Two, by the way in which BP split them between ARB and BP when Raak Veblen and Fred Schmidt (ARB employees) drove to Cherry Point to retrieve them.

As to the first, BP suggests that the samples might have degraded while in storage in a location that was not kept cold. As to the second, BP argues essentially that the retain samples might have changed characteristics due to the loss of volatile materials while the splits were being taken. That, they say, violates § 2296(h). (BPPTB, p.9.)

But the evidence for these points is slim to none. Frederick Zell, the BP employee who actually split the samples, was deposed, and his testimony was put in evidence. He had been the laboratory superintendent at Cherry Point. (Deposition of Frederick Zell, February 20, 2015, 9:22-23.) Mr. Zell had worked at the lab for close to twenty years, had handled samples of hydrocarbons, and knew the importance of handling samples correctly to maintain their integrity. (*Id.* 31:12-34.) At the time he split the samples he was "lab supervisor." (*Id.* 41:5-10.)

He found the retains stored in amber bottles with "vapor sealed caps." (*Id.* at 26:24-25.) There was no evidence that anything escaped the bottles while stored in sealed containers.

When he did the actual work of splitting the samples, he had the sample bottle open for approximately 10-15 seconds. (*Id.* 34:3-10.) Indeed, he testified, "I have done a lot of this type of work. And typically, during the second pipetting I was closing the bottle with my other hand." (*Id.* 36:8-11.) Obviously, he knew how to take care of sensitive samples.

ARB presented the testimony of Dr. Donna Hoel, a Ph.D. chemist who has served on several ASTM committees and subcommittees, including several related to petroleum products. Dr. Hoel testified, unequivocally, that "the retained samples that were supplied to ARB by the Cherry Point refinery...do, in fact, reflect the composition of the shore tanks." (Trial Transcript, Vol. 5, April 3, 2017 [a.m.], 703:24-704:2.9) She explained how she compared the vapor pressure measured in the original "finaled" tanks (from which the retains were taken) with the vapor pressure measured by the ARB lab (on the retains) and found they were "equivalent within the reproducibility of the test method." (*Id.* 706:21-23.) That allowed her to conclude that "the samples were properly sealed and that nothing – none of the higher – lower boiling components escaped." (Id. 707:5-7.) That is relevant to both of BP's points: that the samples were improperly (i) stored and (ii) split. 10

To the extent that Mr. Porter's testimony sought to contradict Dr. Hoel, it was neither supported by anything substantial, nor was it credible. Essentially, he said he had questions about whether samples stored more than thirty days maintained their integrity, and whether Mr. Zell used the best method for splitting the samples. On cross-examination, it became clear that his evidence was weak, at best. The Court gives it little weight.

or seem to consider it relevant.

⁹ The one exception related to a "tank that was labeled December 9th." (*Id.* at 704:4.) But the parties do not cite this

¹⁰ As to the splits, the Court notes that BP focused on the effect of opening the sample bottle for 10-15 second on the material retained in the sample bottle. There was no testimony about the effect on material being pipetted out and placed in the sample bottle given to the ARB.

b. How ARB used the data from the retained samples to state what was in the ship compartments

With respect to the shipments as to which it relies on the retained samples (Shipments 1, 2, 3, 4, 5, 6, and 9), ARB uses two methods to determine whether the aromatic content of the compartments of CARBOB exceeded the limit stated on the Import Notification. For all but shipment #4, it compares the *lowest* aromatics level in the retained samples with the limit stated on the Import Notification. For shipment #4 it relies on volume weighted averaging.

i. Volume Weighted Averaging

Mr. Schmidt, an ARB witness, testified that he has never before "been involved in a case in which the ARB used volume-weighted averaging to calculate the constituent parts of gasoline on a marine vessel." (Trial Transcript, Vol.2, March 28, 2017 [a.m.], 321:15-19.) That is because "there's no way to determine unique contents of each marine vessel compartment by using a volume weighted averag[e]." (*Id.* 321:20-23.) The ARB put forward no other substantial testimony to explain how and why it is proper to use a volume weighted average. ¹¹ Therefore, the Court finds the ARB has failed to carry its burden of proof with respect to shipment #4.

ii. Use of the lowest aromatics level

Shipment #2 was loaded from a single shore tank – Tank #7. (Joint Stipulation #1.) Therefore, the retain from that tank adequately characterizes what was in each of the two compartments on the Overseas Los Angeles 0309. (Shipment #2.)

Shipments 1, 3, 5, and 6 were loaded from two or three shore tanks. To compare the level of aromatics stated in the Import Notification for a given shipment against the *lowest*

¹¹ Ironically, a BP witness, James Lyons, used volume weighted averaging in some of his calculations. But that may have been because he thought ARB was going to present that method. (Trial Transcript, Vol. 7, April 5, 2017 [a.m.] 978-982.) ["...that was something that ARB was doing...We don't have samples from the actual vessels, and it's the only way to estimate or approximate what the composition of the fuels on the – the total composition of the fuels, to look at the total shipment value. We don't have any other information." *Id.* 981:21-982:2.])

aromatics level in the retained sample from the tanks that filled that ship is the *most favorable* case for BP. To use the other retained samples would only make it *less favorable* to BP.

For example, shipment #1 carried 321,750 barrels taken from shore tanks # 3, 5, and 7. (Joint Stipulation #1.) The analysis of the retained samples from those tanks showed the following aromatics levels according to Joint Stipulation #2:

Tank	Aromatics (vol %)	
7	35.3	
3	35.0	
3	35.0	
5	35.3	

The Import Notification for Shipment 1 said the CARBOB would contain no more than 33.1% (vol.) Aromatics. (Exhibit 112, ARBCP000956.) Thus, whether one compares the lowest retain analysis (35.0) or the highest (35.3) the result is the same. There is a violation.

