



## FACILITY PERMIT TO OPERATE

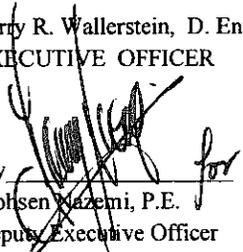
**BP WEST COAST PROD., ARCO COLTON  
2395 RIVERSIDE AVE  
BLOOMINGTON, CA 92316**

### NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.  
EXECUTIVE OFFICER

By  for  
Mohsen Yazemi, P.E.  
Deputy Executive Officer  
Engineering & Compliance



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PROD., ARCO COLTON**

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**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

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**Facility Equipment and Requirements  
(Section D)**

This section consists of a table listing all permitted equipment at the facility, facility wide requirements, all individual Permits to Operate issued to various equipment at the facility, and Rule 219-exempt equipment subject to source-specific requirements. Each permit and Rule 219-exempt equipment will list operating conditions including periodic monitoring requirements, and applicable emission limits and requirements. Also included are the rule origin and authority of each emission limit and permit condition.



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**PERMITTED EQUIPMENT LIST**

THE FOLLOWING IS A LIST OF ALL PERMITS TO OPERATE AT THIS FACILITY:

<b>Application No.</b>	<b>Permit to Operate No.</b>	<b>Equipment Description</b>	<b>Page No.</b>
395595	F50199	STORAGE TANK NO. 1, W/EXT FLOAT ROOF GASOLINE	4
395616	F50322	BULK LOAD TANK TRUCK (1 RACK) GASOLINE	6
395619	F50200	STORAGE TANK NO. 2, NW/ EXT FLOAT ROOF GASOLINE	7
395621	F50196	STORAGE TANK NO. 3, FX RF W/CTL PET MID DISTILLATE	9
395624	F50202	STORAGE TANK NO. 6, FX RF W/INT FLT GASOLINE	10
395625	F50195	STORAGE TANK NO. 7, FX RF W/INT FLT GASOLINE	12
395626	F50203	STORAGE TANK NO. 8, FX RF W/INT FLT GASOLINE	13
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395631	F50193	STORAGE TANK NO. 11, FX RF W/INT FLT GASOLINE	15
395634	R-F50201	CRUDE OIL/GAS/WATER SEP SYTEM (<= 5 TANKS)	17
395638	F50197	STORAGE TANK NO. 15, FX RF W/INT FLT GASOLINE	18
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417018	F63143	STORAGE TANK NO. 9, FX RF W/INT FLT PET DISTIL	21
453402	G22871	RACK NO. 1, BULK LOAD/UNLOAD (>200,000 GPD) GASOLINE	23
453403	G22872	RACK NO. 2, BULK LOAD/UNLOAD (>200,000 GPD) GASOLINE	26
453404	G22873	RACK NO. 3, BULK LOAD/UNLOAD (>200,000 GPD) GASOLINE	29
453406	G22874	RACK NO. 4, BULK LOAD/UNLOAD (>200,000 GPD) GASOLINE	32
453411	G22938	VAPOR RECOVERY SERVING BULK LOADING RACKS 1, 2, 3, & 4	35

**NOTE:** ANY APPLICATIONS THAT ARE STILL BEING PROCESSED AND HAVE NOT BEEN ISSUED PERMITS TO CONSTRUCT OR PERMITS TO OPERATE WILL NOT BE FOUND IN THIS TITLE V PERMIT



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**FACILITY WIDE CONDITION(S)**

**Condition(s):**

1. EXCEPT FOR OPEN ABRASIVE BLASTING OPERATIONS, THE OPERATOR SHALL NOT DISCHARGE INTO THE ATMOSPHERE FROM ANY SINGLE SOURCE OF EMISSIONS WHATSOEVER ANY AIR CONTAMINANT FOR A PERIOD OR PERIODS AGGREGATING MORE THAN THREE MINUTES IN ANY ONE HOUR WHICH IS:
  - A. AS DARK OR DARKER IN SHADE AS THAT DESIGNATED NO. 1 ON THE RINGELMANN CHART, AS PUBLISHED BY THE UNITED STATES BUREAU OF MINES; OR
  - B. OF SUCH OPACITY AS TO OBSCURE AN OBSERVER'S VIEW TO A DEGREE EQUAL TO OR GREATER THAN DOES SMOKE DESCRIBED IN SUBPARAGRAPH (A) OF THIS CONDITION. [RULE 401]
2. THIS FACILITY SHALL BE OPERATED IN COMPLIANCE WITH THE APPLICABLE MINOR SOURCE REQUIREMENTS OF 40CFR63 SUBPART R. [40 CFR 63 SUBPART R]
3. MATERIAL SAFETY DATA SHEETS FOR ALL COATINGS AND SOLVENTS USED AT THIS FACILITY SHALL BE KEPT CURRENT AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST. [RULE 109, 1303(b)(2)OFFSETS]
4. THIS FACILITY SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF RULE 1173. [RULE 1173]
5. THIS FACILITY SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF 40CFR63 SUBPART BBBBBB. [40 CFR63 SUBPART BBBBBB]



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**PERMIT TO OPERATE**

**Permit No. F50199  
A/N 395595**

**Equipment Description:**

TANK #1, GASOLINE STORAGE, EXTERNAL FLOATING ROOF, DOUBLE DECK TYPE, 80 FT. DIA. X 48 FT. HIGH, 1,764,000 GALLONS CAPACITY, WELDED SHELL, WITH A METALLIC SHOE TYPE PRIMARY SEAL AND RIM MOUNTED WIPER TYPE SECONDARY SEAL.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS TANK SHALL NOT BE USED FOR STORING PETROLEUM LIQUID HAVING A VAPOR PRESSURE OF 569 MM Hg (11 PSIA) OR GREATER UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463]
4. THROUGHPUT TO THIS TANK OF ORGANIC LIQUIDS SHALL NOT EXCEED 60 TURNOVERS PER YEAR. THROUGHPUT RECORDS, IN ADDITION TO THOSE RECORDS REQUIRED BY RULE 463(b)(4) SHALL BE AVAILABLE FOR INSPECTION BY SCAQMD PERSONNEL UPON REQUEST.  
[RULE 1303(b)(2) OFFSETS, RULE 463]
5. THIS TANK SHALL NOT BE USED FOR STORING PURE ORGANIC COMPOUNDS.  
[204]
6. THE OPERATOR SHALL KEEP RECORDS, IN MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):  
  
TYPE OF LIQUID STORED, THROUGHPUT, AND TRUE VAPOR PRESSURE OF LIQUIDS UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463]

**Periodic Monitoring: NONE**



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**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

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**Emissions and Requirements:**

7. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 463

VOC: RULE 1149



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**PERMIT TO OPERATE**

**Permit No. F50322  
A/N 395616**

**Equipment Description:**

FUEL PUMP-BACK SYSTEM, CONSISTING OF:

1. 4" CAM LOCK VAPOR TIGHT, HOSE TO PIPE CONNECTION FOR FUEL UNLOADING.
2. 3" CAM LOCK VAPOR TIGHT, HOSE TO PIPE, CONNECTION FOR FUEL UNLOADING.
3. 2" CONNECTION FROM SUMP TO VAPOR RECOVERY SYSTEM.
4. FUEL UNLOADING PUMP WITH 25 HP MOTOR, TANDEM MECHANICAL SEAL AND VENTED TO VAPOR RECOVERY SYSTEM.
5. SUMP TANK, U/G 700 GAL. CAPACITY, 3' 9".
6. RELATED PIPING AND VALVES.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
(RULE 204)
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
(RULE 204)
3. THE PUMP BACK SUMP SHALL BE VENTED TO AIR POLLUTION CONTROL DEVICE WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A PERMIT BY THE EXECUTIVE OFFICER.

VENT GASES FROM THE PUMP BACK SUMP SHALL BE VENTED TO THE ON-SITE VAPOR RECOVERY SYSTEM, OR ALTERNATIVELY TO THE THERMAL OXIDIZER OWNED AND OPERATED BY KINDER MORGAN ENERGY PARTNERS (FACILITY ID 800129).  
[RULE 1303(a)(1)-BACT]

**Periodic Monitoring: NONE**

**Emissions and Requirements: NONE**



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**PERMIT TO OPERATE**

**Permit No. F50200  
A/N 395619**

**Equipment Description:**

TANK #2, GASOLINE STORAGE, EXTERNAL FLOATING ROOF, DOUBLE DECK TYPE (WELDED), 80 FT. DIA. X 46 FT. HIGH, 1,680,000 GALLON CAPACITY; WITH A METALLIC SHOE TYPE PRIMARY SEAL (CATEGORY A); AND RIM MOUNTED WIPER TYPE SECONDARY SEAL (CATEGORY B OR BETTER).

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS TANK SHALL NOT BE USED FOR STORING PETROLEUM LIQUID HAVING A VAPOR PRESSURE OF 569 MM Hg (11 PSIA) OR GREATER UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463]
4. THROUGHPUT TO THIS TANK OF ORGANIC LIQUIDS SHALL NOT EXCEED 60 TURNS PER YEAR. THROUGHPUT RECORDS, IN ADDITION TO THOSE RECORDS REQUIRED BY RULE 463(b)(4) SHALL BE AVAILABLE FOR INSPECTION BY SCAQMD PERSONNEL UPON REQUEST.  
[RULE 1303(b)(2) OFFSETS, RULE 463]
5. THIS TANK SHALL NOT BE USED FOR STORING PURE ORGANIC COMPOUNDS.  
[204]
6. THE OPERATOR SHALL KEEP RECORDS, IN MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):  
  
TYPE OF LIQUID STORED, THROUGHPUT, AND TRUE VAPOR PRESSURE OF LIQUIDS UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463]

**Periodic Monitoring: NONE**



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**Emissions and Requirements:**

7. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 463

VOC: RULE 1149



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**PERMIT TO OPERATE**

**Permit No. F50196  
A/N 395621**

**Equipment Description:**

TANK NO. 3, INTERNAL FLOATING ROOF (WELDED); 20,000 BBL CAPACITY, 60'-0" DIA. X 40'-0" H., WITH A METALLIC SHOE PRIMARY SEAL (CATEGORY A) AND A WIPER TYPE SECONDARY SEAL (CATEGORY B OR BETTER)

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
(RULE 204)
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
(RULE 204)
3. THE OPERATOR SHALL USE AN EXPLOSIMETER OR EQUIVALENT DEVICE TO MONITOR THE HYDROCARBON CONCENTRATION IN THE VAPOR SPACE ABOVE THE INTERNAL FLOATING ROOF TWICE A YEAR AT 4 TO 8 MONTH INTERVALS. THE HYDROCARBON CONCENTRATION SHALL NOT EXCEED 50 PERCENT OF THE LOWER EXPLOSIVE LIMIT.  
[RULE 463]
4. THE OPERATOR SHALL KEEP RECORDS, IN MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):  
  
TYPE OF LIQUID STORED, THROUGHPUT, AND TRUE VAPOR PRESSURE OF LIQUIDS UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463]

**Periodic Monitoring: NONE**

**Emissions and Requirements:**

- 5 THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:  
  
VOC: RULE 463  
VOC: RULE 1149



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**PERMIT TO OPERATE**

**Permit No. F50202  
A/N 395624**

**Equipment Description:**

TANK NO. 6, FIXED ROOF WITH A WELDED INTERNAL FLOATING PAN, 15'-0" DIA. X 16'-0" H., 17,900 GALLON CAPACITY, WELDED SHELL, WITH A VAPOR MOUNTED RESILIENT FOAM-FILLED PRIMARY SEAL AND A WIPER TYPE SECONDARY SEAL.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
(RULE 204)
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
(RULE 204)
3. THIS TANK SHALL NOT BE USED FOR STORING PETROLEUM LIQUID HAVING A VAPOR PRESSURE OF 569 MM HG (11 PSIA) OR GREATER UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463]
4. THE OPERATOR SHALL USE AN EXPLOSIMETER OR EQUIVALENT DEVICE TO MONITOR THE HYDROCARBON CONCENTRATION IN THE VAPOR SPACE ABOVE THE INTERNAL FLOATING ROOF TWICE A YEAR AT 4 TO 8 MONTH INTERVALS. THE HYDROCARBON CONCENTRATION SHALL NOT EXCEED 50 PERCENT OF THE LOWER EXPLOSIVE LIMIT.  
[RULE 463]
5. FOUR 90 DEGREES RADIAL VAPOR BARRIERS (IMPEDERS) SHALL BE PROVIDED ON VAPOR-MOUNTED PRIMARY SEALS AND SHALL PENETRATE INTO THE PRODUCT LIQUID 2" OR MORE.  
[RULE 1303(a)(1) - BACT]
6. THE OPERATOR SHALL KEEP RECORDS, IN MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):  
  
TYPE OF LIQUID STORED, THROUGHPUT, AND TRUE VAPOR PRESSURE OF LIQUIDS UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463]

**Periodic Monitoring: NONE**



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**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

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**Emissions and Requirements:**

7. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 463  
VOC: RULE 1149



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**PERMIT TO OPERATE**

**Permit No. F50195  
A/N 395625**

**Equipment Description:**

TANK NO. 7, PETROLEUM PRODUCTS, INTERNAL FLOATING ROOF (WELDED), 60' DIA. X 33'-7" H., 20,000 BBL CAPACITY, WITH MECHANICAL SHOE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
(RULE 204)
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
(RULE 204)
3. THIS TANK SHALL NOT BE USED FOR STORING ORGANIC LIQUID HAVING A VAPOR PRESSURE OF 11.0 PSIA OR GREATER UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463, RULE 1303(b)(2) OFFSETS]
4. THE OPERATOR SHALL USE AN EXPLOSIMETER OR EQUIVALENT DEVICE TO MONITOR THE HYDROCARBON CONCENTRATION IN THE VAPOR SPACE ABOVE THE INTERNAL FLOATING ROOF TWICE A YEAR AT 4 TO 8 MONTH INTERVALS. THE HYDROCARBON CONCENTRATION SHALL NOT EXCEED 50 PERCENT OF THE LOWER EXPLOSIVE LIMIT.  
[RULE 463]
5. THE OPERATOR SHALL KEEP RECORDS, IN MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):  
  
TYPE OF LIQUID STORED, THROUGHPUT, AND TRUE VAPOR PRESSURE OF LIQUIDS UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463]

**Periodic Monitoring: NONE**

**Emissions and Requirements:**

6. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:  
  
