

FILED

MAY 5 2005

HEARING BOARD
BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

MARY ROMAIDIS
CLERK
HEARING BOARD
BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

**BEFORE THE HEARING BOARD OF THE
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
STATE OF CALIFORNIA**

In the Matter of

Docket No. 3492

THE AIR POLLUTION CONTROL OFFICER of the
BAY AREA AIR QUALITY MANAGEMENT DISTRICT

STIPULATED CONDITIONAL
ORDER FOR ABATEMENT

Complainant,

vs.

(HEALTH AND SAFETY CODE
SECTION 42451(b))

TESORO REFINING & MARKETING CO., GOLDEN
EAGLE REFINERY

Site No. B2758

Respondent.

The above-captioned matter is an "Accusation and Request For Conditional Order For Abatement" filed by Complainant, the Air Pollution Control Officer ("APCO") of the Bay Area Air Quality Management District ("District") against Respondent, Tesoro Refining & Marketing Co. ("Tesoro"). The APCO filed its Accusation on February 23, 2005, seeking an order from this Hearing Board requiring Tesoro to shut down a process unit known as the Fluid Coker Unit, Source S-806, unless Tesoro satisfies certain conditions. This Accusation was assigned Docket No. 3492.

On March 8, 2005, Tesoro filed a "Notice of Defense" and "Statement By Way Of Mitigation" requesting a hearing and expressly denying all allegations of the Accusation.

An initial hearing was held on April 7, 2005, and a further hearing was held on May 5, 2005. At both hearings, the APCO was represented by Assistant Counsel Alexander G. Crockett, Esq., and Tesoro

1 was represented by Bruce C. Paltenghi, Esq. All hearings were duly noticed in accordance with

2
3 **WRITTEN EXPLANATION OF ACTION**

4 Because the parties have stipulated to the entry of this Order, the Hearing Board must include a
5 written explanation of its action in this Order, but it is not required to make any factual findings to support
6
7 action as follows.

8 The parties have agreed upon a course of action to address the problems identified in the
9

10
11
12
13
14
15 Additionally, Tesoro will review various operating and maintenance procedures; provide additional

16
17 The Hearing Board therefore believes that the parties' agreed course of action is in the public

18
19 **ORDER**

20 WHEREFORE, pursuant to Sections 42451(b) and 42452 of the California Health & Safety Code,

- 21
22
- 23 1. The APCO's Request for a Conditional Order For Abatement shall be and hereby is
 - 24
 - 25 2. Tesoro is hereby ordered to cease and desist from operation of its Fluid Coker Unit
 - 26
 - 27
 - 28

1 I.

2 IMPLEMENTATION OF BACKUP SYSTEM FOR NO. 5 BOILER

3 3 Tesoro shall identify and evaluate the feasibility of implementing any and all appropriate
4 technologies, processes, and/or equipment that could serve as a backup system for the No. 5 Boiler
5 (Source S-903) as a means to accept and treat Coker flue gas emissions. Tesoro shall evaluate each
6 identified alternative based on the following criteria:

- 7 a. effectiveness at preventing pollution and violations of applicable District
8 regulations
9 b. cost
10 c. any ancillary or indirect positive or negative impacts on Tesoro or the public health
11 and welfare
12 d. time required for implementation
13 e. any other relevant factors identified by Tesoro or the APCO

14 Tesoro shall submit a status report to the Hearing Board presenting the pros and cons of each alternative
15 evaluated, and proposing a preferred alternative, by July 1, 2005. Prior to submitting the status report,
16 Tesoro shall meet and confer with the APCO regarding the status report's contents. The Hearing Board
17 may hold a hearing, upon its own motion or upon the request of any party, to consider and review the
18 matters presented in the status report, including the preferred alternative.

19 4 After submission and review of the status report pursuant to Paragraph 3 above, Tesoro
20 shall proceed to develop a detailed engineering proposal for the preferred alternative (or as otherwise
21 required by further Order of the Board). By September 15, 2005, Tesoro shall submit a Final Engineering
22 Report to the Hearing Board setting forth the final engineering proposal. The Final Engineering Report
23 shall contain increments of progress to implement the preferred alternative (such as engineering,
24 permitting, procurement of parts, installation and tie-in). Prior to submitting the Final Engineering
25 Report, Tesoro shall meet and confer with the APCO regarding the Report's contents. Following
26 submission of the Final Engineering Report, the Hearing Board shall hold a further hearing in this matter
27 to review the Final Engineering Report and amend or modify this Order to require implementation of the
28

preferred alternative (or as otherwise ordered at the further hearing) along with the appropriate increments of progress and associated due dates.