The same pattern holds for shipments 3, 5, and 6. Indeed, it is not even a close question. In each instance, *all* of the measured values of aromatics in the retained samples (from lowest to highest) exceeded the level contained in the corresponding Import Notification.¹²

D. Summary

The following table compares the level of aromatics measured with the value of aromatics stated on the corresponding Import Notification as to the shipments for which the ARB has carried its burden of proof. (As to those shipments in which retains were used, the lowest value is stated.) The table also reflects the number of compartments on those ships.

 $^{^{12}}$ Although there was discussion of an exceedance of benzene in one instance, it has not been discussed separately in ARB's post-trial briefs.

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Shipment #	Import Notification	Measured level of	Number of
	Aromatics % (vol)	Aromatics	Compartments
1	33.1	35.0	16
2	33.5	35.7	2
3	33.2	35.7	8
5	34.0	36.0	14
6	34.3	36.0	12
7	32.6	35.5	6
8	33.4	36.2	8
10	33.4	35.4	10

In the case of shipments #7, 8 and 10, the "retain sample test results" on Joint Stipulation #2 are a fraction of a percent lower than the "ARB vessel compartment test results" on Joint Stipulation #5. The Court uses that since it is more favorable to BP, but it really makes no difference to the result.

Thus, the Court finds that the ARB has carried its burden of proving a violation with respect to shipments 1, 2, 3, 5, 6, 7, 8 and 10, comprising a total of 76 compartments. The ARB has proved that BP committed 76 violations of § 43027 with regard to the requirements of § 2265(a) and of 2265(b).

In addition, BP acknowledges that three of the ships were unloaded over the course of more than one calendar day. (BPPTB, 35:6.) That adds three violations under § 43030(a). ("[E]ach day during any portion of which a violation occurs is a separate offense.")

Thus, there are a total of 79 violations related to the Import Notifications and unloading of the fuel from the shipboard compartments.

III. Unloading the CARBOB and Moving It Downstream

ARB makes two arguments to establish "downstream" liability. One, that BP has violated § 2261(b)(1)(B). Two, that BP has violated § 2266.5(h).

A. Section 2261(b)(1)(B)

Section 2261(b)(1)(B) says, "[t]he remaining CaRFG Phase 3 standards and compliance requirements contained in this subarticle shall apply to all sales, supplies, or offers of California gasoline occurring on or after December 31, 2003." (Subarticle 2 contains §§ 2260 through 2276.)

Regulations must be read in context. So viewed, § 2261 is seen as a statement of *when* various parts of a complex set of reformulated gasoline regulations become effective. For example, § 2261(b)(1)(A) provides that certain cap limit standards "apply starting December 31, 2003," others "starting February 14, 2004 ...[or] February 14, 2006," still others "starting March 31, 2004... [or] March 31, 2006... [or] March 31, 2012." (In some of these cases, the regulation ratchets down the limits on certain parameters, such as benzene or sulfur, over a period of years.)

In that context, § 2261(b)(1)(B) provides, as a catch-all, that all other Phase 3 reformulated gasoline standards in subarticle 2 apply to "all sales, supplies, or offers of California gasoline occurring on or after December 31, 2003." In other words, some of the rules take effect on specified dates in 2003, 2004, 2006, or 2012. All others take effect on December 31, 2003.

ARB seeks to read this to impose other substantive regulations. It notes that § 2266.5(a)(1) equates gasoline and CARBOB for purposes of certain section, including § 2261. From that, it reasons, "the importer was subject to the Predictive Model compliance requirements

...for all downstream sales and supplies of CARBOB (under sections 2261 and 2266.5." (PPTB 18:7-10.)

But § 2265.5(a)(1) makes clear that all regulations – for both finished gasoline and CARBOB – take effect on the dates shown. It prevents a possible argument that some regulations have no effective date.

In addition, ARB's argument conflicts with the provision of § 2265 (the Predictive Model regulation) that describes the conditions under which a producer or importer may "sell or supply from its production facility or import facility a final blend..." § 2265(a)(1). To read § 2261 to apply the Predictive Model limits to sales other than from the import facility (the ships) – as ARB does -- would strain the language of § 2265(a)(1).

ARB's argument also runs contrary to the ARB's *Updated Informative Digest:*Amendments to the California Cleaner-Burning Gasoline Regulations (Sept. 19, 1995) which is Exhibit 1 to BP's Request for Judicial Notice filed May 19, 2017. There, ARB noted that a producer or importer may use the Predictive Model "to identify…limits applicable when gasoline is supplied *from the production or import facility.*" (*Id.* at p. 2, emphasis supplied).)

It does not appear that § 2261 was intended to impose additional substantive requirements on the sale of CARBOB downstream of the import facility.

B. <u>Section 2266.5(h)</u>

ARB argues that the mixing of CARBOB that does not meet the standards identified in the import notification violates § 2266.5(h). (PPTB, 20:5-18.) Section 2266.5(h) reads, in relevant part,

No person may combine California gasoline which has been supplied from a production or import facility with any nonoxygenate blendstock...unless...

¹³ The Request for Judicial Notice is granted. ARB's objections are overruled.

ARB argues that "for purposes of the regulations, Phase 3 made the words 'gasoline,' 'California gasoline,' and 'CARBOB' synonymous with each other. (§ 2265.5, subd. (a)(1).)" But, that section of the regulations creates an equality of definition for certain specified sections of the regulations – not including § 2265.5. Thus, the premise of ARB's argument fails.

"California gasoline" is defined in § 2260(a) as that which is ready to be put into a motor vehicle – essentially finished gasoline. CARBOB is not put into a motor vehicle unless and until it is oxygenated. As BP argues, the regulation cited by ARB prohibits mixing finished gasoline with CARBOB. There is no allegation of such an incident here.