VOC: RULE 463  
VOC: RULE 1149



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**PERMIT TO OPERATE**

**Permit No. F50203  
A/N 395626**

**Equipment Description:**

TANK NO. 8, GASOLINE STORAGE, INTERNAL FLOATING ROOF, WELDED PAN TYPE 73'-0" X 33'-10", 30,000 BBL (1,260,000 GAL.) CAPACITY, WELDED SHELL, WITH METALLIC SHOE PRIMARY SEAL AND WIPER TYPE SECONDARY SEAL

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
(RULE 204)
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
(RULE 204)
3. THE OPERATOR SHALL USE AN EXPLOSIMETER OR EQUIVALENT DEVICE TO MONITOR THE HYDROCARBON CONCENTRATION IN THE VAPOR SPACE ABOVE THE INTERNAL FLOATING ROOF TWICE A YEAR AT 4 TO 8 MONTH INTERVALS. THE HYDROCARBON CONCENTRATION SHALL NOT EXCEED 50 PERCENT OF THE LOWER EXPLOSIVE LIMIT.  
[RULE 463]
4. THIS TANK SHALL NOT BE USED FOR STORING ORGANIC LIQUID HAVING A VAPOR PRESSURE OF 11.0 PSIA OR GREATER UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463]
5. THE OPERATOR SHALL KEEP RECORDS, IN MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):  
  
TYPE OF LIQUID STORED, THROUGHPUT, AND TRUE VAPOR PRESSURE OF LIQUIDS UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463]

**Periodic Monitoring: NONE**

**Emissions and Requirements:**

6. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:  
  
VOC: RULE 463  
VOC: RULE 1149



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**PERMIT TO OPERATE**

**Permit No. F50194  
A/N 395629**

**Equipment Description:**

STORAGE TANK NO. 10, FIXED ROOF WITH A WELDED INTERNAL FLOATING PAN, 70'-0" DIA. X 56'-0" H., 35,000 BBL CAPACITY, A FOAM LOG TYPE PRIMARY SEAL, AND A WIPER TYPE SECONDARY SEAL.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
(RULE 204)
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
(RULE 204)
3. THIS TANK SHALL NOT BE USED FOR STORING ORGANIC LIQUID HAVING A VAPOR PRESSURE OF 11.0 PSIA OR GREATER UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463, 40CFR60 SUBPART Kb]
4. THE OPERATOR SHALL USE AN EXPLOSIMETER OR EQUIVALENT DEVICE TO MONITOR THE HYDROCARBON CONCENTRATION IN THE VAPOR SPACE ABOVE THE INTERNAL FLOATING ROOF TWICE A YEAR AT 4 TO 8 MONTH INTERVALS. THE HYDROCARBON CONCENTRATION SHALL NOT EXCEED 50 PERCENT OF THE LOWER EXPLOSIVE LIMIT.  
[RULE 463]
5. THE OPERATOR SHALL KEEP RECORDS, IN MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):  
  
TYPE OF LIQUID STORED, THROUGHPUT, AND TRUE VAPOR PRESSURE OF LIQUIDS UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463, 40CFR60 SUBPART Kb]

**Periodic Monitoring:** NONE

**Emissions and Requirements:**

6. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:  
  
VOC/TOC: 40 CFR 60, SUBPART Kb  
VOC: RULE 463  
VOC: RULE 1149



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**PERMIT TO OPERATE**

**Permit No. F50193  
A/N 395631**

**Equipment Description:**

STORAGE TANK NO. 11, 70'-0" DIA. X 56'-0" H., 35,000 BBL CAPACITY, WELDED SHELL, WELDED INTERNAL FLOATING ROOF WITH VAPOR MOUNTED RESILIENT FOAM-FILLED PRIMARY SEAL.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS TANK SHALL NOT BE USED FOR STORING PETROLEUM LIQUID HAVING A VAPOR PRESSURE OF 11.0 PSIA OR GREATER UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463, 40CFR60 SUBPART Kb]
4. THROUGHPUT TO THIS TANK OF ORGANIC LIQUIDS SHALL NOT EXCEED 2,190,000 BBLS. PER YEAR. THROUGHPUT RECORDS, IN ADDITION TO THOSE RECORDS REQUIRED BY RULE 463, SHALL BE MAINTAINED ON FILE AND BE AVAILABLE FOR INSPECTION BY AUTHORIZED DISTRICT PERSONNEL.  
[RULE 463, RULE 1303(b)(2) OFFSETS]
5. THIS TANK SHALL NOT BE USED FOR STORING PURE ORGANIC COMPOUNDS.  
[RULE 204]
6. THE OPERATOR SHALL USE AN EXPLOSIMETER OR EQUIVALENT DEVICE TO MONITOR THE HYDROCARBON CONCENTRATION IN THE VAPOR SPACE ABOVE THE INTERNAL FLOATING ROOF TWICE A YEAR AT 4 TO 8 MONTH INTERVALS. THE HYDROCARBON CONCENTRATION SHALL NOT EXCEED 30 PERCENT OF THE LOWER EXPLOSIVE LIMIT.  
[RULE 463]
7. THE OPERATOR SHALL KEEP RECORDS, IN MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):  
  
TYPE OF LIQUID STORED, THROUGHPUT, AND TRUE VAPOR PRESSURE OF LIQUIDS UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463, 40CFR60 SUBPART Kb]

**Periodic Monitoring: NONE**



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**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

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**Emissions and Requirements:**

8. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC/TOC: 40 CFR 60, SUBPART Kb  
VOC: RULE 463  
VOC: RULE 1149



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**PERMIT TO OPERATE**

**Permit No. R-F50201  
A/N 395634**

**Equipment Description:**

OIL/WATER SEPARATOR TANK SP-100, FIXED ROOF, LOVELES GDS, GRAVITY SEPARATION TYPE, MODEL 20M021, 2,000 GALLON TOTAL CAPACITY, 4'-0" DIA. X 21'-0" L., WITH A 1 H.P. RECOVERED OIL DISCHARGE PUMP AND A WATER GRAVITY-DRAIN TO SEWER.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. A PRESSURE-VACUUM RELIEF VALVE SHALL BE INSTALLED IN ALL SEPARATOR VENT LINES TO THE ATMOSPHERE.  
[RULE 1303(a)(1) BACT, RULE 1173]

**Periodic Monitoring: NONE**

**Emissions and Requirements:**

4. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:  
  
VOC: RULE 464



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**PERMIT TO OPERATE**

**Permit No. F50197  
A/N 395638**

**Equipment Description:**

STORAGE TANK NO. 15, ETHANOL OR GASOLINE STORAGE, INTERNAL FLOATING ROOF, WELDED, 40'-0" DIA. X 48'-0" H., 441,000 GALLON CAPACITY, WELDED SHELL, WITH A METALLIC SHOE-TYPE PRIMARY SEAL (CATEGORY A) AND A WIPER TYPE SECONDARY SEAL (CATEGORY B OR BETTER).

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THIS TANK SHALL NOT BE USED FOR STORING ORGANIC LIQUID HAVING A VAPOR PRESSURE OF 569 MM HG (11 PSIA) OR GREATER UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463, 40CFR60 SUBPART Kb]
4. ANNUAL THROUGHPUT RECORDS, IN ADDITION TO THOSE RECORDS REQUIRED BY RULE 463(b)(4) SHALL BE AVAILABLE FOR INSPECTION BY AUTHORIZED DISTRICT PERSONNEL.  
[RULE 463]
5. THE OPERATOR SHALL USE AN EXPLOSIMETER OR EQUIVALENT DEVICE TO MONITOR THE HYDROCARBON CONCENTRATION IN THE VAPOR SPACE ABOVE THE INTERNAL FLOATING ROOF TWICE A YEAR AT 4 TO 8 MONTH INTERVALS. THE HYDROCARBON CONCENTRATION SHALL NOT EXCEED 30 PERCENT OF THE LOWER EXPLOSIVE LIMIT.  
[RULE 463]
6. THE OPERATOR SHALL KEEP RECORDS, IN MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):  
  
TYPE OF LIQUID STORED, THROUGHPUT, AND TRUE VAPOR PRESSURE OF LIQUIDS UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463, 40CFR60 SUBPART Kb]

**Periodic Monitoring: NONE**



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**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

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**Emissions and Requirements:**

7. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC/TOC: 40 CFR 60, SUBPART Kb

VOC: RULE 463

VOC: RULE 1149



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**PERMIT TO OPERATE**

**Permit No. R-F50190  
A/N 395640**

**Equipment Description:**

ETHANOL TRUCK UNLOADING RACK: CONSISTING OF A 4" CAM LOCK VAPOR TIGHT, HOSE TO PIPE CONNECTION FOR ETHANOL UNLOADING, WITH 10 H.P. MOTOR, TANDEM MECHANICAL SEAL, VENTED TO VAPOR RECOVERY SYSTEM, A FLOW METER WITH STRAINER AND BACK PRESSURE CONTROL VALVE.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. A DAILY OPERATIONAL LOG INCLUDING THROUGHPUT RECORDS FOR THE FACILITY SHALL BE MAINTAINED. ALL RECORDS SHALL BE MADE AVAILABLE UPON REQUEST.  
[RULE 204]
4. THE EQUIPMENT INCLUDING THE TRANSFER PUMP SEAL SHALL NOT BE OPERATED UNLESS IS VENTED TO A VAPOR RECOVERY SYSTEM WHICH IS IN FULL USE AND HAS A VALID PERMIT TO RECEIVE VENT GASES FROM THIS EQUIPMENT.  
[RULE 1303(a)(1) BACT]
5. THE OPERATOR SHALL INSPECT FOR LEAKS (VAPOR AND LIQUID) MANUALLY (SIGHT, SMELL, & SOUND) ON A MONTHLY BASIS, OR QUARTERLY IF USING AN ORGANIC VAPOR ANALYZER (OVA).  
(RULE 1303(a)(1) BACT)
6. THE OPERATOR SHALL PERFORM ANNUAL INSPECTION OF ALL VALVES FOR LIQUID LEAK IN ACCORDANCE WITH RULE 466.1 AND SHALL REINSPECT WITHIN 90 DAYS AFTER ANY REPAIR.  
[RULE 466.1]

**Periodic Monitoring:** NONE

**Emissions and Requirements:** NONE



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**PERMIT TO OPERATE**

**Permit No. F63143  
A/N 417018**

**Equipment Description:**

STORAGE TANK NO. 9, FIXED ROOF WITH AN INTERNAL FLOATING PAN, 70'-0" DIA. X 56'-0" H., 35,000 BBL CAPACITY, WELDED SHELL, MECHANICAL SHOE PRIMARY SEAL.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE OPERATOR SHALL USE AN EXPLOSIMETER OR EQUIVALENT DEVICE TO MONITOR THE HYDROCARBON CONCENTRATION IN THE VAPOR SPACE ABOVE THE INTERNAL FLOATING ROOF TWICE A YEAR AT 4 TO 8 MONTH INTERVALS. THE HYDROCARBON CONCENTRATION SHALL NOT EXCEED 50 PERCENT OF THE LOWER EXPLOSIVE LIMIT.  
[RULE 463]
4. THIS TANK SHALL NOT BE USED FOR STORING PURE ORGANIC COMPOUNDS.  
[RULE 1303(b)(2) OFFSETS]
5. THIS TANK SHALL NOT BE USED TO STORE CRUDE OIL.  
[RULE 204]
6. THE OPERATOR SHALL KEEP RECORDS, IN MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):  
  
TYPE OF LIQUID STORED, THROUGHPUT, AND TRUE VAPOR PRESSURE OF LIQUIDS UNDER ACTUAL STORAGE CONDITIONS.  
[RULE 463]

**Periodic Monitoring: NONE**



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**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

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**Emissions and Requirements:**

7. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 463  
VOC: RULE 1149



## FACILITY PERMIT TO OPERATE BP WEST COAST PRODUCTS LLC, COLTON TERMINAL

### CONDITIONS:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE AGGREGATE LOADING RATE OF DIESEL FUEL SHALL NOT EXCEED 150,000 BARRELS PER MONTH AND THE AGGREGATE LOADING RATE OF PETROLEUM PRODUCTS (EXCLUDING DIESEL) SHALL NOT EXCEED 1,428,571 BARRELS PER MONTH AT LOADING RACKS NOS. 1, 2, 3 AND 4.  
[RULE 1303(b)(2) OFFSETS]
4. THE AGGREGATE LOADING RATE OF ALL PRODUCTS SHALL NOT EXCEED 80,952 BARRELS PER DAY AT LOADING RACKS NOS. 1, 2, 3 AND 4.  
[RULE 462]
5. THE THROUGHPUT SHALL BE MONITORED AND RECORDED WITH TOTALIZING METERS, EQUIPPED WITH DIGITAL READOUTS, AS WELL AS AN AUTOMATED SYSTEM DESIGNED TO SHUTDOWN LOADING WHEN THE THROUGHPUT LIMIT IS REACHED.  
[RULE 462, RULE 1303(b)(2) OFFSETS, 40CFR60 SUBPART XX]
6. THIS EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED TO AN AIR POLLUTION CONTROL DEVICE WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A PERMIT BY THE EXECUTIVE OFFICER.  
  
VENT GASES FROM THE LOADING RACK SHALL BE VENTED TO THE ON-SITE VAPOR RECOVERY SYSTEM, OR ALTERNATIVELY TO THE THERMAL OXIDIZER OWNED AND OPERATED BY KINDER MORGAN ENERGY PARTNERS (FACILITY ID 800129).  
[RULE 462, RULE 1303(a)(1)-BACT, 40CFR60 SUBPART XX]
7. THE FOLLOWING BACT REQUIREMENTS SHALL APPLY TO COMPONENTS IN VOC SERVICE.
  - A. ALL NEW VALVES SHALL BE BELLOWS SEAL VALVES, EXCEPT AS APPROVED BY THE DISTRICT, IN THE FOLLOWING APPLICATIONS: HEAVY LIQUID SERVICE, CONTROL VALVE, INSTRUMENT PIPING/TUBING, APPLICATIONS REQUIRING TORSIONAL VALVE STEM MOTION, APPLICATIONS WHERE VALVE FAILURE COULD POSE SAFETY HAZARD (e.g. DRAIN VALVES WITH VALVE STEMS IN HORIZONTAL POSITION), RETROFITS/ SPECIAL APPLICATIONS WITH SPACE LIMITATIONS, AND VALVES NOT COMMERCIALY AVAILABLE. ADDITIONAL EXCEPTIONS ARE LISTED IN DISTRICT RULE 1173 (I)(1).