5 Tesoro shall investigate the cause(s) of emissions violations that have occurred in connection with startup of the Coker/No. 5 Boiler, and shall take all appropriate corrective actions to address the cause(s) identified so that Coker-startup-related emissions problems do not recur. Tesoro shall complete its investigation and provide a status report to the Hearing Board on the cause(s) and the scheduled corrective actions taken (or to be taken) no later than July 1, 2005

8 **II.**

9 **INTERIM IMPROVEMENTS TO CURRENT BACKUP SYSTEM PENDING**

10 **IMPLEMENTATION OF LONG-TERM CORRECTIVE SOLUTION**

11 6. Tesoro shall maintain the No. 5 Boiler (Source S-903), the No. 6 Boiler (Source S-904), the bypass line between them, and any associated equipment in such a condition that flue gas from the Coker can be bypassed from No. 5 Boiler to No. 6 Boiler in the shortest reasonable time. All reasonable measures shall be implemented by Tesoro to shorten the bypass time

15 7. Tesoro shall demonstrate compliance with the requirements of Paragraph 6 above by conducting a critical path analysis of the steps necessary to bypass Coker flue gas from the No. 5 Boiler to the No. 6 Boiler (including the preparation of a Program Evaluation and Review Technique (PERT) chart). For each step identified by the analysis, Tesoro shall document:

- 19 a. the measures it has taken or plans to take to reduce the time necessary to complete
20 that step; and
21 b. why further steps to reduce the time further would not be reasonable.

Tesoro shall submit a report containing this information to the Hearing Board no later than July 15, 2005

23 8. If at any time the APCO believes that Tesoro is not in compliance with the requirements of Paragraph 6 above, the APCO shall notify Tesoro in writing of the area(s) in which the APCO contends that Tesoro's compliance is deficient, and the parties shall meet and confer in good faith, in person or by telephone, to attempt to resolve the APCO's concerns. Tesoro shall not be deemed in violation of Paragraph 6 before the APCO has provided Tesoro notice and the parties have met and conferred as

required by this Paragraph 8.

2 9. Tesoro shall repair and maintain the Electrostatic Precipitator on the No. 6 Boiler ("ESP"
3 (Abatement Device A-11) such that the No. 6 Boiler is capable of handling the maximum reasonably
4 anticipated volume of Coker flue gas without causing any violation of District regulations. If the No. 5
5 Boiler is out of service and Tesoro directs Coker flue gas to the No. 6 Boiler, and the No. 6 Boiler
6 experiences violations of District regulations as a result of inadequate ESP abatement capacity, then
7 Tesoro shall immediately shut down the Coker.

8 10. By July 15, 2005, Tesoro shall document that the ESP currently has sufficient abatement
9 capacity to handle the maximum reasonably anticipated volume of Coker flue gas without causing
10 violations of District regulations.

11 1 Tesoro shall improve and maintain the leak tightness of the No. 6 Boiler, the Coker flue
12 gas bypass piping between the No. 5 Boiler and No. 6 Boiler, and all associated equipment, such that the
13 APCO can carry out routine inspections and source (stack) testing at the No. 6 Boiler while firing Coker
14 flue gas without having to wear Self-Contained Breathing Apparatus. Tesoro shall develop an inspection
15 and testing protocol to demonstrate compliance with this requirement, and shall submit such protocol to
16 the APCO by June 15, 2005, for review and approval

17 12. Tesoro shall conduct weekly inspections of the No. 5 Boiler, the No. 6 Boiler, the bypass
18 line between them, and any associated equipment, to provide that all equipment is in a condition such that
19 flue gas from the Coker can be bypassed from No. 5 Boiler to No. 6 Boiler in the shortest reasonable time
20 as required by Paragraph 6 above. Tesoro shall record the results of the inspections required by this
21 Paragraph 12 in writing and shall maintain the records for a period of at least 5 years, from the date the
22 record was created, and shall make the records available to the APCO upon request.

23 13. Tesoro shall conduct monthly inspections of the No. 6 Boiler to provide that:

- 24 a. the No. 6 Boiler ESP is in a condition that will allow the No. 6 Boiler to be fired on
25 Coker flue gas without causing violation of District regulations as required by
26 Paragraph 9 above; and
27 b. the No. 6 Boiler is in compliance with the CO leak tightness requirements of
28

1 Paragraph 11 above.

2 Tesoro shall record the results of the inspections required by this Paragraph 13 in writing and shall
3 maintain the records for a period of at least 5 years, from the date the record was created, and shall make
4 the records available to the APCO upon request.

5 **III.**

6 **PREVENTATIVE MEASURES TO REDUCE POTENTIAL FOR UNCONTROLLED**
7 **SHUTDOWN OF NO. 5 BOILER**

8 14. Tesoro shall review and update its operating and maintenance procedures for the No. 5
9 Boiler as follows:

- 10 a. Tesoro shall review all No. 5 Boiler operating and maintenance procedures
11 (including, without limitation, procedures relating to the Boiler's attemperation
12 water and tube temperature monitoring systems) and identify any and all
13 deficiencies for operating procedures by May 15, 2005 and for maintenance
14 procedures by November 15, 2005.
- 15 b. Tesoro shall rewrite the No. 5 Boiler operating and maintenance procedures, as
16 necessary to address any deficiencies for operating procedures, by June 15, 2005
17 and for maintenance procedures by December 15, 2005.
- 18 c. By June 15, 2005, all No. 5 Boiler operating procedures shall include a requirement
19 that operators document each specific, discrete step completed by recording the
20 date and time the step was completed and the initials of the operator who
21 completed it. All procedures shall also include a requirement that all measurements
22 required to be made by operators must be recorded and the records maintained for a
23 period of at least 5 years from the date the record was created.
- 24 d. By June 15, 2005, Tesoro shall make available for the APCO's review and
25 approval all revisions made to No. 5 Boiler operating procedures. By December
26 15, 2005, Tesoro shall make available for the APCO's review and approval all
27 revisions to No. 5 Boiler maintenance procedures. Review of these procedures by
28

1 the APCO shall be conducted at Tesoro's refinery.