BP also cites § 2266.5(f) which is more apposite. It is entitled "Restrictions on blending CARBOB with other materials." It prohibits mixing CARBOB with another substance, unless the latter is described in one of the 11 subparts of § 2266.5(f)(1). Subpart (B) allows CARBOB to be mixed with other CARBOB "for which the same oxygenate type, and the same amount (or range of amounts) of oxygen, was specified by the producer or importer at the time the CARBOB was supplied from the production or import facility." § 2266.5(f)(1)(B). There was no proof at trial that BP's CARBOB was blended with CARBOB that did not met this test. To the contrary, the only relevant testimony suggested it did. (See, *e.g.* the testimony of Ms. Ciccarelli and Mr. Hackett.)

The Court finds no "downstream" violation under either of the sections cited by ARB.

IV. The Retail Sales

A. Can there be a violation of § 2268?

ARB contends that BP also violated § 2268 which reads,

For the purposes of this subarticle, each sale of California gasoline at retail, and each dispensing of California gasoline into a motor vehicle fuel tank, shall also be deemed a sale or supply by any person who previously sold or supplied such gasoline in violation of any applicable section of this subarticle.

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of the seven ships" (PPTB 27:1-3) shown on Exhibit 448 yields 42, not 34 final terminal locations. However, ARB's principle is clear: each delivery to a "pipeline terminal" (Exhibit 448, Column O) results in a charge of one sale at retail. Applying that principle, the Court has done its own count with respect to the smaller number of violations shown, as explained below.

Here, "California gasoline" includes "CARBOB or transactions involving CARBOB." § 2266.5(a)(1). Thus, it may include retail sales of the CARBOB imported by BP.

BP argued in its motion for non-suit and elsewhere that § 2268 is "obsolete" and has been supplanted by SB 163's specific penalty policies. But BP conflates a regulation that establishes a basis of liability with a piece of legislation (SB 163) that repealed a method of calculating penalties based on a "per [retail gas station] fill-up."

The latter, which was the subject of much discussion in the Phase 1 briefing, was directed to the method of *calculating* penalties. (*See* BP's Request for Judicial Notice, filed April 1, 2015, Exhibits 11 and 12.) As ARB said in its Phase 1 briefing, it "relies on section 2268 to define violations, not penalties, which in turn, will factor into the *court's* determination of penalties under Health and Safety Code sections 43027-43032." (Reply to BP's Phase 1 Trial Brief from California Air Resources Board, filed April 20, 2015, 16:7-9.)

Here, penalties will be calculated (below) based on the current statutory scheme. That legislative directive will be used to calculate the penalty for all violations, including those that arise under § 2265 and those that arise under § 2268.

B. How many violations of § 2268 were proven?

Earlier in the case there was considerable discussion and briefing over the possibility of thousands of violations at the retail level, ARB has limited its charge to 34 violations.¹⁴ BP disputes whether ARB proved any of those violations.

Mr. Hackett testified for ARB. He spent twenty years at Mobil Oil in supply, distribution and trading. His work included "moving fuel oil around the West Coast." (Trial Transcript, Vol. 8, April 6, 2017 [a.m.] 1169:15.) He noted that "the last thing that a supplier wants to do is run a

¹⁴ It is not entirely clear how ARB counts 34 violations. Counting the "final terminal locations" for the "11 cargoes

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gas station out of gas." (*Id.* 1173:4-5.) So, he described, cogently, how fuel flows from a tanker, to a storage tank, through downstream terminals, to truck racks, to trucks and then to gas stations. (*Id.* 1173:8-17.) Using Exhibits 447 and 448 he traced BP's CARBOB from the dock to various pipeline terminals. Some terminals received more than one shipment of the fuel at issue in this case. But the number of receipts at pipeline terminals totals 42, not including Shipments 7, 8 and 10 which were recertified before delivery. (*See* Exhibit 448, Column O.) He also testified that as a general practice, fuel was delivered from there, ultimately to retail gas stations.

Mr. Hackett demonstrated a clear understanding of the fuel distribution system. It was patent from his testimony that the fuel shipped by BP was placed in a system that was designed for the purpose of supplying gasoline to retail gas stations where drivers could fill their tanks.

BP raises many "ifs" and "maybes." (BPPTB, 28:12-29:7.) But the Court finds that ARB has proved, by a preponderance of the evidence, that CARBOB imported by BP on the ships at issue resulted in deliveries to retail gas stations and sales to retail customers.

Of course, the Court may draw reasonable inferences from the evidence. (*Beck Development Co. v. Southern Pacific Transportation Co.* (1996) 44 Cal.App.4th 1160, 1204; *Fullerton Union High Sch. Dist. v. Riles* (1983) 139 Cal.App.3d 369, 383.) Here, there were approximately 80,000,000 gallons of fuel imported. ¹⁵ It strains credulity to think that now, eight years later, that fuel remains unsold. Mr. Hackett established that the purpose of importing the fuel was to move it to retail, that the system into which the CARBOB was placed was designed for the purpose of moving it to retail gas stations, and that fuel was trucked from pipeline terminals to retail gas stations. That is sufficient.

The question, though, is how many retail sales occurred. ARB has taken the conservative position that it will assert only one violation for each delivery to a pipeline terminal. The Court

¹⁵ As noted below, approximately 64 million gallons were out of compliance. Whether the number is 80 million or 64 million is not material with regard to this point.

has examined Exhibit 448 to determine how many such deliveries there were. The Court has not included in its count the deliveries from Shipments 4 and 9 for the reasons stated above. That excludes from the calculation lines 11-14, 19-31, and 41-45 on the first page of Exhibit 448. It also excludes the recertified shipments, *i.e.* lines 71-78 on page two of Exhibit 448.

Assessing one penalty for each of the remaining deliveries to a pipeline terminal from Shipments 1, 2, 3, 5, and 6 results in 23 violations. (*See* Exhibit 448, Column O, p. 1, lines 7-8, 15-16, 32-38, p.2, lines 51-53, 56-58, 61-63, 66-68.)