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**PERMIT TO OPERATE**

**Permit No. G22871  
A/N 453402**

**Equipment Description:**

**BULK FUEL LOADING RACK NO. 1, CONSISTING OF:**

1. FOUR GASOLINE BOTTOM LOADING ARMS/HOSES, EACH 4" DIA. CORRUGATED METAL OR INDUSTRY STANDARD EQUIVALENT, WITH A DRY-BREAK CONNECTOR, A PRESET FLOW METER, AND A STRAINER.
2. THREE DIESEL BOTTOM LOADING ARMS/HOSES, EACH 4" DIA. CORRUGATED METAL OR INDUSTRY STANDARD EQUIVALENT, WITH A DRY-BREAK CONNECTOR AND TWO PRESET FLOW METERS.
3. TWO VAPOR RECOVERY HOSES, EACH 3" DIA., VENTING TO A VAPOR RECOVERY SYSTEM.
4. FOUR GASOLINE CENTRIFUGAL TRANSFER PUMPS, EACH WITH A 50 HP MOTOR, WITH TANDEM MECHANICAL SEALS AND CONNECTED TO THE EXISTING VAPOR RECOVERY SYSTEM, COMMON TO RACKS NO. 1, 2, 3, AND 4.
5. SIX GASOLINE CENTRIFUGAL TRANSFER PUMPS, EACH WITH A 60 HP MOTOR, WITH TANDEM MECHANICAL SEALS AND CONNECTED TO THE VAPOR RECOVERY SYSTEM, COMMON TO RACKS NO. 1, 2, 3, AND 4.
6. VAPOR KNOCKOUT SUMP, 4,000 GALLON CAPACITY (BELOW GRADE), COMMON TO RACKS NO. 1, 2, 3, AND 4.
7. DIESEL DISPENSING UNIT CONSISTING OF A CONTROL VALVE, FILTER, METER, DISPENSING NOZZLE, AND A 1-1/2 HP PUMP, COMMON TO RACKS NO. 1, 2, 3, AND 4.
8. TWO DIESEL TRANSFER PUMPS, CENTRIFUGAL, WITH 60 HP MOTOR, COMMON TO RACKS NO. 1 AND 2.
9. TWO ETHANOL TRANSFER PUMPS, EACH WITH TANDEM MECHANICAL SEALS AND 50 HP MOTOR, VENTED TO VAPOR RECOVERY SYSTEM, COMMON TO LOADING RACKS NO. 1, 2, 3, AND 4.
10. TWO ADDITIVE PUMPS, MECHANICAL DRIVE, COMMON TO LOADING RACKS NO. 1, 2, 3, AND 4.



## FACILITY PERMIT TO OPERATE BP WEST COAST PRODUCTS LLC, COLTON TERMINAL

- B. ALL NEW PRESSURE RELIEF DEVICES WHICH VENT TO ATMOSPHERE SHALL UTILIZE A RUPTURE DISC AND A TELL-TALE INDICATOR. THE RUPTURE DISC SHALL BE REPLACED ANYTIME THE PRESSURE RELIEF DEVICE HAS LIFTED.
- C. ALL NEW GASOLINE TRANSFER PUMPS SHALL UTILIZE DUAL SEALS AND EITHER:
1. A HIGHER PRESSURE BARRIER FLUID OR
  2. VENT THE VOID SPACE BETWEEN THE SEALS TO THE VAPOR RECOVERY SYSTEM.

FOR PUMPS BEING VENTED TO A VAPOR RECOVERY SYSTEM, THE TIE IN TO THE VAPOR RECOVERY SYSTEM SHALL BE UPSTREAM OF THE BLOWERS USED TO DRAW DISPLACED VAPORS FROM THE LOADING RACKS.

- D. ALL NEW FUGITIVE COMPONENTS SHALL BE INSPECTED QUARTERLY USING EPA METHOD 21.
- E. FOR ALL NEW FUGITIVE COMPONENTS, ANY LEAK GREATER THAN 500 PPM MEASURED AS METHANE ABOVE BACKGROUND AS MEASURED USING EPA METHOD 21, SHALL BE REPAIRED WITHIN 14 DAYS OF DETECTION. COMPONENTS SHALL BE DEFINED AS ANY VALVE, FITTING, PUMP, COMPRESSOR, PRESSURE RELIEF VALVE, DIAPHRAGM, HATCH, SIGHT GLASS, AND METER.  
[RULE 1303(b)(1) - BACT]

8. THE OPERATOR SHALL KEEP RECORDS OF THE THROUGHPUT, RECORDS REQUIRED BY DISTRICT RULE 462, AND RECORDS OF THE QUARTERLY INSPECTION, SUBSEQUENT REPAIR AND RE-INSPECTION. RECORDS SHALL BE IN A FORMAT APPROVED BY THE DISTRICT AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.  
[RULE 462, RULE 1303(b)(2) OFFSETS]

**Periodic Monitoring:** NONE

**Emissions and Requirements:**

9. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: 0.08 LB/1000 GAL. ORGANIC LIQUID LOADED, RULE 462  
TOC/VOC: 35MG/LITER ORGANIC LIQUID LOADED, 40CFR60 SUBPART XX



## FACILITY PERMIT TO OPERATE BP WEST COAST PRODUCTS LLC, COLTON TERMINAL

### PERMIT TO OPERATE

Permit No. G22872  
A/N 453403

#### Equipment Description:

##### BULK FUEL LOADING RACK NO. 2, CONSISTING OF:

1. FOUR GASOLINE BOTTOM LOADING ARMS/HOSES, EACH 4" DIA. CORRUGATED METAL OR INDUSTRY STANDARD EQUIVALENT, WITH A DRY-BREAK CONNECTOR, A PRESET FLOW METER, AND A STRAINER.
2. THREE DIESEL BOTTOM LOADING ARMS/HOSES, EACH 4" DIA. CORRUGATED METAL OR INDUSTRY STANDARD EQUIVALENT, WITH A DRY-BREAK CONNECTOR, TWO PRESET FLOW METERS.
3. TWO VAPOR RECOVERY HOSES, EACH 3" DIA. VENTING TO A VAPOR RECOVERY SYSTEM.
4. FOUR GASOLINE CENTRIFUGAL TRANSFER PUMPS, EACH WITH A 50 HP MOTOR, WITH TANDEM MECHANICAL SEALS AND CONNECTED TO THE EXISTING VAPOR RECOVERY SYSTEM, COMMON TO RACKS NO. 1, 2, 3, AND 4.
5. SIX GASOLINE CENTRIFUGAL TRANSFER PUMPS, EACH WITH A 60 HP MOTOR, WITH TANDEM MECHANICAL SEALS AND CONNECTED TO THE VAPOR RECOVERY SYSTEM, COMMON TO RACKS NO. 1, 2, 3, AND 4.
6. VAPOR KNOCKOUT SUMP, 4,000 GALLON CAPACITY (BELOW GRADE), COMMON TO RACKS NO. 1, 2, 3, AND 4.
7. DIESEL DISPENSING UNIT CONSISTING OF A CONTROL VALVE, FILTER, METER, DISPENSING NOZZLE, AND A 1-1/2 HP PUMP, COMMON TO RACKS NO. 1, 2, 3, AND 4.
8. TWO DIESEL TRANSFER PUMPS, CENTRIFUGAL, WITH 60 HP MOTOR, COMMON TO RACKS NO. 1 AND 2.
9. TWO ETHANOL TRANSFER PUMPS, EACH WITH TANDEM MECHANICAL SEALS AND 50 HP MOTOR, VENTED TO VAPOR RECOVERY SYSTEM, COMMON TO LOADING RACKS NO. 1, 2, 3, AND 4.
10. TWO ADDITIVE PUMPS, MECHANICAL DRIVE, COMMON TO LOADING RACKS NO. 1, 2, 3, AND 4.



## FACILITY PERMIT TO OPERATE BP WEST COAST PRODUCTS LLC, COLTON TERMINAL

### Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE AGGREGATE LOADING RATE OF DIESEL FUEL SHALL NOT EXCEED 150,000 BARRELS PER MONTH AND THE AGGREGATE LOADING RATE OF PETROLEUM PRODUCTS (EXCLUDING DIESEL) SHALL NOT EXCEED 1,428,571 BARRELS PER MONTH AT LOADING RACKS NOS. 1, 2, 3 AND 4.  
[RULE 1303(b)(2) OFFSETS]
4. THE AGGREGATE LOADING RATE OF ALL PRODUCTS SHALL NOT EXCEED 80,952 BARRELS PER DAY AT LOADING RACKS NOS. 1, 2, 3 AND 4.  
[RULE 462]
5. THE THROUGHPUT SHALL BE MONITORED AND RECORDED WITH TOTALIZING METERS, EQUIPPED WITH DIGITAL READOUTS, AS WELL AS AN AUTOMATED SYSTEM DESIGNED TO SHUTDOWN LOADING WHEN THE THROUGHPUT LIMIT IS REACHED.  
[RULE 462, RULE 1303(b)(2) OFFSETS, 40CFR60 SUBPART XX]
6. THIS EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED TO AN AIR POLLUTION CONTROL DEVICE WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A PERMIT BY THE EXECUTIVE OFFICER.  
  
VENT GASES FROM THE LOADING RACK SHALL BE VENTED TO THE ON-SITE VAPOR RECOVERY SYSTEM, OR ALTERNATIVELY TO THE THERMAL OXIDIZER OWNED AND OPERATED BY KINDER MORGAN ENERGY PARTNERS (FACILITY ID 800129).  
[RULE 462, RULE 1303(a)(1)-BACT, 40CFR60 SUBPART XX]
7. THE FOLLOWING BACT REQUIREMENTS SHALL APPLY TO COMPONENTS IN VOC SERVICE.
  - A. ALL NEW VALVES SHALL BE BELLOWS SEAL VALVES, EXCEPT AS APPROVED BY THE DISTRICT, IN THE FOLLOWING APPLICATIONS: HEAVY LIQUID SERVICE, CONTROL VALVE, INSTRUMENT PIPING/TUBING, APPLICATIONS REQUIRING TORSIONAL VALVE STEM MOTION, APPLICATIONS WHERE VALVE FAILURE COULD POSE SAFETY HAZARD (e.g. DRAIN VALVES WITH VALVE STEMS IN HORIZONTAL POSITION), RETROFITS/SPECIAL APPLICATIONS WITH SPACE LIMITATIONS, AND VALVES NOT COMMERCIALY AVAILABLE. ADDITIONAL EXCEPTIONS ARE LISTED IN DISTRICT RULE 1173 (I)(1).



## FACILITY PERMIT TO OPERATE BP WEST COAST PRODUCTS LLC, COLTON TERMINAL

B. ALL NEW PRESSURE RELIEF DEVICES WHICH VENT TO ATMOSPHERE SHALL UTILIZE A RUPTURE DISC AND A TELL-TALE INDICATOR. THE RUPTURE DISC SHALL BE REPLACED ANYTIME THE PRESSURE RELIEF DEVICE HAS LIFTED.

C. ALL NEW GASOLINE TRANSFER PUMPS SHALL UTILIZE DUAL SEALS AND EITHER:

1. A HIGHER PRESSURE BARRIER FLUID OR
2. VENT THE VOID SPACE BETWEEN THE SEALS TO THE VAPOR RECOVERY SYSTEM.

FOR PUMPS BEING VENTED TO A VAPOR RECOVERY SYSTEM, THE TIE IN TO THE VAPOR RECOVERY SYSTEM SHALL BE UPSTREAM OF THE BLOWERS USED TO DRAW DISPLACED VAPORS FROM THE LOADING RACKS.

D. ALL NEW FUGITIVE COMPONENTS SHALL BE INSPECTED QUARTERLY USING EPA METHOD 21.

E. FOR ALL NEW FUGITIVE COMPONENTS, ANY LEAK GREATER THAN 500 PPM MEASURED AS METHANE ABOVE BACKGROUND AS MEASURED USING EPA METHOD 21, SHALL BE REPAIRED WITHIN 14 DAYS OF DETECTION. COMPONENTS SHALL BE DEFINED AS ANY VALVE, FITTING, PUMP, COMPRESSOR, PRESSURE RELIEF VALVE, DIAPHRAGM, HATCH, SIGHT GLASS, AND METER.

[RULE 1303(b)(1) - BACT]

8. THE OPERATOR SHALL KEEP RECORDS OF THE THROUGHPUT, RECORDS REQUIRED BY DISTRICT RULE 462, AND RECORDS OF THE QUARTERLY INSPECTION, SUBSEQUENT REPAIR AND RE-INSPECTION. RECORDS SHALL BE IN A FORMAT APPROVED BY THE DISTRICT AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

[RULE 462, RULE 1303(b)(2) OFFSETS]

**Periodic Monitoring: NONE**

**Emissions and Requirements:**

9. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: 0.08 LB/1000 GAL. ORGANIC LIQUID LOADED, RULE 462

TOC/VOC: 35MG/LITER ORGANIC LIQUID LOADED, 40CFR60 SUBPART XX



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**PERMIT TO OPERATE**

**Permit No. G22873  
A/N 453404**

**Equipment Description:**

BULK FUEL LOADING RACK NO. 3, CONSISTING OF:

1. FOUR GASOLINE BOTTOM LOADING ARMS/HOSES, EACH 4" DIA. CORRUGATED METAL OR INDUSTRY STANDARD EQUIVALENT, WITH A DRY-BREAK CONNECTOR, A PRESET FLOW METER, AND A STRAINER.
2. TWO VAPOR RECOVERY HOSES, EACH 3" DIA. VENTING TO A VAPOR RECOVERY SYSTEM.
3. FOUR GASOLINE CENTRIFUGAL TRANSFER PUMPS, EACH WITH A 50 HP MOTOR, WITH TANDEM MECHANICAL SEALS AND CONNECTED TO THE EXISTING VAPOR RECOVERY SYSTEM, COMMON TO RACKS NO. 1, 2, 3, AND 4.
4. SIX GASOLINE CENTRIFUGAL TRANSFER PUMPS, EACH WITH A 60 HP MOTOR, WITH TANDEM MECHANICAL SEALS AND CONNECTED TO THE VAPOR RECOVERY SYSTEM, COMMON TO RACKS NO. 1, 2, 3, AND 4.
5. VAPOR KNOCKOUT SUMP, 4,000 GALLON CAPACITY (BELOW GRADE), COMMON TO RACKS NO. 1, 2, 3, AND 4.
6. DIESEL DISPENSING UNIT CONSISTING OF A CONTROL VALVE, FILTER, METER, DISPENSING NOZZLE, AND A 1-1/2 HP PUMP, COMMON TO RACKS NO. 1, 2, 3, AND 4.
7. TWO ETHANOL TRANSFER PUMPS, EACH WITH TANDEM MECHANICAL SEALS AND 50 HP MOTOR, VENTED TO VAPOR RECOVERY SYSTEM, COMMON TO LOADING RACKS NO. 1, 2, 3, AND 4.
8. TWO ADDITIVE PUMPS, MECHANICAL DRIVE, COMMON TO LOADING RACKS NO. 1, 2, 3, AND 4.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE AGGREGATE LOADING RATE OF DIESEL FUEL SHALL NOT EXCEED 150,000 BARRELS PER MONTH AND THE AGGREGATE LOADING RATE OF PETROLEUM PRODUCTS (EXCLUDING DIESEL) SHALL NOT EXCEED 1,428,571 BARRELS PER MONTH AT LOADING RACKS NOS. 1, 2, 3 AND 4.  
[RULE 1303(b)(2) OFFSETS]



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**FACILITY PERMIT TO OPERATE**  
**BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

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4. THE AGGREGATE LOADING RATE OF ALL PRODUCTS SHALL NOT EXCEED 80,952 BARRELS PER DAY AT LOADING RACKS NOS. 1, 2, 3 AND 4.  
[RULE 462]
5. THE THROUGHPUT SHALL BE MONITORED AND RECORDED WITH TOTALIZING METERS, EQUIPPED WITH DIGITAL READOUTS, AS WELL AS AN AUTOMATED SYSTEM DESIGNED TO SHUTDOWN LOADING WHEN THE THROUGHPUT LIMIT IS REACHED.  
[RULE 462, RULE 1303(b)(2) OFFSETS, 40CFR60 SUBPART XX]
6. THIS EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED TO AN AIR POLLUTION CONTROL DEVICE WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A PERMIT BY THE EXECUTIVE OFFICER.  
  