2 15. Tesoro shall train (or retrain) all No. 5 Boiler operators and maintenance personnel on the
3 No. 5 Boiler's modified operating and maintenance procedures identified in the provisions of Paragraph
4 14 above. Such training (or retraining) shall be done for operators by July 15, 2005 and for maintenance
5 personnel by January 15, 2006.

6 16. By May 15, 2005, Tesoro shall identify the key operating parameters and associated limits
7 for the No. 5 Boiler and No. 6 Boiler, and shall implement a Documentation Program to record the key
8
9 being fired on Coker flue gas. The Documentation Program shall specify the frequency and method of
10
11
12

13 17. Beginning no later than May 15, 2005, Tesoro shall ensure that a management-level
14
15 pursuant to Paragraph 16 above. This review shall meet the following requirements:

- 16 a. The staff member that conducts the review shall certify in writing that the review
17 was performed.
- 18 b. The certification shall either:
- 19 i. state that each key operating parameter is in compliance with its associated
20 limits and has been throughout the week reviewed; or
- 21 ii. identify each key operating parameter that is not in compliance with its
22 associated limits or was not at any time during the week reviewed, and state
23 that the other key operating parameters are in compliance with all associated
24 limits and have been throughout the week reviewed.

25 For each key operating parameter that is identified as being or having been out of
26 compliance with any of its associated limits pursuant to subsection b.ii. of this
27 Paragraph 17, the certification shall identify what steps have been taken and/or will
28

1 be taken to address the situation and bring the parameter back within the limit
2 involved.

3 c. The certification shall identify all monitoring devices on the No. 5 Boiler and
4 associated equipment that are inoperative or have been inoperative for greater than
5 24 hours during the week reviewed.

6 d. The certification shall be reviewed by Tesoro's Environmental Manager or
7 Refinery Manager, or by the person acting in the capacity of Environmental
8 Manager or Refinery Manager should the Environmental Manager or Refinery
9 Manager be unable to conduct such a review because of absence from the refinery,
10 within one week following the date the certification is made. The person
11 performing the review required by this subparagraph 17.d. shall mark the
12 certification with their initials and the date of their review to indicate that they have
13 reviewed the certification.

14 e. Tesoro shall maintain copies of all such certifications for a period of at least 5 years
15 from the date the record was created, and shall make them available to the APCO
16 for inspection upon request.

17 18. Beginning no later than July 1, 2005, Tesoro shall implement a system (the "DCS system")
18 to record electronically key operating parameters that are measured at the No. 5 Boiler and No. 6 Boiler.

19 19. Any key parameters that are not electronically recorded at the No. 5 Boiler, and at the No.
20 6 Boiler when firing Coker flue gas, Tesoro shall record in the manner and method, and in such
21 frequency, as set forth in the Documentation Program Tesoro is required to implement pursuant to
22 Paragraph 16 above

23 20. Tesoro shall notify the APCO:

- 24 a. whenever it discovers that any key operating parameter is not in compliance with
25 any of its associated limits; and
26 b. whenever it commences preparations for bypassing Coker flue gas from the No. 5
27 Boiler to the No. 6 Boiler.

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

IV.

MISCELLANEOUS PROVISIONS

21 The parties, or either of them, shall notify in writing, by an original and nine (9) copies, the

22 This Order may be modified or amended by further order of the Hearing Board.

23 This Order is not intended to and shall not be construed to have the effect of permitting a
24 variance.

25 The Hearing Board shall retain jurisdiction of this matter.

26 In addition to all reports to the Hearing Board required by the terms of this Order, Tesoro

27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

26 This Order shall become effective immediately upon the filing of this Order.

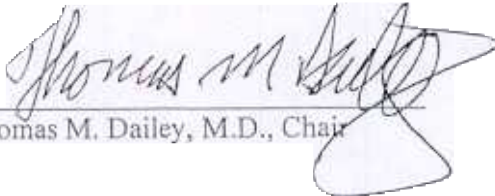
Moved by: Christian Colline, P.E.

Seconded by: Terry A. Trumbull, Esq.

AYES: Christian Colline, P.E.; Allan R. Saxe, Esq.; Julio Magalhães, Ph. D.; Thomas M. Dailey,
M.D.

NOES: None

NON-PARTICIPATING: None


Thomas M. Dailey, M.D., Chair

5-5-05
Date