V. The Level of Culpability

The parties vigorously dispute the level of culpability that ought to attach to these violations. Indeed, BP has made a motion for non-suit as to ARB's second cause of action based on negligent violations of § 43027(b).

The issue centers on the errors made in BP's Cherry Point laboratory. There is essentially no dispute that the gas chromatograph (GC) that BP's lab used for D5580 testing for aromatics was producing erroneous readings. The reason for that, at base, was that the people using the machine were preparing the samples improperly.

BP did a "root cause analysis" of the problem after ARB notified it that shipments 7, 8 and 10 were not in compliance. The analysis found, among other things,

- 2) CH[erry]P[oint] Laboratory employee did not possess proper knowledge and training for [the Senior Tech] position.
- 3) Quality Control information from ASTM Round Robin testing was not widely communicated to peers, reported to supervision, and analyzed.
- 4) The CH[erry]P[oint] lab did not transfer complete information around quality critical role when the Laboratory organizational change (Lab Chemist Retired) occurred.

- Personnel changeover and duties [were] not assessed according to demands of position.
- 6) No comparison testing was performed between the old GC 5890 and new GC 6980 during the commissioning of the new instrument.

(Exhibit 271, pp. 2-3.)

The root cause analysis went into considerable detail. It explained that the employee in question (Amy Tannehill) did not understand the method she was charged with performing. "15.1 No training provided – Training was not provided to employee. 15.3.: Knowledge transfer not effective – Insufficient procedures/practices existed for handling of calibration samples." (*Id.* p.20.)

As to the round robin (the ASTM Interlaboratory Cross-Check Procedure), it found that neither horizontal nor vertical communication was effective within the Cherry Point lab. The failings included,

"Failure to recognize improper conditions or practices; -Failure to identify and manage quality control risks; -Failure to initiate preventive or corrective actions.... -Policies unclear and not up-to-date.... -Accountabilities around ASTM Round Robin data not clear between Technicians, Chemists, Lab Supervisor, and Lab Manager.... -No policy existed for reviewing ASTM Round Robin results."

(*Id.* p.21.)

With regard to the transfer of information, the Root Cause Analysis determined that there was "unclear accountability for actions," and that there was a "leadership failure to guide crew during 2006 transition of instrument ownership and retirement of chemist." "[I]nsufficient procedures/practices existed for handling of calibration samples." (*Id.* p.22.)

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In addition, the report found that Ms. Tannehill was "distracted by long-term vs. short-term job multi-tasking" and her "time to work on new GC 6890 instrument was limited…because of shift work responsibilities for daily job." (*Id.* p.23.) "Calibration/troubleshooting required multiple consecutive days during normal work hours, which was difficult when on shift." (*Ibid.*)

Ms. Tannehill testified. She was largely credible. However, it was clear that BP put her in a somewhat untenable position. Indeed, she testified that she was the "CH[erry]P[oint] Laboratory employee [who] did not possess proper knowledge and training for [the Senior Tech] position." (*Id.* p. 20.) She said she agreed with that conclusion of the Root Cause Analysis. In fact, she agreed with each of the conclusions of the analysis quoted above.

Ms. Tannehill has an undergraduate degree in physical anthropology, not chemistry. Her training in laboratory analyses was largely obtained on-the-job. There is no reason to doubt that she is well suited to follow procedures required to analyze the chemical properties of samples. But that is very different from saying that she had the background, training or experience to understand why a GC was producing erroneous readings or to realize it was human – not machine – error that was responsible.

Indeed, she knew from Rich Ellingsen, a laboratory chemist who trained her before he retired in June 2006, that the old GC was producing readings that were 10% low. Mr. Ellingsen had solved the "problem" by having a computer program adjust the GC's output data. Ms. Tannehill did not know why that was done or what caused the 10% error.

When the new GC arrived, Ms. Tannehill was charged with creating the written procedures to be used with it. She simply copied Mr. Ellingsen's erroneous instructions on how to prepare the sample, thereby perpetuating the 10% error. Again, it is not so much Ms. Tannehill's fault, as it is the fault of BP's managers who placed her in a position for which she had not been given sufficient training and experience.

Still, BP had ample opportunities to fix the problem. It participated, for years, in the ASTM Interlaboratory Cross Check Program. In that program, it had the opportunity to see how well its lab was analyzing aromatic samples.

That is the same round robin program in which the ARB lab participated. Recall, ARB's results were routinely close to the robust mean. By contrast, BP's results were abysmal. The Root Cause Analysis report notes that "D5580 Total Aromatics results were outside of the acceptable +/- 2 Z-score in 23 out of 38 months since January of 2006." (Exhibit 271, p. 11.)

The round robin results are contained on Exhibit 2001, Joint Stipulation #7. In the twelve months ending March 2009 (the time of the violations at issue here) the ASTM reported that BP's aromatics tests were so incorrect as to be rejected 6 times. In other words, 50% of the time, their results were simply unacceptable. In other months, the Z scores showed that the results were outside the range of -2 to +2 – also indicating an infirmity in the data. In addition, for almost all of the months shown on Joint Stipulation #7, the Z scores (for the samples that were not rejected), were almost uniformly negative numbers – meaning BP's lab was reporting results that were consistently low.

All of this put BP on notice that its laboratory was not properly analyzing for aromatics. For a very long time, it received monthly reports that showed it was unable to produce correct results for a D5580 analysis. Yet the actions it took to address that were scattered and wholly ineffective. It neglected to attend to a problem that was fundamental to its ability to comply with the law.

Dr. Hoel testified about the performance of the Cherry Point laboratory. She explained that its results were unsatisfactory and that the lab personnel had the opportunity to take the steps prescribed by the ASTM in the "Checklist for Investigating the Root Cause of Unsatisfactory"

¹⁶ BP sometimes argues that the Anderson-Darling scores show that the ASTM data were not reliable. However the Anderson-Darling scores for the year leading up to the violations in question were well within normal limits and do not give reason to question the accuracy of the ASTM's findings.