VENT GASES FROM THE LOADING RACK SHALL BE VENTED TO THE ON-SITE VAPOR RECOVERY SYSTEM, OR ALTERNATIVELY TO THE THERMAL OXIDIZER OWNED AND OPERATED BY KINDER MORGAN ENERGY PARTNERS (FACILITY ID 800129).  
[RULE 462, RULE 1303(a)(1)-BACT, 40CFR60 SUBPART XX]
7. THE FOLLOWING BACT REQUIREMENTS SHALL APPLY TO COMPONENTS IN VOC SERVICE.
  - A. ALL NEW VALVES SHALL BE BELLOWS SEAL VALVES, EXCEPT AS APPROVED BY THE DISTRICT, IN THE FOLLOWING APPLICATIONS: HEAVY LIQUID SERVICE, CONTROL VALVE, INSTRUMENT PIPING/TUBING, APPLICATIONS REQUIRING TORSIONAL VALVE STEM MOTION, APPLICATIONS WHERE VALVE FAILURE COULD POSE SAFETY HAZARD (e.g. DRAIN VALVES WITH VALVE STEMS IN HORIZONTAL POSITION), RETROFITS/SPECIAL APPLICATIONS WITH SPACE LIMITATIONS, AND VALVES NOT COMMERCIALY AVAILABLE. ADDITIONAL EXCEPTIONS ARE LISTED IN DISTRICT RULE 1173 (I)(1).



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

B. ALL NEW PRESSURE RELIEF DEVICES WHICH VENT TO ATMOSPHERE SHALL UTILIZE A RUPTURE DISC AND A TELL-TALE INDICATOR. THE RUPTURE DISC SHALL BE REPLACED ANYTIME THE PRESSURE RELIEF DEVICE HAS LIFTED.

C. ALL NEW GASOLINE TRANSFER PUMPS SHALL UTILIZE DUAL SEALS AND EITHER:

1. A HIGHER PRESSURE BARRIER FLUID OR
2. VENT THE VOID SPACE BETWEEN THE SEALS TO THE VAPOR RECOVERY SYSTEM.

FOR PUMPS BEING VENTED TO A VAPOR RECOVERY SYSTEM, THE TIE IN TO THE VAPOR RECOVERY SYSTEM SHALL BE UPSTREAM OF THE BLOWERS USED TO DRAW DISPLACED VAPORS FROM THE LOADING RACKS.

D. ALL NEW FUGITIVE COMPONENTS SHALL BE INSPECTED QUARTERLY USING EPA METHOD 21.

E. FOR ALL NEW FUGITIVE COMPONENTS, ANY LEAK GREATER THAN 500 PPM MEASURED AS METHANE ABOVE BACKGROUND AS MEASURED USING EPA METHOD 21, SHALL BE REPAIRED WITHIN 14 DAYS OF DETECTION. COMPONENTS SHALL BE DEFINED AS ANY VALVE, FITTING, PUMP, COMPRESSOR, PRESSURE RELIEF VALVE, DIAPHRAGM, HATCH, SIGHT GLASS, AND METER.

[RULE 1303(b)(1) - BACT]

8. THE OPERATOR SHALL KEEP RECORDS OF THE THROUGHPUT, RECORDS REQUIRED BY DISTRICT RULE 462, AND RECORDS OF THE QUARTERLY INSPECTION, SUBSEQUENT REPAIR AND RE-INSPECTION. RECORDS SHALL BE IN A FORMAT APPROVED BY THE DISTRICT AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

[RULE 462, RULE 1303(b)(2) OFFSETS]

**Periodic Monitoring: NONE**

**Emissions and Requirements:**

9. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: 0.08 LB/1000 GAL. ORGANIC LIQUID LOADED, RULE 462

TOC/VOC: 35MG/LITER ORGANIC LIQUID LOADED, 40CFR60 SUBPART XX



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**PERMIT TO OPERATE**

**Permit No. G22874  
A/N 453406**

**Equipment Description:**

**BULK FUEL LOADING RACK NO. 4, CONSISTING OF:**

1. FOUR GASOLINE BOTTOM LOADING ARMS/HOSES, EACH 4" DIA. CORRUGATED METAL OR INDUSTRY STANDARD EQUIVALENT, WITH A DRY-BREAK CONNECTOR, A PRESET FLOW METER, AND A STRAINER.
2. TWO VAPOR RECOVERY HOSES, EACH 3" DIA. VENTING TO A VAPOR RECOVERY SYSTEM.
3. FOUR GASOLINE CENTRIFUGAL TRANSFER PUMPS, EACH WITH A 50 HP MOTOR, WITH TANDEM MECHANICAL SEALS AND CONNECTED TO THE EXISTING VAPOR RECOVERY SYSTEM, COMMON TO RACKS NO. 1, 2, 3, AND 4.
4. SIX GASOLINE CENTRIFUGAL TRANSFER PUMPS, EACH WITH A 60 HP MOTOR, WITH TANDEM MECHANICAL SEALS AND CONNECTED TO THE VAPOR RECOVERY SYSTEM, COMMON TO RACKS NO. 1, 2, 3, AND 4.
5. VAPOR KNOCKOUT SUMP, 4,000 GALLON CAPACITY (BELOW GRADE), COMMON TO RACKS NO. 1, 2, 3, AND 4.
6. DIESEL DISPENSING UNIT CONSISTING OF A CONTROL VALVE, FILTER, METER, DISPENSING NOZZLE, AND A 1-1/2 HP PUMP, COMMON TO RACKS NO. 1, 2, 3, AND 4.
7. TWO ETHANOL TRANSFER PUMPS, EACH WITH TANDEM MECHANICAL SEALS AND 50 HP MOTOR, VENTED TO VAPOR RECOVERY SYSTEM, COMMON TO LOADING RACKS NO. 1, 2, 3, AND 4.
8. TWO ADDITIVE PUMPS, MECHANICAL DRIVE, COMMON TO LOADING RACKS NO. 1, 2, 3, AND 4.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE AGGREGATE LOADING RATE OF DIESEL FUEL SHALL NOT EXCEED 150,000 BARRELS PER MONTH AND THE AGGREGATE LOADING RATE OF PETROLEUM PRODUCTS (EXCLUDING DIESEL) SHALL NOT EXCEED 1,428,571 BARRELS PER MONTH AT LOADING RACKS NOS. 1, 2, 3 AND 4.  
[RULE 1303(b)(2) OFFSETS]



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**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

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4. THE AGGREGATE LOADING RATE OF ALL PRODUCTS SHALL NOT EXCEED 80,952 BARRELS PER DAY AT LOADING RACKS NOS. 1, 2, 3 AND 4.  
[RULE 462]

5. THE THROUGHPUT SHALL BE MONITORED AND RECORDED WITH TOTALIZING METERS, EQUIPPED WITH DIGITAL READOUTS, AS WELL AS AN AUTOMATED SYSTEM DESIGNED TO SHUTDOWN LOADING WHEN THE THROUGHPUT LIMIT IS REACHED.  
[RULE 462, RULE 1303(b)(2) OFFSETS, 40CFR60 SUBPART XX]

6. THIS EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED TO AN AIR POLLUTION CONTROL DEVICE WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A PERMIT BY THE EXECUTIVE OFFICER.

VENT GASES FROM THE LOADING RACK SHALL BE VENTED TO THE ON-SITE VAPOR RECOVERY SYSTEM, OR ALTERNATIVELY TO THE THERMAL OXIDIZER OWNED AND OPERATED BY KINDER MORGAN ENERGY PARTNERS (FACILITY ID 800129).  
[RULE 462, RULE 1303(a)(1)-BACT, 40CFR60 SUBPART XX]

7. THE FOLLOWING BACT REQUIREMENTS SHALL APPLY TO COMPONENTS IN VOC SERVICE.

A. ALL NEW VALVES SHALL BE BELLOWS SEAL VALVES, EXCEPT AS APPROVED BY THE DISTRICT, IN THE FOLLOWING APPLICATIONS: HEAVY LIQUID SERVICE, CONTROL VALVE, INSTRUMENT PIPING/TUBING, APPLICATIONS REQUIRING TORSIONAL VALVE STEM MOTION, APPLICATIONS WHERE VALVE FAILURE COULD POSE SAFETY HAZARD (e.g. DRAIN VALVES WITH VALVE STEMS IN HORIZONTAL POSITION), RETROFITS/SPECIAL APPLICATIONS WITH SPACE LIMITATIONS, AND VALVES NOT COMMERCIALY AVAILABLE. ADDITIONAL EXCEPTIONS ARE LISTED IN DISTRICT RULE 1173 (l)(1).



## FACILITY PERMIT TO OPERATE BP WEST COAST PRODUCTS LLC, COLTON TERMINAL

B. ALL NEW PRESSURE RELIEF DEVICES WHICH VENT TO ATMOSPHERE SHALL UTILIZE A RUPTURE DISC AND A TELL-TALE INDICATOR. THE RUPTURE DISC SHALL BE REPLACED ANYTIME THE PRESSURE RELIEF DEVICE HAS LIFTED.

C. ALL NEW GASOLINE TRANSFER PUMPS SHALL UTILIZE DUAL SEALS AND EITHER:

1. A HIGHER PRESSURE BARRIER FLUID OR
2. VENT THE VOID SPACE BETWEEN THE SEALS TO THE VAPOR RECOVERY SYSTEM.

FOR PUMPS BEING VENTED TO A VAPOR RECOVERY SYSTEM, THE TIE IN TO THE VAPOR RECOVERY SYSTEM SHALL BE UPSTREAM OF THE BLOWERS USED TO DRAW DISPLACED VAPORS FROM THE LOADING RACKS.

D. ALL NEW FUGITIVE COMPONENTS SHALL BE INSPECTED QUARTERLY USING EPA METHOD 21.

E. FOR ALL NEW FUGITIVE COMPONENTS, ANY LEAK GREATER THAN 500 PPM MEASURED AS METHANE ABOVE BACKGROUND AS MEASURED USING EPA METHOD 21, SHALL BE REPAIRED WITHIN 14 DAYS OF DETECTION. COMPONENTS SHALL BE DEFINED AS ANY VALVE, FITTING, PUMP, COMPRESSOR, PRESSURE RELIEF VALVE, DIAPHRAGM, HATCH, SIGHT GLASS, AND METER.

[RULE 1303(b)(1) - BACT]

8. THE OPERATOR SHALL KEEP RECORDS OF THE THROUGHPUT, RECORDS REQUIRED BY DISTRICT RULE 462, AND RECORDS OF THE QUARTERLY INSPECTION, SUBSEQUENT REPAIR AND RE-INSPECTION. RECORDS SHALL BE IN A FORMAT APPROVED BY THE DISTRICT AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

[RULE 462, RULE 1303(b)(2) OFFSETS]

**Periodic Monitoring: NONE**

**Emissions and Requirements:**

9. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: 0.08 LB/1000 GAL. ORGANIC LIQUID LOADED, RULE 462

TOC/VOC: 35MG/LITER ORGANIC LIQUID LOADED, 40CFR60 SUBPART XX



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

**PERMIT TO OPERATE**

**Permit No. G22938  
A/N 453411**

**Equipment Description:**

VAPOR RECOVERY SYSTEM SERVING LOADING RACKS NO. 1, 2, 3, AND 4, CONSISTING OF:

1. TWO CARBON ADSORBERS, EACH 8'-0" DIA. X 8'-0" H., EACH WITH 9,600 LBS OF ACTIVATED CARBON, OPERATING ON 15 MINUTE CYCLES.
2. GASOLINE ABSORPTION TOWER, 3'-0" DIA. X 20'-0" H.
3. GLYCOL SEPARATOR, 3'-0" DIA. X 8'-0" H., 400 GALLONS.
4. TWO LIQUID RING VACUUM PUMPS, EACH 940 CFM, WITH 75 HP MOTOR.
5. SUPPLY SPONGE GASOLINE PUMP, 150 GPM, WITH 7.5 HP MOTOR.
6. RETURN SPONGE GASOLINE PUMP, 150 GPM, WITH 7.5 HP MOTOR.
7. TWO SEAL FLUID GLYCOL PUMP, EACH 24 GPM, WITH A 2 HP MOTOR.
8. SHELL AND TUBE HEAT EXCHANGER, GLYCOL COOLER.
9. VAPOR BLOWER, 1400 SCFM CAPACITY, WITH A 7.5 HP MOTOR.
10. VACUUM BOOSTER BLOWER, 2810 ACFM CAPACITY, WITH A 75 HP MOTOR.