Analytical Performance." However, the laboratory failed to complete all the steps prescribed by ASTM. (Trial Testimony, Vol. 5 (a.m.), 723:6-724:18.) In addition, the laboratory never undertook a "cold eyes" review, which "most of us do at some point." (*Id.* at 725:7-12.) It is a review to "see if you are doing or saying something that you should not be saying." (*Ibid.*) Rather than having someone from outside the lab (or even the lab supervisor) review these issues, they were reviewed only by Mr. Bode and Ms. Tannehill. (*Id.* at 725:17-726:3.) The clear thrust of her testimony was that BP's laboratory personnel did not do what they should have done.

The Root Cause Analysis report explains how poorly the lab personnel dealt with the round robin results. At base, BP put in place a system in which (i) responsibility was placed on people who had insufficient training to deal with a serious problem; (ii) there was insufficient supervision of them to spot a problem as serious as the round-robin revealed; and (iii) there was no other system in place to catch the error. That is corporate negligence.

In defense, BP argues that Wasson – the company that supplied the GC – was to blame. That is not so. The GC worked just fine. The problem was in the preparation of the sample that was inserted into the machine. BP answers that a Wasson technician observed Ms. Tannehill and somehow approved of her sample preparation technique. The Court does not find credible testimony to support that view. Ms. Tannehill was equivocal, at best, on the point. In the end, she acknowledged on cross-examination that "no one from Wasson told you that your dilution was correct." (Trial Transcript, Vol. 11, April 11, 2017 [p.m.] 1792:18-20.)

VI. The Penalty

A, The Law

The parties agree that the Court's assessment of penalties is governed by § 43031, which reads.

- (b) In determining the amount assessed, the court, the Attorney General, or the state board, in reaching any settlement, shall take into consideration all relevant circumstances, including, but not limited to, all of the following:
 - (1) The extent of harm to public health, safety, and welfare caused by the violation.
 - (2) The nature and persistence of the violation, including the magnitude of the excess emissions.
 - (3) The compliance history of the defendant, including the frequency of past violations.
 - (4) The preventive efforts taken by the defendant, including the record of maintenance and any program to ensure compliance.
 - (5) The innovative nature and the magnitude of the effort required to comply, and the accuracy, reproducibility, and repeatability of the available test methods.
 - (6) The efforts to attain, or provide for, compliance.
 - (7) The cooperation of the defendant during the course of the investigation and any action taken by the defendant, including the nature, extent, and time of response of any action taken to mitigate the violation.
 - (8) For a person who owns a single retail service station, the size of the business.

The Court has considered all those factors other than the last, which does not apply to this case and as to which there was no evidence or argument.

B The extent of harm to public health, safety, and welfare caused by the violation

There are two important strands in this regard. One relates to the general integrity of the air pollution control laws; the other relates to the quality of the fuel imported.

With regard to the first, the integrity of the California Reformulated Gas Program depends on voluntary compliance by the regulated community. The evidence was clear: the state does not have enough inspectors to examine every tanker that docks in California, nor every tank that is filled by a refinery. Indeed, the chance of a given quantity of fuel being sampled by ARB staff is low. Were there not a high level of compliance by those who produce and import fuel, the state would have to employ a much larger force of inspectors at considerable expense. In that respect, BP's failure to operate its laboratory in a manner that would allow it to comply with the law harms the public welfare. It creates doubt about the integrity of the fuel program; it has resulted in the expenditure of considerable time (and money) by ARB staff to deal with BP's defalcations.

As is written in the ARB's penalty policy,

...reporting and certification obligations are important. Air quality programs cannot function properly without them and violations of these types of obligations warrant substantial penalties.

(Exhibit 114, p.22.)

On the other hand, there is limited evidence that the non-complying fuel actually resulted in significant amounts of excess emissions. It can be argued that it did, and it can be argued that it did not. Of course, each side argued one of those positions. But it is telling that to establish their positions, each had to use a different frame of reference – a different way of measuring the impact. The parties did not agree on how to measure whether an emission is "excess."

ARB essentially compared the fuel specified on the Import Notifications with the fuel actually imported. Mr. Cayabyab testified that the latter created 2.82 tons more NOx emissions and .12 tons more potency weighted toxic air contaminants than predicted by the Import Notifications.

However, Mr. Cayabyab actually calculated something of a hybrid version of excess emissions. He determined the difference by varying only the total aromatic hydrocarbons. In the base case, he determined the emissions that would have come from the fuel as described on an Import Notification. Then he changed only the total aromatic hydrocarbons – using the value measured in the retains – while keeping the other parameters as they were on the Import Notification. By comparing the predicted emissions from those two sets of numbers he stated an amount of "excess emissions."

Essentially, ARB's position is that the Import Notification sets the parameters that define what fuel may "legally" be imported. That is right. It then seeks to penalize emissions in excess of what may legally be imported. That finds some support in the ARB's penalty policy:

Whether quantifiable or not, whenever there is a violation of a requirement ARB is charged with enforcing and there are emissions to the air, the violation involves illegal, excess emissions....

(*Id.* at p.21-22.)

Thus, it is understandable that ARB had Mr. Cayabyab calculate emissions that were greater than those that would have been produced by the fuel BP said, on an Import Notification, it was bringing to California.

Dr. Solomon then testified that *any* excess emissions are a public health concern.

Although she has impeccable credentials, and testified persuasively, it was clear she could not pinpoint any particular health impact. The sum of her testimony was that if there are excess emissions they can be harmful.

On the other hand, BP presented James Lyons, a chemical engineer (and former ARB employee), who did a different "excess emissions" analysis. He criticized Mr. Cayabyab's analysis, saying first, that it did not consider the actual properties of the imported fuel.

Instead, Mr. Lyons took the actual, measured properties of the imported fuel and compared them to the "reference fuel" embedded in the Predictive Model. By doing that, he testified, most of the imported fuel passed the Predictive Model. Shipments 6 and 8 did not. However, Shipment 6 was within reproducibility and Shipment 8 was one of the three that was recertified before being released from the shore tanks.

Mr. Lyons also calculated the emissions that would be permitted to be created by the reference fuel embedded in the Predictive Model and compared that to the emissions from the fuel actually imported.¹⁷ From that, he concluded that the actual emissions were *less* than would have been permitted had BP imported reference fuel.

It should be noted, however, that Mr. Lyons' spreadsheet says "emissions analysis is performed for each shipment using ARB's volume-w[eigh]t[e]d approach..." (Exhibit 1019, Summary Page, Cell A28.) He testified that is what he did. (Trial Transcript, Vol. 7, April 5, 2017 [a.m.] 978-982.)

Yet, when ARB used volume weighted averaging to calculate the contents of Shipment 4, BP objected to the use of that method. The Court has found (above) that there is no support in the evidence for its use. That, therefore, affects the weight that can be given to Mr. Lyon's analysis.

Nonetheless, the essence of Mr. Lyon's testimony is that (i) had BP restated the Import Notification it could have brought most of this fuel into California legally, and (ii) BP could have imported fuel with higher levels of emissions (*i.e.* the reference fuel) and did not; its fuel was actually cleaner than the worst fuel permitted in California.

In effect, BP is considering the actual, real-world impact of its behavior. There is some force to that argument.

¹⁷ In his analyses, Mr. Lyons used both the ARB and Intertek values for the parameters in the fuel.

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But whether one considers the ARB's view of this, or BP's view of this, the result is not terribly dramatic: it appears that the actual impact on air emissions from the fuel imported by BP was somewhat limited. Emissions were likely a bit more than predicted by the Import Notification, and likely a bit less than what could legally have been imported. This is not a case in which there was a substantial impact on air pollution from wrongful behavior.

The nature and persistence of the violation, including the magnitude of the excess emissions.

The magnitude of the excess emissions has been discussed. The nature and persistence of the violations is a different matter.

These violations related to the importation and unloading of fuel between February 4, 2009 and March 19, 2009. (See Joint Stipulation #1.) That is not insignificant. It reflects the fact that BP's laboratory analyses of aromatics were unreliable and that the problem persisted without sufficient attention for quite a while.

The violations relating to the retail sales of this fuel likely occurred within roughly the same time frame. That time frame does not add much to the penalty analysis.

D. The compliance history of the defendant, including the frequency of past violations

Mark Stover is the chief of the field operations branch within the enforcement division of the ARB. He testified about BP's compliance history and compared it to other refiners in the Bay Area.

He reviewed ARB's settlement files covering the period from 2002 to 2010. In that time frame, ARB issued 9 NOVs (notices of violation) to Tesoro, 17 to Chevron, 18 to Shell and 29 to BP. (Trial Transcript, Volume 9, April 7, 2017, 1405:10-14. Six of the twenty-nine NOVs were issued to BP after the violations at issue in this case. (Trial Transcript, Volume 10, April

¹⁸ It appears that Mr. Stover may have been speaking about cases that were settled in that time frame.

10, 2017 [a.m.], 1437:21-23.) Approximately a dozen NOVs were settled on April 30, 2009 for a penalty of \$1,098,000. Exhibit 95. They appear to have involved 17 violations. (Exhibit 601.)

BP argues that the news release describing them said "most of the violations were clerical errors that led to inaccurate reporting to enforcement officials...[T]he mistakes did not lead to increased emissions..." (*Id.*) Yet the same news release indicated that for "four citations for shipping fuel that did not match BP documentation of blend" BP paid a penalty of \$110,000 – more than \$25,000 per violation. For one violation of excess sulfur it paid \$80,000.

BP points out that many of those NOVs related to its refinery in Carson, California which has now been sold. But it is the compliance history of the company, not the particular facility that is at issue here.

E. The preventive efforts taken by the defendant, including the record of maintenance and any program to ensure compliance

To the extent that this factor looks to pre-violation efforts, the discussion of the problems with BP's Cherry Point laboratory, discussed above, is on point. BP did not take adequate steps "to comply," nor did it make "systematic attempts to prevent or promptly identify...violations." (Exhibit 114, p. 22, ¶ (4).) The Court will not repeat the discussion about BP's negligence. But to the extent this factor can be read to address pre-violation work, that discussion is directly relevant. (See, however, the discussion of factor (6) in subsection G immediately below.)

To the extent that this factor relates to post-violation efforts to come into compliance, it cuts in BP's favor. Since 2009, BP appears to have brought its operations into compliance. It has not been found to have violated the air laws since 2010. It has made serious efforts to comply with the air laws, and those efforts appear to have been successful.

F. The innovative nature and the magnitude of the effort required to comply, and the accuracy, reproducibility, and repeatability of the available test methods.

The evidence shows that it did not take much for BP to determine how to comply with the law once ARB inspectors found it to be out of compliance. Indeed at least one other BP refinery knew exactly how to prepare a D5580 sample.

Ms. Tannehill testified that on May 21, 2009 at 4:47 p.m. Mr. Torpey sent an e-mail to Eugene Zaluzec who worked at the laboratory at BP's Carson refinery. (See Trial Transcript, Vol. 11, April 11, 2017 [p.m.], p.1794-1798.) He merely asked for a copy of the D5580 operating procedure used in Carson. "This would be specific to a technician stepping through a procedure to run a gasoline sample." (Exhibit 272.) The following morning, at 10:24 a.m. Mr. Zaluzec shared the procedure with the Cherry Point laboratory. (*Id.*) Within another three minutes, Mr. Torpey passed it along to Ms Tannehill and others in the Cherry Point laboratory. He observed that it "uses much of the language from the ASTM method, which we can always get by reading the ASTM method." (*Id.*)

BP Cherry Point could have complied without any innovation. The magnitude of the effort required to comply was slight. "Accuracy, reproducibility, and repeatability of the available test methods" was well within its reach. There is nothing about this factor that operates in BP's favor.