**Conditions:**

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.  
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.  
[RULE 204]
3. THE FOLLOWING BACT REQUIREMENTS SHALL APPLY TO COMPONENTS IN VOC SERVICE:
  - A. ALL NEW VALVES SHALL BE BELLOWS SEAL VALVES, EXCEPT AS APPROVED BY THE DISTRICT, IN THE FOLLOWING APPLICATIONS: HEAVY LIQUID SERVICE, CONTROL



## FACILITY PERMIT TO OPERATE BP WEST COAST PRODUCTS LLC, COLTON TERMINAL

VALVE, INSTRUMENT PIPING/TUBING, APPLICATIONS REQUIRING TORSIONAL VALVE STEM MOTION, APPLICATIONS WHERE VALVE FAILURE COULD POSE SAFETY HAZARD (E. G. DRAIN VALVES WITH VALVE STEMS IN HORIZONTAL POSITION), RETROFITS/SPECIAL APPLICATIONS WITH SPACE LIMITATIONS, AND VALVES NOT COMMERCIALY AVAILABLE. ADDITIONAL EXCEPTIONS ARE LISTED IN DISTRICT RULE 1173 (I)(1).

- B. ALL NEW PRESSURE RELIEF DEVICES WHICH VENT TO ATMOSPHERE SHALL UTILIZE A RUPTURE DISC AND A TELL-TALE INDICATOR. THE RUPTURE DISC SHALL BE REPLACED ANYTIME THE PRESSURE RELIEF DEVICE HAS LIFTED.
  - C. ALL NEW GASOLINE TRANSFER PUMPS SHALL UTILIZE DUAL SEALS AND EITHER: UTILIZE A HIGHER PRESSURE BARRIER FLUID OR VENT THE VOID SPACE BETWEEN THE SEALS TO THE VAPOR RECOVERY SYSTEM. FOR PUMPS BEING VENTED TO A VAPOR RECOVERY SYSTEM, THE TIE IN TO THE VAPOR RECOVERY SYSTEM SHALL BE UPSTREAM OF THE BLOWERS USED TO PROVIDE MOTIVE FORCE TO THE DISPLACED VAPORS FROM THE LOADING RACKS.
  - D. ALL NEW FUGITIVE COMPONENTS SHALL BE INSPECTED QUARTERLY USING EPA METHOD 21.
  - E. FOR ALL NEW FUGITIVE COMPONENTS, ANY LEAK GREATER THAN 500 PPM MEASURED AS METHANE ABOVE BACKGROUND AS MEASURED USING EPA METHOD 21, SHALL BE REPAIRED WITHIN 14 DAYS OF DETECTION. COMPONENTS SHALL BE DEFINED AS ANY VALVE, FITTING, PUMP, COMPRESSOR, PRESSURE RELIEF VALVE, DIAPHRAGM, HATCH, SIGHT GLASS, AND METER.
  - F. THE OPERATOR SHALL KEEP RECORDS OF THE QUARTERLY INSPECTION, SUBSEQUENT REPAIR, AND REINSPECTION.  
[RULE 1303(a)(1) - BACT]
4. THE OPERATOR SHALL INSTALL AND MAINTAIN A CONTINUOUS MONITORING SYSTEM (CMS), TO ACCURATELY INDICATE THE VOC CONCENTRATION AT THE OUTLET OF THE CARBON ADSORBER IN PPMV. THE MONITORING SYSTEM SHALL COMPLY WITH THE REQUIREMENTS OF DISTRICT RULE 462. THE EMISSIONS MONITORING DEVICE SHALL BE CALIBRATED DAILY.  
[RULE 462, RULE 1303(b)(2) OFFSETS, 40CFR60 SUBPART XX]
5. THE SYSTEM SHALL INCLUDE A HYDROCARBON MONITOR THAT SHALL:
- A. ALERT THE OPERATOR BOTH AUDIBLY AND VISUALLY TO PREVENT HYDROCARBON BREAKTHROUGH. THE ALARM WILL BE SET TO ACTIVATE AT A HYDROCARBON EMISSIONS RATE OF 0.08 LBS PER 1000 GALLONS LOADED.
  - B. INCLUDE INTERLOCK TO DISABLE THE OPERATION OF THE LOADING RACKS WHEN THE HYDROCARBON EMISSIONS FROM THE OUTLET OF THE VAPOR RECOVERY SYSTEM EXCEEDS 0.08 LBS PER 1000 GALLONS LOADED.  
[RULE 462]
6. RECORDS REQUIRED BY THIS PERMIT SHALL BE MADE AVAILABLE TO THE DISTRICT UPON REQUEST.



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

[RULE 462, RULE 466.1, RULE 467]

**Periodic Monitoring:**

7. THE OPERATOR SHALL CONDUCT SOURCE TEST(S) IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:
  - A. THE TEST SHALL BE CONDUCTED TO DETERMINE THE BULK LOADING RATE IN GALLONS PER HOUR DURING THE SOURCE TEST.
  - B. THE TEST SHALL BE CONDUCTED TO DETERMINE THE VOC EMISSION RATE IN POUNDS PER 1000 GALLONS OF ORGANIC LIQUIDS LOADED.
  - C. THE TEST SHALL BE CONDUCTED PERIODICALLY AT 3 YEAR INTERVALS.  
[RULE 1303(a)(1) BACT, RULE 3004(a)(4) PERIODIC MONITORING]

**Emissions and Requirements:**

8. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:  
  
VOC: 0.08 LB/1000 GAL. ORGANIC LIQUID LOADED RULE 462  
TOC/VOC: 35MG/LITER ORGANIC LIQUID LOADED, 40CFR60 SUBPART XX



## FACILITY PERMIT TO OPERATE BP WEST COAST PRODUCTS LLC, COLTON TERMINAL

### RULE 219 EQUIPMENT

**Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS.

**Conditions:**

1. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

FOR ARCHITECTURAL APPLICATIONS WHERE NO THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN SEMI-ANNUAL RECORDS OF ALL COATINGS CONSISTING OF (A) COATING TYPE, (B) VOC CONTENT AS SUPPLIED IN GRAMS PER LITER (g/l) OF MATERIALS FOR LOW-SOLIDS COATINGS, (C) VOC CONTENT AS SUPPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.

FOR OTHER ARCHITECTURAL APPLICATIONS WHERE THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN DAILY RECORDS FOR EACH COATING CONSISTING OF (A) COATING TYPE, (B) VOC CONTENT AS APPLIED IN GRAMS PER LITER (g/l) OF MATERIALS USED FOR LOW-SOLIDS COATINGS (C) VOC CONTENT AS APPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.  
[RULE 3004 (a) (4)]

**Periodic Monitoring:** NONE

**Emissions and Requirements:**

2. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

VOC: RULE 1113, SEE APPENDIX B FOR EMISSION LIMITS  
VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS



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**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

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**RULE 219 EQUIPMENT**

**Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, HAND WIPING OPERATIONS.

**Emissions and Requirements:**

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS



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**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

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**RULE 219 EQUIPMENT**

**Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, AIR CONDITIONING UNITS.

**Emissions and Requirements:**

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

TOC: RULE 1415

TOC: 40CFR82 SUBPART B



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**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

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**RULE 219 EQUIPMENT**

**Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, MACHINING EQUIPMENT, SMALL GRINDERS.



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**FACILITY PERMIT TO OPERATE  
BP WEST COAST PRODUCTS LLC, COLTON TERMINAL**

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**RULE 219 EQUIPMENT**

**Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, STORAGE AND TRANSFER EQUIPMENT FOR UNHEATED ORGANIC LIQUIDS.



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
21865 Copley Drive, Diamond Bar, CA 91765

Section H Page: 1  
Facility ID: 800397  
Revision #: 2  
Date: February 19, 2013



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**FACILITY PERMIT TO OPERATE  
BP WEST COAST PROD., ARCO COLTON**

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**SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE**

NONE



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## FACILITY PERMIT TO OPERATE BP WEST COAST PROD., ARCO COLTON

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### SECTION I: PLANS AND SCHEDULES

This section lists all plans approved by AQMD for the purposes of meeting the requirements of applicable AQMD rules specified below. The operator shall comply with all conditions specified in the approval of these plans .

Documents pertaining to the plan applications listed below are available for public review at AQMD Headquarters. Any changes to plan applications will require permit modification in accordance with Title V permit revision procedures.

List of approved plans:

Application	Rule
396485	463
487163	462

NOTE: This section does not list compliance schedules pursuant to the requirements of Regulation XXX - Title V Permits; Rule 3004(a)(10)(C). For equipment subject to a variance, order for abatement, or alternative operating condition granted pursuant to Rule 518.2, equipment specific conditions are added to the equipment in Section D or H of the permit.



**RULE 462 CONTINUOUS MONITORING SYSTEM (CMS) COMPLIANCE PLAN  
FACILITY 800397 – BP WEST COAST PROD., ARCO COLTON**

**CONTINUOUS MONITORING SYSTEM (CMS) EQUIPMENT**

CONTINUOUS MONITORING SYSTEM (CMS) CONSISTING OF AN INFRARED INDUSTRIES INC., SUMMIT MODEL IR-8400D, GAS ANALYZER AND A YOKOGAWA DAQSTATION DX106 SERIES RECORDER SERVING A JOHN ZINK CARBON ADSORPTION SYSTEM.

**CONDITIONS**

1. THE OPERATOR SHALL CONDUCT THE OPERATION OF THIS CMS IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE PLAN APPLICATION UNDER WHICH THIS APPROVAL IS GRANTED, UNLESS OTHERWISE NOTED BELOW.
2. THE CMS SHALL SAMPLE AND ANALYZE GAS FROM THE OUTLET OF THE CARBON CANISTERS TO ACCURATELY MEASURE THE NONMETHANE HYDROCARBON (NMHC) CONCENTRATION AT THE EXHAUST OF THE VAPOR RECOVERY UNIT
3. THE CMS SHALL PROVIDE AND THE DATA RECORDER SHALL RETAIN THE INSTANTANEOUS NMHC CONCENTRATION AND A CONTINUOUS 15-MINUTE AVERAGE NMHC CONCENTRATION, MEASURED AT THE EXHAUST OF THE VAPOR RECOVERY SYSTEM (CARBON ADSORBERS)
4. THE OPERATOR SHALL MAINTAIN A DISPLAY OF THE NMHC CONCENTRATIONS IN A LOCATION ACCESSIBLE TO DISTRICT PERSONNEL.
5. DAILY CALIBRATION ERROR TESTS SHALL BE PERFORMED ON THE CMS AT THE LOW (0-20 PERCENT) AND HIGH (80-100 PERCENT) RANGES OF CONCENTRATION. THE CALIBRATION ERROR SHALL NOT EXCEED 2.5 PERCENT OF THE FULL SCALE RANGE.
6. TESTING OF THE CEMS FOR RELATIVE ACCURACY (RA) AND CALIBRATION DRIFT, AS DESCRIBED IN 40 CFR APPENDIX B SHALL BE CONDUCTED IN CONJUNCTION WITH THE VAPOR RECOVERY SYSTEM (CARBON ADSORBERS) PERFORMANCE TESTING REQUIRED BY THE PERMIT FOR THE VAPOR RECOVERY SYSTEM (CARBON ADSORBERS).
7. THE OPERATOR SHALL ENSURE THAT THE CMS IS PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES AND THAT IT MEETS APPLICABLE REQUIREMENTS OF 40 CFR 63.427 AND 40 CFR 60 APPENDIX B, SPECIFICATION 8. THE APPLICABILITY OF 40 CFR 63.427 IS PURSUANT TO AQMD RULE 462 (f)(2) AND DOES NOT NECESSARILY IMPLY THAT THE FACILITY IS A MAJOR SOURCE OF HAZARDOUS AIR POLLUTANTS(HAPS).



**RULE 462 CONTINUOUS MONITORING SYSTEM (CMS) COMPLIANCE PLAN  
FACILITY 800397 – BP WEST COAST PROD., ARCO COLTON**

8. THE OPERATOR SHALL MAINTAIN THE RECORDING DEVICE IN PROPER OPERATION AT ALL TIMES SUCH THAT IT IS ACCURATELY SYNCHRONIZED WITH THE CORRECT TIME OF DAY.
9. THE ELECTRONIC RECORDING DEVICES SHALL ARCHIVE DATA IN A SECURE ENCRYPTED FORMAT TO NONVOLATILE DATA STORAGE. INSTANTANEOUS READINGS SHALL BE RECORDED AT A FREQUENCY OF NOT LESS THAN ONCE PER MINUTE. THE RECORDER/SOFTWARE SHALL BE CAPABLE OF DISPLAYING AND PRINTING OUT PLOTS OF THE NMHC CONCENTRATION WITHIN 3 HOURS OF A REQUEST. WHERE EXTERNAL STORAGE MEDIA IS USED, IT SHALL BE REPLACED AT A SUFFICIENT FREQUENCY TO ENSURE THAT THE AMOUNT OF STORED DATA IS AT NO MORE THAN 90% OF THE STORAGE CAPACITY OF THE MEDIA.
10. THE OPERATOR SHALL NOTIFY THE EXECUTIVE OFFICER, WITHIN 24 HOURS, IN THE EVENT OF A CMS OR RECORDER FAILURE OR SHUTDOWN FOR REPAIR, WHICH EXCEEDS ONE HOUR. THE NOTIFICATION SHALL INCLUDE THE CAUSE AND TIME OF THE FAILURE, THE TIME THE RECORDER RETURNED TO OPERATION, MAINTENANCE OR CORRECTIVE WORK PERFORMED AND ACTIONS TAKEN TO PREVENT SUCH FAILURES IN THE FUTURE. THE CMS OR RECORDER SHALL BE RESTORED TO NORMAL OPERATION WITHIN 96 HOURS OF THE FAILURE.
11. THE OPERATOR SHALL KEEP RECORDS ON SITE TO SHOW COMPLIANCE WITH THE CONDITIONS REQUIRED BY THIS PLAN. SUCH RECORDS SHALL BE KEPT FOR AT LEAST FIVE YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.



**Rule 463 Inspection and Maintenance Plan Approval**  
Facility ID :800397 - Company Name :BP West Coast Products, LLC

LEGAL OWNER OR OPERATOR      BP West Coast Products, LLC  
FACILITY LOCATION                2395 W. Riverside Avenue, Bloomington, CA 92316  
MAILING ADDRESS                 2395 W. Riverside Avenue, Bloomington, CA 92316

**ADMINISTRATIVE REQUIREMENTS**

This facility shall be subject to the terms and conditions of this plan unless this plan is suspended, revoked, modified, reissued or denied. Failure to maintain a valid plan is a violation of Rule 463.