Indeed, the Penalty Policy says this factor "refers to creative methods or unusual efforts to comply that should be encouraged.... [It] does not refer to efforts that are common in the industry." (Exhibit 114, p. 22.)

If anything, this factor underscores how easy it would have been for BP to have corrected its laboratory problem and avoided the Notices of Violation.

G. The efforts to attain or provide for compliance.

To this extent that this factor "refers to actions taken *prior* to the violation to insure compliance," (Exhibit 114, p.22, \P (6)) it implicates the laboratory problems discussed above.

Mr. Stover testified that this factor is "essentially what is in [factor] four," but it is related to long-term policies and practices. (Trial Transcript. Volume 9, April 7, 2017, 1407:7-9.) Those long-term policies and practices – dating back to the time of Mr. Ellingsen have been described above.

It is true that BP brought in technicians from Wasson to seek to fix their problems. However, that was ineffective. And the results of the Interlaboratory Cross-Check Program warranted more attention than BP gave them. Its long-term policies and practices remained intact and incorrect.

H. The cooperation of the defendant during the course of the investigation and any action taken by the defendant, including the nature, extent, and time of response of any action taken to mitigate the violation.

Every witness who addressed this subject agreed: BP was cooperative during the course of the investigation. It responded promptly to ARB's requests for information – even on very short notice. It worked to lock down the three shiploads of non-complying fuel and get those quantities recertified before moving them further into the stream of commerce. The one e-mail argued by ARB (Exhibit 307) is relatively minor compared to BP's overall cooperation. And BP disclosed the information described in that exhibit in a later submission.

I. Other factors

BP argues vigorously that the penalty in this case should be comparable to the penalty agreed to by Tesoro in 2006. (Exhibits 747 and 996.) ARB says that is not a sufficient comparison.

The argument about Tesoro is, at bottom, an argument about consistency in the application of the Penalty Policy. The Court agrees that justice requires treating similar cases similarly. It has, therefore, studied these matters carefully. In addition, it has found it helpful to look at more than just that one settlement.

In 2004, during an inspection of the Tesoro refinery in Martinez, ARB discovered four batches of CARBOB and gasoline that had greater concentrations of aromatics than were stated on their Predictive Model reports. Further investigation showed that Tesoro's gas chromatograph had not been properly maintained. ARB obtained some retain samples and found additional violations. In all, it found eleven batches of fuel were out of compliance over a period of 26 days. (Exhibit 996.) A little more than 40 million gallons of fuel was involved, about four-elevenths of which (36%) exceeded the Predictive Model. (Trial Transcript, Volume 10, April 10, 2017 [a.m.], 1498:23 – 1499:16.) For that, Tesoro paid \$325,000 in cash and promised an additional \$100,000 worth of emissions reductions. (*Id.* 1499: 19 – 1500:1.) It seems accurate to say Tesoro paid a total of \$425,000 in 2006 for these violations.

It appears the facts of the Tesoro settlement are similar to those of the present case in many respects. However, BP's summary of that settlement does not account for all of the factors to be considered, including, for example, the volume of fuel at issue, the company's compliance history and the difference between strict liability and negligence.

ARB introduced evidence of another Tesoro settlement – related to violations that occurred in 2009 and 2010. (Exhibit 558.) There, (in late 2014) Tesoro agreed to pay \$1,014,000 for what are stated to be 52 days of violation. The potential penalties for those violations were reduced "in part because the alleged violations were innocent and inadvertent, Tesoro made diligent efforts to comply, to reduce the number of days of violation, to cooperate with the investigation and to take steps to help prevent recurrence of similar situations." (*Id.* p.5.)

It is of some note that the penalty, on a strict liability basis, was stated to be \$19,500 per day.

(Id. p.4.)¹⁹

Both Tesoro settlements were grounded on strict liability. At the time of the first settlement, Tesoro had a better record of compliance than BP. Tesoro settled the second case for a higher "per day" amount than the first, suggesting, as Mr. Stover testified, that compliance history counts. The second set of violations is penalized more severely than the first.²⁰

We also have another BP settlement that is relevant to its compliance history. It is evidenced by Exhibits 95 and 601. There, BP and ARB settled seventeen violations for \$1,098,000. "BP voluntarily reported many of the matters to the CARB...and these matters caused little or no harm to the public health, safety, and welfare." (Exhibit 95, p.4, ¶ 5.) "The mistakes did not lead to increased emissions..." (Exhibit 601.) In addition, these were all assessed as strict liability offenses. (Trial Transcript, April 10, 2017 [a.m.], 1448:16-19.) Still, BP agreed to pay more than a million dollars in penalties. As noted above, "four citations for shipping fuel that did not match BP documentation of blend" were penalized a total of \$110,000." Exhibit 601. (That is \$27,500 per violation. Here we have 76 such violations. Proportionately, that would be fine of \$2,090,000; not considering the difference between strict liability and negligence.)

An analysis of these other settlements suggests a few things. The earlier settlements were all concluded on a strict liability basis. (\S 43027(c).) The maximum penalty in the first Tesoro case was reduced (to \S 425,000) because the violations resulted in minimal excess emissions and Tesoro "has voluntarily agreed to produce gasoline that will more than offset these excess emissions." (Exhibit 747, p.3, \P 20.)

¹⁹ There was not much testimony about this settlement. However Exhibit 558 indicated the issues involved both the offer for sale of gasoline with olefin content greater than the Predictive Model limit and the unlawful mixing of conventional gasoline with CARBOB. (*Id.* p.2.)