It is the responsibility of the facility to comply with other District Rules and Regulations and with all laws, ordinances and regulations of other government agencies which are applicable to the operation of the equipment.

This plan does not authorize the emission of air contaminants in excess of those allowed by Division 26 of the Health and Safety Code of the State of California or the Rules and Regulations of the SCAQMD. This plan cannot be considered as permission to violate existing laws, ordinances, regulation, or statutes of the other governmental agencies.

**RULE 463 EQUIPMENT**

External Floating Roof Tanks listed on page(s) Attachment A, Page 2.

Internal Floating Roof Tanks listed on page(s) Attachment A, Page 2.

**CONDITIONS**

1. The operator shall conduct the operation of the storage equipment in compliance with all data and specifications submitted with the plan application under which this approval is granted.
2. Floating roof tank seals shall be properly installed and continuously maintained in good operating condition.

**ARCO Colton Terminal**

2395 South Riverside Avenue  
Bloomington, CA 90280

Owned by: BP West Coast Products LLC

**SCAQMD Rule 463  
FLOATING ROOF TANK INSPECTION AND MAINTENANCE  
PLAN**

Updated: January 1, 2002  
By: Ruthanne Walker, HSE Advisor

## **A. Purpose of Floating Roof Tank Inspection and Maintenance Plan**

This Floating Roof Tank Inspection and Maintenance Plan has been prepared to comply with SCAQMD Rule 463 (as amended March 11, 1994). The plan originally was submitted to meet a September 14, 1994 deadline and is now being updated to reflect that BP West Coast Products LLC now owns the ARCO Colton Terminal. The plan must also be revised whenever a new tank is constructed. The plan includes the following:

- Proposed Self-Inspection Schedule
- Number of Certified Persons Dedicated to Program
- Self-Inspection Procedures
- Safety Procedures
- Tank Inventory (Tank ID, Maximum Design Capacity, Product, Shell Type, Dimensions, Seal Type, Seal Manufacturer, Floating Roof Type, Date of Construction, Location)

## **B. Proposed Self-Inspection Schedule**

ARCO Colton Terminal is owned by BP West Coast Products LLC effective January 1, 2002. ARCO/BP will inspect all floating roof tanks twice per year at 4 to 8 month intervals. To help assure that inspections occur within the 4 to 8 month window, inspections will be planned to take place during the months of approximately March and September. However, flexibility in scheduling will be accommodated as long as the 4 to 8 month window is met. Inspections will be conducted by a certified person in accordance with the procedures and guidelines set forth in "Inspection Procedures and Compliance Report Form" (Attachment B).

Each time a tank is emptied and degassed, the primary and secondary seals will be inspected by a certified person. On external floating roofs, gap measurements will be taken when the liquid surface is still, but not more than 24 hours after the tank roof is refloated. SCAQMD will be notified at least two weeks prior to starting a tank-emptying or roof-refloating operation for planned tank maintenance.

## **C. Number of Certified Persons Dedicated to the Program**

Typically, two ARCO/BP employees associated with operation of the terminal are certified to perform the semi-annual Rule 463 Tank Inspections at the Colton Terminal. However, in many cases, the inspections will be performed by outside contractors. Outside contractors will also be used to perform the primary and secondary seal inspections when a tank is emptied and degassed. Only ARCO/BP employees or outside contractors who are SCAQMD certified tank inspectors, holding a certificate attesting to completion of the training, will conduct Rule 463 tank inspections.

## **D. Self Inspection Procedures**

All Tank inspections are conducted in accordance with the procedures and guidelines set forth in SCAQMD's "Inspection Procedures and Compliance Report Form" (Attachment B).

## **E. Safety Procedures**

Safety procedures followed during tank inspections are contained in the BP Health and Safety Procedures Manual. Copies of these procedures are located in Attachment A. Procedures, which apply to tank inspections per Rule 463, include, but may not be limited to the following:

<b>Procedure Name</b>	<b>Safety Procedure #</b>
Blinding and Equipment Isolation	B2
Confined Spaces, Permit-Required	C7
Contractor Safety	C8
Lockout/Tagout (Control of Hazardous Energy Sources)	L4
Tank Cleaning	T1



## **Attachment A**

### **BP Health and Safety Procedures**

Blinding and Equipment Isolation	B2
Confined Spaces, Permit-Required	C7
Contractor Safety	C8
Lockout/Tagout (Control of Hazardous Energy Sources)	L4
Tank Cleaning	T1

## **BLINDING AND EQUIPMENT ISOLATION**

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### **1.0. BLINDING AND ISOLATION**

Blinds shall be installed to effectively isolate equipment, vessels, and piping from other parts of operating areas so repairs, maintenance, or cleaning can be conducted in a safe manner. Closing a block valve will not be sufficient in isolating the area when entering a confined space. Disconnecting is also an adequate means of isolation.

### **2.0. EXCEPTIONS AND ENFORCEMENT**

Exceptions to blinding must be approved by the supervisor in charge at that location. The operating supervisors are responsible for the implementation and enforcement of this program.

### **3.0. PROCEDURE FOR OPENING FLANGED JOINT FOR INSTALLATION OF BLINDS**

Before opening any flanged joint for the installation of a blind:

- 3.1. Verify the exact locations where blinds are necessary.
- 3.2. Determine from the designated operator that the equipment or piping is prepared for, and properly released for blinding. Verify that lines and equipment have been depressured and drained. Also, ensure that drain valves are open by using proper rod-out equipment.
- 3.3. Determine what product or material has been contained in the equipment or piping. If this material is hazardous, secure and wear the appropriate protective clothing and equipment.
- 3.4. If equipment is under more than slightly above atmospheric pressure, make sure that the operating supervisor in charge has granted approval.
- 3.5. Please reference Lockout/Tagout section of this manual for applicability when performing blinding or equipment isolation.

### **4.0. PROCEDURE FOR OPENING FLANGED JOINT FOR INSTALLATION OF BLIND**

When opening any flanged joint for the installation of blinds:

- 4.1. Wear protective clothing and equipment as dictated by the circumstances. Always wear appropriate eye protection.
- 4.2. Remove flange bolting leaving a minimum of two, then loosen these bolts and without completely removing the nuts spread the flanges to install the blind. Always spread the flange on the side away from the workman first so any sudden release will be directed away.
- 4.3. Flanges should be open a minimum length of time consistent with the safe installation of the blind.

## **BLINDING AND EQUIPMENT ISOLATION**

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- 4.4. When opening flanges suspected to contain toxic gases, self-contained breathing apparatus are to be worn unless it has been definitely established through testing that no toxic gases are present.

### **5.0. INSTALLATION OF BLINDS**

- 5.1. Blinds will be installed at the flange closest to the vessel, tank or equipment under consideration.
- 5.2. Blinds will be installed on the side of block valves that is most consistent with pressure testing requirements.
- 5.3. When vessels or process equipment is interconnected in such a way that blinding of each is not possible or practical, the combination is to be considered as one vessel. The combination will be appropriately blinded and prepared as a unit.
- 5.4. A blind may have a gasket installed on both sides but a minimum of one gasket installed on the pressure side of the blind is required.
- 5.5. Blinds should also be tagged with the blind location, person installing, and the date recorded in the blind record, if applicable at your facility.

### **6.0. BLINDING CONSIDERATIONS**

All Blinds will be installed with the following considerations in mind:

- 6.1. Will the blind effectively accomplish its purpose in the selected location?
- 6.2. Can the blind be removed safely when its removal is required? The precautions taken during the installation of the blind shall be followed when removing the blind.
- 6.3. Is the selected location accessible to personnel and equipment?
- 6.4. Is the blind located at the flange closest to the equipment, tank or vessel?
- 6.5. Is the blind the correct size and pressure rating?
- 6.6. Has the line, vessel or equipment contained toxic or corrosive material?
- 6.7. Have provisions been made to eliminate or reduce spillage or prevent pollution?

### **7.0. REFERENCES**

Occupational Safety and Health Administration, Department of Labor, 29 CFR, Part 1910.147.

**1.0. INTRODUCTION**

OSHA 29 CFR 1910.146 "Permit-Required Confined Spaces" states that no confined space shall be entered until precautionary measures have been taken to secure the safety of personnel from atmospheric, mechanical, and other hazards. Each location shall adhere to the confined space procedures, practices, and rules contained in this program, including the issuing of permits that authorize entry into a Permit-Required Confined Space.

**1.1. What is a Confined Space?**

A space that is large enough and so configured that an employee can bodily enter and perform assigned work; has limited or restricted means for entry or exit; and is not designed for continuous employee occupancy.

**1.2. What is a Permit-Required Confined Space?**

A confined space that has one or more of the following characteristics:

1.2.1. Contains or has potential to contain a hazardous atmosphere;

1.2.2. Contains a material that has the potential for engulfing an entrant;

1.2.3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or

1.2.4. Contains any other recognized serious safety or health hazard.

1.2.5. Examples of Permit-Required Confined Spaces are, but not limited to: above and underground storage tanks; tops of floating roof tanks; filter or pressure vessels; motor control buildings; ship, barge, truck, and rail car product storage compartments; stacks and ducts; catch basins, sewers, water conduits, and sumps; wells, deep pits, pipe chases, box culverts, utility vaults, etc.

**1.3. What is an Alternate Procedure Confined Space?**

An alternate procedure confined space is a reclassified permit-required space whose only hazard is an actual or potential hazardous atmosphere that can be controlled by continuous forced air ventilation alone.

**1.4. What is a Non-Permit Required Confined Space?**

A non-permit required confined space is a reclassified permit-required confined space that poses no actual or potential atmospheric hazards and all other hazards in the space have been eliminated.

**2.0. PERMIT-REQUIRED CONFINED SPACES**

2.1. Permit-required spaces are spaces where the toxic gases or oxygen concentrations may require some respiratory protection or mechanical ventilation. Examples are tank cleaning or internal floating roof descent. Only trained personnel should be permitted

to enter permit-required spaces. Entry permits are valid only for the period of time required to complete the assigned task or job identified on the permit.

- 2.2. Permit-Required Confined Spaces that can be entered shall bear a warning label at all entrances, e.g., "**DANGER—PERMIT-REQUIRED CONFINED SPACE, DO NOT ENTER**".
- 2.3. A permit system shall control entry into any permit-required confined space (See Appendix A - Confined Space Entry Permit"). All areas and item lines of the permit must be filled in. Use **NA** (**N**ot **A**pplicable) if area or item line is not applicable.
- 2.4. These spaces will be continuously monitored for oxygen and flammable limits throughout entry. Toxic gases will also be monitored if the situation indicates the potential for their presence.
- 2.5. If the entry into a permit-required enclosure will continue through shift change, workmen must inform operating personnel so that the entry supervisor can ensure that the operation is properly transferred and that permit conditions remain unchanged.
- 2.6. While working inside a permit-required space, a full-time PPE-equipped standby person or attendant is required, including required emergency rescue equipment. Refer to the Section 12.0 for the duties pertaining to this person. Non-permit-required spaces do not mandate a full-time standby person or attendant unless specified by the permit originator.
- 2.7. Pre-planning for rescue and emergency response should be done prior to commencement of the entry. All required rescue equipment must be at the entry location and ready for immediate use.
- 2.8. No Hot Work may be performed in a permit-required space unless it is verified that hot work will not add to the hazards present and a separate Hot Work Permit is issued.
- 2.9. Upon completion of the entry covered by the permit and after all entrants have exited the permit space, the permit originator shall be notified. It is the responsibility of the entry supervisor to cancel the permit by signing and dating (including the time) the permit in the spaces provided. This cancellation should occur on the file copy. All posted copies of the permit should be immediately removed.

**3.0. NON-PERMIT REQUIRED CONFINED SPACES**

- 3.1. Non-permit spaces are reclassified permit-required spaces that meet the following:
  - 3.1.2. Pose no actual or potential atmospheric hazards (oxygen deficient and/or toxic concentrations exceed PELs and TLVs; flammability concentrations in excess of 10 percent of lower flammable limit).
  - 3.1.3. All other hazards eliminated (engulfment, entrapment, etc.).

3.1.4. If entry is required to eliminate hazards or test the atmosphere, such entry shall meet the requirements of permit-required spaces.

3.2. Procedure:

3.2.1. Isolate the confined space-lockout, blinding, etc.

3.2.2. Monitor the atmosphere remotely to determine no atmospheric hazards.

3.2.3. Eliminate all other confined space type of hazards-engulfment, trapped, sloping walls.

3.2.4. Document the atmospheric tests and hazard elimination determination.

3.2.5. When there are changes in the use or configuration of a non-permit confined space that might increase the hazards to entrants, the space shall be reevaluated and, if necessary, reclassified as a permit-required confined space.

3.3. Daily Hot Work Permits may be required.

**4.0. ALTERNATE PROCEDURE CONFINED SPACES**

4.1. A space whose only actual or potential hazard is a hazardous atmosphere that can be controlled by continuous forced air ventilation alone.

4.2. Procedure:

4.2.1. Isolate the confined space-lockout, blinding, etc.

4.2.2. Monitor and inspect the internal atmosphere, remotely, to determine atmospheric hazards, initially and periodically, throughout the work process.

4.2.3. If initial entry into the space is required to monitor and inspect, entry procedures must follow the requirements for permit-required confined space.

4.2.4. Communicate and post the monitoring and inspection results to all employees entering the space.

4.2.5. Ensure a hazardous atmosphere does not exist whenever an employee is in the space.

4.2.6. Continuous forced air ventilation must be used throughout the work process.

4.2.7. Document the atmospheric tests and inspection results.

4.2.8. If a hazardous atmosphere is detected, entrants must evacuate and the space be re-evaluated.

4.3. Daily Hot Work Permits may be required .

### **5.0. PREPARATION OF CONFINED SPACE ENTRY PERMITS**

The people who prepare Confined Space Entry Permits must help protect the entrants against all known hazards. Such hazards include exposure to toxic gases, fumes, and harmful chemicals without proper protective equipment, improper isolation of lines, inadequate ventilation, and unsafe access.

5.1. Verbal permission cannot be given to enter a Confined Space.

5.2. The Entry Supervisor will authorize a permit to be issued by signing the permit in the proper location.

5.3. The Entry Supervisor may assign a person with proper training to make the required gas tests, perform necessary safety inspections and prepare the remainder of the form. The Entry Supervisor, however, is ultimately responsible to insure that the contractor is properly prepared, entrance and rescue procedures are followed, and conditions for safe entry are maintained.

5.4. All Entry Permits require testing for oxygen deficiency, total hydrocarbons, benzene and explosive gases. Before an employee enters the space, the internal atmosphere shall be tested, with a calibrated direct-reading instrument, for the following conditions in the order given:

5.4.1. Oxygen content, acceptable levels are:  
Greater than 19.5% and  
Less than 23.5%

5.4.2. Flammable gases and vapors, acceptable levels are:  
Less than 10% for Hot Work (NO entry without proper PPE) and  
Less than 20% for non-spark producing type work

5.4.3. Total Hydrocarbon contaminants, acceptable levels are:  
Less than 300 ppm for 8 hour TWA and  
Less than 500 ppm for 15 min. STEL

5.4.4. Benzene, acceptable levels are:  
Less than 1 ppm for 8 hour TWA and  
Less than 5 ppm for 15 min. STEL

5.4.5. Lead, acceptable levels are:  
Less than 50 ug/m<sup>3</sup> for 8 hour TWA

- 5.5. Confined Space Entry permits require additional testing if other toxics are suspected to be present. **NOTE:** If a tank has been cleaned and put into non-leaded product service, then no lead testing is required.

**NOTE:** Refer to Appendix C and the MSDS sheet for guidance on working with specific substances.

- 5.6. Atmospheric conditions and recommendations for entry should be made by a qualified person who is knowledgeable of the hazards involved, permissible exposure limits, and testing methodology required to ensure that conditions are safe for entry.

**6.0. PERMIT PREPARATION**

- 6.1. The permit is a 1 page form with 4 copies. Instructions for issuing the permit is printed on the booklet cover. Permits must be posted as listed below:

**ORIGINAL** - Post Conspicuously Near Entry Point

**COPY 2** - Post Conspicuously in Office

**COPY 3** - Discretionary Copy for Dock, Vehicle, Contractor, etc.

**COPY 4** - Retain in Book

- 6.2. Insert the **ORIGINAL** copy and the analytical certificate, if required, in a plastic envelope and issue to the contractor.

**The permit must be securely attached in a conspicuous location near the main entrance of the enclosure prior to entry.**

- 6.3. All areas of the permit pertaining to the Confined Space must be completed to alert all personnel of any present and potential hazards that may be encountered. No space may be left blank. The space must be marked to indicate that item is complete or marked **"NA"** if it is **Not Applicable** to the present entry.

- 6.4. The person who performed the gas tests and inspected the area will sign the permit in the indicated space.

- 6.5. The contractor's designated qualified person (entry supervisor) must also sign the permit in the space provided, at the bottom, prior to issuance.

- 6.6. The Terminal Manager or his designee must sign at the bottom to authorize the permit.

- 6.7. Any hazards confronted or problems encountered during the entry operations must be noted on the canceled permit form to provide information required for the annual program review.

**7.0. PERMIT REVIEW and RETENTION**

- 7.1. A copy of all issued Confined Space Entry Permits must be retained on site for one year. The filed permit must have the originator's signature, date, and time the permit was canceled in the appropriate boxes.

If there is insufficient space to record all authorized entrants on the permit form, a list of authorized entrants must be attached to the **ORIGINAL** copy AND to the file copy of the permit.

- 7.2. A review of the Permit-Required Confined Space Program is required annually by the Area HSE Advisor. All canceled permits for the current year must be reviewed to determine if revisions to the program are required. Revisions to the program must be made to ensure that employees participating in entry operations are protected from permit space hazards.

**NOTE:** It is permissible, under the regulation, to perform a single annual review covering all entries performed during a 12 month period. If no entry is performed during a 12 month period, no review is necessary.

**8.0. GENERAL REQUIREMENTS FOR ALL CONFINED SPACES**

- 8.1. Hazard elimination by engineering methods (i.e., improved ventilation) or administrative controls (elimination of source, removal of people, etc.) is considered the first priority. Where such controls are not feasible, or are unsuccessful, respiratory protection equipment must be used.

- 8.2. Each facility must be evaluated to determine if there are any permit-required confined spaces in the workplace.

If the workplace contains any permit spaces then all exposed employees shall be informed, by posting danger signs or by any other equally effective means, of the existence and location of and the danger posed by the permit space.

- 8.3. Signs and/or barricades must be posted to prevent unauthorized entry into the Confined Space.
- 8.4. All lines to an enclosure must be blinded in place or physically disconnected with blind flanges installed over the end(s).
- 8.5. All electrical and/or mechanical devices must be isolated per the lockout/tagout procedures.
- 8.6. Positive ventilation, usually produced by an air mover blowing air into or out of the space, is recommended for any entry to perform work. Steps should be taken to direct exiting vapors away from any potential ignition sources.

- 8.7. Weather conditions should be closely monitored to insure that any exiting vapors are dispersed and do not remain in low lying areas (e.g., tank dikes). Confined spaces should not be entered during thunder storms.
- 8.8. When conditions change, making it unsafe to remain inside an enclosure, anyone can alert the standby person or persons inside to immediately exit.
- 8.9. Re-entry can only be made after a recheck showing that it is safe to do so (this includes a minimum of oxygen and explosive gas tests).

**9.0. CONTRACT EMPLOYEES**

- 9.1. If a Contractor performs work that involves confined space entry, BP shall:
  - 9.1.1. Inform the contractor that the project/job involves confined space(s) and confined space entry is allowed only through compliance with a Confined Space Entry Program.
  - 9.1.2. Inform the contractor of the elements including the hazards identified and BP's experiences with the space that makes it a confined space.
  - 9.1.3. Inform the contractor of any precautions or procedures that BP has implemented for protection of employees in or near confined space(s) where contractor will be working.
  - 9.1.4. Coordinate confined space entry operations with the contractor, when both BP personnel and contractor personnel will be working in or near confined space(s).
- 9.2. Contractor responsibilities
  - 9.2.1. All contractors performing work in the field who handle or are exposed to hazardous materials, may be required to participate in Oil Spill Response, or may perform work in areas of "exposure", will be required to make available to their contract representative or company inspector:
    - 9.2.2. A copy of their written respirator program.
    - 9.2.3. Medical authorization for their employees to wear Respiratory Protection Equipment (RPE).
    - 9.2.4. Documentation that employees are properly trained.
    - 9.2.5. Assurance that proper RPE is on hand or can be supplied prior to beginning work in or around designated hazardous environments.

**10.0. TRAINING REQUIREMENTS**

- 10.1. All persons connected in any capacity with permit-required confined space entries must be provided with full information and training that will give them the understanding, skills, and knowledge to carry out their jobs safely. For all of them this will include the hazards of confined spaces and the effects and consequences of various possible exposures.
- 10.2. Some personnel will need more specialized information and training as listed below:
  - 10.2.1. ENTRY SUPERVISORS
    - 10.2.1.1. Must know the appropriate tests and monitoring,
    - 10.2.1.2. must know how to determine acceptable and prohibited conditions, and
    - 10.2.1.3. must know the proper permitting and entry procedures.
  - 10.2.2. AUTHORIZED ENTRANTS
    - 10.2.2.1. Must be able to recognize signs and symptoms of exposure,
    - 10.2.2.2. know how to use any needed entry and rescue equipment,
    - 10.2.2.3. how to communicate with attendants as needed and alert them when some warning symptom or hazardous condition becomes evident, and
    - 10.2.2.4. how to exit as promptly as possible when ordered or alerted to do so.
  - 10.2.3. ATTENDANTS
    - 10.2.3.1. Must know how to monitor activities and conditions of the space and the entrants,
    - 10.2.3.2. how to order exit or summon rescue services, and
    - 10.2.3.3. how to perform non-entry rescue.
  - 10.2.4. RESCUE PERSONNEL
    - 10.2.4.1. Whether on-site or off-site, need to know all of the same things that authorized entrants do.
    - 10.2.4.2. The on-site rescue teams must be provided with proper personal protective and rescue equipment, and training in how to use it.
    - 10.2.4.3. Each member must have first-aid training, including CPR. At least one member must have current certification in first-aid and CPR.

- 10.2.4.4. The ENTIRE TEAM must practice simulated rescues at least once every 12 months.
  - 10.2.4.5. Outside services must be permitted access to comparable permit spaces to develop rescue plans and practice rescues.
  - 10.2.4.6. Hospitals and treatment centers must be provided with any information that may assist in the treatment of rescued employees.
- 10.3. After the required initial training, refresher training must be provided whenever:
- 10.3.1. Duties change,
  - 10.3.2. the hazards in the space change, or
  - 10.3.3. evaluation indicates that there are inadequacies in an employee's knowledge.
- 10.4. The regulation requires that training for all persons involved in entry operations be certified. This certification must be available for inspection by employees and their authorized representatives. The certification must contain:
- 10.4.1. Each employee's name,
  - 10.4.2. the signatures or initials of the trainers, and
  - 10.4.3. the dates of training.

#### **11.0. DUTIES OF PERSONS INVOLVED IN CONFINED SPACE ENTRY**

In addition to those who will actually enter the permit-required confined space, a number of other individuals or teams are involved in assuring that the entry and the work inside the space are carried out safely from beginning to end, and in providing rescue services if they should become necessary. Each of these individuals has specific duties under the regulation as shown below:

##### **11.1. AUTHORIZED ENTRANT**

- 11.1.1. Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
- 11.1.2. Properly uses equipment as required by the regulation (testing & monitoring, ventilation, communications, PPE, lighting, barriers, shields, rescue and emergency response equipment).
- 11.1.3. Communicates with the attendant as necessary to enable the attendant to monitor entrant status and to enable the attendant to alert entrants of the need to evacuate the space as may be required.
- 11.1.4. Alerts the attendant whenever:

11.1.4.1. the entrant recognizes any warning sign or symptom of exposure to a dangerous situation, or

11.1.4.2. the entrant detects a prohibited condition.

11.1.5. Exits from the permit space as quickly as possible whenever:

11.1.5.1. an order to evacuate is given by the attendant or the entry supervisor,

11.1.5.2. the entrant recognizes any warning sign or symptom of exposure to a dangerous situation,

11.1.5.3. the entrant detects a prohibited condition, and

11.1.5.4. an evacuation alarm is activated.

## 11.2. ATTENDANT

11.2.1. Knows the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure;

11.2.2. Is aware of possible behavioral effects of hazard exposure in authorized entrants;

11.2.3. Continuously maintains an accurate count of authorized entrants in the permit space and ensures that the means used to identify authorized entrants accurately identifies who is in the permit space;

11.2.4. Remains outside the permit space during entry operations until relieved by another attendant;

11.2.5. Communicates with authorized entrants as necessary to monitor entrant status and to alert entrants of the need to evacuate the space if needed;

11.2.6. Monitors activities inside and outside the space to determine if it is safe for entrants to remain in the space and orders the authorized entrants to evacuate the permit space immediately under any of the following conditions:

11.2.6.1. if the attendant detects a prohibited condition;

11.2.6.2. if the attendant detects the behavioral effects of hazard exposure in an authorized entrant;

11.2.6.3. if the attendant detects a situation outside the space that could endanger the authorized entrants; or

- 11.2.6.4. if the attendant cannot safely and effectively perform all the duties required under the regulation.
- 11.2.7. Summon rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance to escape from permit space hazards.
- 11.2.8. Takes the following actions when unauthorized persons approach or enter a permit space while entry is underway:
  - 11.2.8.1. inform the unauthorized persons that they must stay away from the permit space;
  - 11.2.8.2. advise the unauthorized persons that they must exit immediately if they have entered the permit space; and
  - 11.2.8.3. inform the authorized entrants and the entry supervisor if unauthorized persons have entered the permit space.
- 11.2.9. Performs non-entry rescues within limits of training and available equipment.
- 11.2.10. Performs no duties that might interfere with the attendant's primary duty to monitor and protect the authorized entrants.
- 11.3. ENTRY SUPERVISOR
  - 11.3.1. Knows the hazards that may be faced during entry, including information on the mode, signs, or symptoms, and consequences of the exposure;
  - 11.3.2. Verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin;
  - 11.3.3. Terminates the entry and cancels the permit.
  - 11.3.4. Verifies that rescue services are available and that the means for summoning them are operable;
  - 11.3.5. Removes unauthorized individuals who enter or who attempt to enter the permit space during entry operations; and
  - 11.3.6. Determines, whenever responsibility for a permit space entry operation is transferred and at intervals dictated by the hazards and operations performed within the space, that entry operations remain consistent with terms of the entry permit and that acceptable entry conditions are maintained.

**12.0. RESCUE AND EMERGENCY SERVICES**

12.1. A review should be conducted of all the different types of confined spaces which will be entered and what steps/equipment it will take to get someone out. Consideration should be given to the size and configuration of the confined space and the body size of entering personnel. The following requirements apply to company employees who enter permit spaces to perform rescue services:

12.1.1. The company will ensure that each member of the rescue service shall be trained to perform the assigned rescue duties. Each member of the rescue service shall also receive the training required of authorized entrants.

12.1.2. The company will ensure that each member of the rescue service is provided with, and is trained to use properly, the personal protective equipment and rescue equipment necessary for making rescues from permit spaces.

12.1.3. Each member of the rescue service shall practice making permit space rescues at least once every 12 months, by means of simulated rescue operations in which they remove dummies, mannequins, or actual persons from the actual permit spaces or from representative permit spaces. Representative permit spaces shall, with respect to opening size, configuration, and accessibility, simulate the types of permit spaces from which rescue is to be performed.

12.1.4. Each member of the rescue service shall be trained in basic first-aid and in cardiopulmonary resuscitation (CPR). At least one member of the rescue service, having a current certification in first-aid and in CPR, must be available.

12.1.5. For permit-required confined spaces, emergency response personnel shall be on-site. For non permit-required confined spaces, rescue personnel should be available within 10 to 15 minutes.

12.2. Off-site emergency response personnel (local fire, rescue, etc.) may be used provided they are:

12.2.1. qualified to perform a rescue, and

12.2.2. are familiar with the premises.

12.3. If outside emergency organizations are to be used as rescuers, these organizations should be involved in rescue procedure development and drills.