²⁰ The second settlement said it was based on \$19,500 per day. If one considers the first Tesoro settlement to have been for \$425,000 and to involve 26 days, that's a daily rate of \$16,346.

The maximum penalty in the second Tesoro case was reduced (to more than a million dollars) because of the "innocent and inadvertent" nature of the violations, Tesoro's "diligent efforts to comply" and so on.

Similarly, the maximum penalty in the earlier BP case was reduced (to more than a million dollars) because BP "voluntarily reported many of the matters to CARB, BP cooperated with the CARB in its investigation of these matters, BP voluntarily and expeditiously implemented corrective actions, and these matters caused little or no harm to the public health, safety and welfare." (Exhibit 95, p.4, \P 5.)

The compliance history of the two companies is very different. At the time of the first Tesoro settlement, it appears to have had a limited history of violations. (See Exhibit 996.) At the time of the second Tesoro settlement, it paid considerably more in settlement.

Only nine Notices of Violation were issued to Tesoro in the same time frame in which BP had 29 NOV's. (Trial Transcript, April 7, 2017 [a.m.], 1405:10-14.) As Mr. Stover testified, "you would not treat a company that had nine violations in that time frame the same as you would treat a company that had 29 violations in that period of time." (*Id.* 1405:16-19.) Indeed, as shown in Exhibits 95 and 601, the amount paid by BP in the April 30, 2009 settlement exceeded one million dollars – much as the second Tesoro settlement did.

The first Tesoro settlement involved approximately 40 million gallons of fuel – about 36% of which (14.4 million gallons) exceeded the Predictive Model. This case involves approximately 64 million gallons.²¹ The first Tesoro case involved 11 batches of fuel. Here, we have 76 compartments of fuel plus 23 retail sales.

In short, the first Tesoro settlement is instructive, but it cannot be the whole basis of comparison. It was a strict liability penalty, involving a smaller quantity of fuel, imposed on a

²¹ ARB has always said approximately 80 million gallons. But if the quantities contained in Shipments 4 and 9 are deducted, the total is approximately 63.6 million gallons. See Joint Stipulation #1 (loads vol. (bbl) multiplied by 42 gallons per barrel).

company with a limited history of violations, and several mitigating factors, including emission offsets. One cannot compare BP to Tesoro without also considering such things as BP's compliance history, the second Tesoro settlement, and the different bases of liability, *i.e.* strict versus negligent.

In addition, a review of the prior BP settlements shows that on a per violation basis, the strict liability penalties were \$700 (Exhibit 103, self-reported violation occurring in 2009, settled on November 8, 2011), \$5,000 (Exhibit 104, 2 inadvertent violations occurring in 2010, settled on November 17, 2011), \$5,700, 7 days of inadvertent violations occurring in 2008, settled November 8, 2011), \$15,000 (Exhibit 118, 1 inadvertent violation occurring in December 2009, settled on November 8, 2011), and \$17,500 (Exhibit 120, 2 inadvertent violations occurring in 2009, settled on November 19, 2011).²²

As discussed above, the Court has found that BP violated both § 2265(a) and (b). However, the conduct giving rise to those two categories of violations is nearly identical. It appears to the Court appropriate to assess penalties for only one violation in each instance in which there has been a violation of both § 2265(a) and § 2265(b). Thus, the Court considers 76 compartments of fuel (plus 3 violations for those which spanned two days) and 23 retail sales for a total of 102 violations.

The Court gives considerable weight to the fact that BP has not had a notice of violation in several years. It appears to have paid serious attention to its obligations to comply with the air pollution laws, and for that it is entitled to significant credit. So, to the extent that a penalty is intended to induce current compliance, it seems a diminished factor. But to the extent that a

²² In addition, there were (1) an unspecified number of violations (including not less than 70 days) in 2002 and 2003 that BP settled for \$200,000 on October 13, 2006 (Exhibit 117) and (2) a self-reported violation involving a tankload of fuel that did not meet the predictive model and was shipped to twelve California service stations in 2007, settled for \$19,000 on September 21, 2010 (Exhibit 121).

penalty is intended to punish a company for not having come into compliance sooner, despite a history of non-compliance, BP's current lawfulness mitigates but does not excuse its violations.

VII. Conclusion

Under § 43027 the maximum penalty for 102 negligent violations is \$ 5,100,000.²³ Taking into account all of the factors discussed above, all of the arguments made by the parties, and considering how to calibrate a fair penalty in light of the precedents adduced by the parties, the Court assesses a penalty of \$ 2,542,000.

That takes into account all the factors discussed above as well as the law and policies cited by both parties. It considers, among other things, the amount BP and Tesoro previously paid for *strict liability* violations of a similar nature, the limited additional impact created by the chance occurrence that some ships were offloaded over a two day period, and the modest impact on air quality. While the penalty is considerably less than the maximum for a negligent violation, it represents considerably more per violation than the most BP has previously paid for settlement of a strict liability case.

 23 Were the Court to assess penalties for § 2265(a) and § 2265(b) there would be a total of 178 violations and a maximum penalty of \$8,900,000. (The unloading that spanned two days would only be counted once.) Were these to be considered strict liability violations, the maximum penalty would be \$6,230,000.

The reduction in the maximum penalty also reflects, in very significant part, BP's compliance record since the time these violations were committed. It seems clear that BP has made great efforts to come into and remain in compliance. That is commendable and this decision reflects that. Had BP not had a clean compliance record for the last several years, the penalty would have been considerably larger.

Dated: August 23, 2017

Hon. Barry Goode cn=Hon. Barry Goode, o, ou, email=cxlit@contracos ta.courts.ca.gov, c=US 2017.08.23 08:26:37

Barry P. Goode Judge, Superior Court

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