12.3.1. Inform the rescue service of the hazards they may confront when called on to perform rescue at our facility;

12.3.2. Provide the rescue service access to all permit spaces from which rescue may be necessary so that the rescue service can develop appropriate rescue plans and practice rescue operations;

- 12.4. Harnesses, lifelines, and mechanical lifting devices (for vertical entries) are normally required. Breathing equipment and medical aid equipment may also be necessary. Consideration should also be given to what type of lighting would be used in the confined space, communication devices, and any other special equipment which might be used for rescue.
- 12.5. Audible alarms, two-way radios, telephones, etc., are some of the possible means of summoning aid and rescue personnel. Consideration will be given to providing occupants/entrants a method of informing the attendant that there is an emergency.
- 12.6. Each area should contact their local fire, rescue, emergency squads, etc., establish and maintain a current list of phone numbers and available equipment for rescue purposes.
- 12.7. Annual drills should be scheduled to familiarize rescue services with BP facilities.
- 12.8. To facilitate non-entry rescue, retrieval systems or methods shall be used whenever an authorized entrant enters a permit space, unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant.

**13.0. HAZARD COMMUNICATIONS**

- 13.1. BP's Hazard Communication Program is provided to all employees to assist them in working safely with substances listed or suspected to contain hazardous material.
- 13.2. Key points to the hazard communications program include:
  - 13.2.1. Labeling of all primary and secondary containers which contain hazardous substances with appropriate hazard warnings.
  - 13.2.2. Compile a list of all hazardous substances on-site.
  - 13.2.3. Operational directives which require that the location and nature of any operation that could result in exposure to a hazardous or toxic substance be presented through a formal instruction (training) program prior to any exposure occurring.
  - 13.2.4. Obtaining and maintaining material safety data sheets (MSDS) for each toxic or hazardous substance in use. Copies of the MSDS's must be readily accessible to employees in their work area.
  - 13.2.5. Training of employees will include detection of chemicals in the workplace, proper selection and use of Personal Protective Equipment (PPE), physical and health hazards of chemicals they work with, system labeling, and provide a copy of the company's written hazard communications program if requested.

**14.0. GLOSSARY OF TERMS****ACCEPTABLE ENTRY CONDITIONS**

Conditions that must exist in a permit space to allow entry and to ensure that employees involved with a permit-required confined space entry can safely enter into and work within the space.

**ALTERNATE PROCEDURE CONFINED SPACE**

An alternate procedure confined space is a reclassified permit-required space whose only hazard is an actual or potential hazardous atmosphere that can be controlled by continuous forced air ventilation alone. Monitoring and inspection data must support the existence and control of the only hazard, atmospheric.

**ATTENDANT**

An individual stationed outside one or more permit spaces who monitors the authorized entrants and who performs all attendant's duties assigned in the permit space program.

**BLANKING OR BLINDING**

The absolute closure of a pipe, line, or duct by the fastening of a solid plate (such as a spectacle blind or a skillet blind) that completely covers the bore and that is capable of withstanding the maximum pressure of the pipe, line, or duct with no leakage beyond the plate.

**CONFINED SPACE**

A space that is large enough and so configured that an employee can bodily enter and perform assigned work; has limited or restricted means for entry or exit; and is not designed for continuous employee occupancy.

**EMERGENCY**

Any occurrence (including failure of hazard control or monitoring equipment) or event internal or external to the permit space that could endanger entrants.

**ENTRY**

The action by which a person passes through an opening into a permit-required confined space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.

**ENTRY PERMIT (PERMIT)**

The written or printed document that is provided by the employer to allow and control entry into a permit space and that contains the information specified in 29 CFR 1910.146 (f).

**ENTRY SUPERVISOR**

The person (such as the employer, foreman, or crew chief) responsible for determining if acceptable entry conditions are present at a permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by regulation.

**HAZARDOUS ATMOSPHERE**

An atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), injury or acute illness from one or more of the following causes:

1. Flammable gas vapor or mist in excess of 10 percent of its lower flammable limit (LFL);
2. Airborne combustible dust at a concentration that meets or exceeds its LFL;
3. Atmospheric oxygen concentration below 19.5% or above 23.5%;
4. Atmospheric concentration of any substance for which a dose or a permissible exposure limit is published in Subpart G, Occupational Health and Environmental Control, or in Subpart Z, Toxic and Hazardous Substances of 29 CFR 1910 and which could result in employee exposure in excess of its dose or permissible exposure limit;
5. Any other atmospheric condition that is Immediately Dangerous to Life or Health (IDLH).

**HOT WORK PERMIT**

The employer's written authorization to perform operations (for example, riveting, welding, cutting, burning, and heating) capable of providing a source of ignition.

**IMMEDIATELY DANGEROUS TO LIFE OR HEALTH (IDLH)**

Any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a permit space.

**NON-PERMIT CONFINED SPACE**

A confined space that does not contain or, with the respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.

**PERMISSIBLE EXPOSURE LIMIT (PEL)**

An exposure limit that is published and enforced by OSHA as a legal standard and refers to a TWA under which most people can work safely for 8 hours a day with no harmful effects.

**PERMIT-REQUIRED CONFINED SPACE (PERMIT SPACE)**

A confined space that has one or more of the following characteristics:

1. Contains or has the potential to contain a hazardous atmosphere;
2. Contains a material that has the potential for engulfing an entrant;
3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross section; or
4. Contains any other recognized serious safety or health hazard.

**PROHIBITED CONDITION**

Any condition in a permit space that is not allowed by the permit during the period when entry is authorized.

**RESCUE SERVICE**

The personnel and/or contractor designated to rescue employees from permit spaces.

**RETRIEVAL SYSTEM**

The equipment (including a retrieval line; chest or full-body harness; wristlets, if appropriate; and a lifting device or anchor) used for non-entry rescue of persons from permit spaces.

**SHORT TERM EXPOSURE LIMIT (STEL)**

ACGIH recommended exposure limit. Maximum concentration to which workers can be exposed for a short period of time (15 minutes) for only four times throughout the day with at least one hour between exposures.

**TESTING**

The process by which the hazards that may confront entrants of a permit space are identified and evaluated. Testing includes specifying the tests that are to be performed in the permit space.

**TIME WEIGHTED AVERAGE (TWA)**

Refers to concentrations of airborne materials which have been weighted for a certain time duration, usually 8 hours.

**THRESHOLD LIMIT VALUE (TLV)**

A time-weighted average concentration under which most people can work consistently for 8 hours a day, day after day, with no harmful effects. A table of these values and accompanying precautions is published annually by the American Conference of Governmental Industrial Hygienist (ACGIH).

## **CONTRACTOR SAFETY PROGRAM**

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### **1.0 POLICY**

We expect contractors and suppliers to conduct their operations in a manner consistent with those of BP. Businesses are also expected to monitor contractor performance and use this information as a key part of the future selection process.

### **2.0 STAGES OF A CONTRACTOR SAFETY MANAGEMENT SYSTEM**

A contractor safety management system evolves through stages that enables management to effectively plan and complete the work safely. The sections of the document follow the topic listed below for implementation of the system. Appendix A provides a graphic representation of the process.

Risk Assessment  
Vetting, Pre-Qualification Process  
Selection and Orientation  
Monitoring and Audits  
Performance Evaluation  
Dismissal  
Reinstatement

### **3.0 RISK ASSESSMENT**

A key factor on the controls required for Contractor Management comes from the understanding of the "risks" associated with the activity (includes size and type of contractor) and the commitment BP is making towards the "contractor" with respect to duration of the contract.

The "term" or duration of a contract can dictate the ability to impose sufficient standards on the contractor that should ensure improved HSE performance.

The matrix in Appendix B along with the terminal's classification of major contracts types can be used as an indicator on the risk exposure potential. Within the matrix a traffic light color (Red, Yellow, Green) guide has been used to highlight such exposures posed by differing contracts. This is a template and each location should classify their contractors according to the risks associated with their work and the duration of exposure.

### **4.0 CONTRACTOR VETTING AND PRE-QUALIFICATION PROCESS**

BP hires contractors for a variety of work activities that involve varying degrees of risk. We must assess the contractors and subcontractors safety and health programs. This ensures the risks associated with their activities are managed effectively. All Contractors are evaluated during the pre-bid selection for the type of work to be performed. Safety and health must be one of the prime considerations during the evaluation process. A review of a Contractor's previous safety experience is a valuable resource of information in the screening process. Appendix D contains the recommended pre-qualification survey form that is to be used to conduct an evaluation of a Contractor's safety and health program. The determination of a Contractor's ability to work safely is the responsibility of the location, individual or staff hiring the contractor.

## **CONTRACTOR SAFETY PROGRAM**

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Subsequent to the review and analysis, a meeting must be held with the Contractor for the purpose of agreeing on the scope of the project. All information provided by the Contractor as part of the pre-bid process must be reviewed to determine the Contractor's suitability to safely perform the work they are bidding on.

It should be determined at this time whether the Contractor's insurance program includes coverage for property and liability risks due to Contractor accidents. The BP Insurance Department should be contacted for current coverage requirements.

### **5.0 CONTRACTOR SELECTION AND PRE-WORK ORIENTATION**

BP's interest in a Contractor's safe operations should be demonstrated by designating a representative who is vested with the authority to exercise BP's contractual rights and responsibilities. This authority includes the right to curtail or terminate Contractor activities for safety reasons.

The BP Representative has the duty to inform and be satisfied that the Contractor understands the nature and extent of any potentially dangerous conditions in the workplace. They must disclose known safety and health hazards which Contractor employees are likely to encounter including the known potential for fire, explosion, or toxic release hazard. This information should be sufficient to allow the Contractor to determine how to conduct the work in a safe manner.

Contractor Safety Orientation Checklist.

Prior to the start of work an orientation meeting must be held which describes the important safety requirements for working on BP property. The orientation checklist is located in Appendix E and E-1. The initial safety meeting must be scheduled by a BP Representative with the Contractor representatives directly responsible for the work and job safety. The BP Representative should identify him/herself as a contact person for Contractor program coordination. If there is a major change in the scope of the work or the personnel, this meeting must be repeated.

Representatives for all BP departments directly involved with the project should be included. Examples are:

<b><u>BP</u></b>	<b><u>Contractor</u></b>
Project Engineer	Project Manager
Project Inspector	Site Supervisor(s)
Terminal Manager/Designee	Subcontractor Representative(s)
Transportation Supervisor	All other Contract Employees
HSE Representative	

The Contractor shall be given a copy of BP's safety rules and regulations and any other information pertinent to the scope of the project.

## **CONTRACTOR SAFETY PROGRAM**

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### **7.0. MONITORING, AUDITING and SAFETY REVIEWS**

The BP Representative shall enforce the contract by reviewing the Contractor's work, safety procedures and personal protective equipment. If it is determined that the work is being performed in an unsafe manner, then the BP Representative shall stop the affected work **immediately**. The Contractor shall promptly investigate the complaint and eliminate unsafe acts/conditions as they occur and shall maintain safe working practices among its employees and employees of its subcontractors. Contractor who fails to comply with these requirements shall be subject to dismissal. BP will conduct routine inspections and audits of its Contractor work force to determine compliance with BP's safety programs and policies.

Checklists that can be used are:

- BP HSE Assurance Audit Checklist
- Appendix F---Construction Safety Aspects (based on OSHA 1926)
- Appendixes G, G-1, G-2, G-3, G-4---Driver, DOT, Carrier Issues
- Appendix H---Site Self Program Audit Checklist

The contractor should conduct safety reviews, hazard monitoring, and tool box meetings of their own operations. The procedure and form in Appendix I can be used for Pre Task Safety Reviews.

### **8.0. POST PROJECT PERFORMANCE REVIEW**

The BP Representative should conduct periodic and post-project reviews with the Contractors to determine the quality and effectiveness of the Contractor's performance. This evaluation should be documented for suitability of future work with BP. Two appendixes apply to this post project review. Appendix J can be used to gather the statistical information incurred by the project. Appendix K can be used to evaluate the contractor's safety performance.

### **9.0. DISCHARGE CRITERIA FOR SAFETY RELATED PERFORMANCE**

The purpose of a safety management system is to prevent accidents, injuries and illnesses through a process of improvement. In some cases, it may be necessary to take drastic action to ensure that improvement does occur. Appendix L establishes the guidelines to be used to discharge contract firms and/or personnel due to poor safety performance.

### **10.0. REINSTATEMENT CRITERIA FOR SAFETY RELATED PERFORMANCE**

BP may discharge a contracting company and/or employee from a site and future use due to a pattern of non-improvement in their safety performance and/or safety and health programs. Reinstatement allows the Contractor to bid on jobs. The Contractor must meet all of the criteria, listed in Appendix M, prior to being reinstated and working on T&D Sites.

### **11.0. DEFINITIONS**

#### **CONTRACT**

A contract establishes and defines the relationship between the Contractor and BP. Based on procedures established by BP Materials Management, the contract shall contain a clause

## **CONTRACTOR SAFETY PROGRAM**

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dealing with the Contractor's responsibility for maintaining a safe work place for its employees and its subcontractor's employees and shall at a minimum, enforce all government safety regulations and BP's safety rules and regulations at the job site. Contractors must be in compliance with all federal, state, and local health, safety, and environmental requirements.

The contract should have a separate clause dealing with the Contractor's compliance with health, safety, and environmental requirements. The contract should address the Contractor's sole responsibility for maintaining a safe work place for its employees and its subcontractor's employees.

**DOT**  
Department of Transportation

**1.0 PURPOSE**

This procedure establishes the minimum requirements for the lockout or tagout of energy isolating devices. It shall be used to ensure that the machine(s) or equipment are isolated from all potentially hazardous energy, and locked out or tagged out before employees perform any servicing or maintenance activities where unexpected energizing, start up, or release of stored energy could cause injury. Conductors and/or parts of electrical equipment that have been de-energized but have not been locked out or tagged shall be treated as energized parts.

**2.0. GENERAL**

- 2.1. All energy sources shall be locked and tagged in the off or closed position when maintenance work is being performed by either company or contract personnel. An energy source is any electrical, mechanical, hydraulic, pneumatic, chemical, nuclear, thermal, or other energy source that could cause injury to personnel.
- 2.2. The terminal supervisor or an "authorized employee" will be responsible to ensure that all equipment is properly locked and tagged out prior to starting work. The use and procedures of the lockout/tagout program shall be reviewed with appropriate personnel when there is a change in assignments, equipment, or procedures. This training shall be documented.
- 2.3. Specific procedures must be developed in a written program for each piece of equipment. Appendix A should be used to record the procedures.
- 2.4. Whenever non-BP employees (contractors) are scheduled to perform work covered by this program, both employers (BP and contractor) must inform each other of the respective requirements and ensure all procedures are complied with.
- 2.5. This program does not apply to work on cord and plug connected electric equipment for which exposure to the hazards of unexpected energization or start-up of the equipment is controlled by unplugging the equipment from the energy source and by the plug being under the exclusive control of the employee performing the servicing.

**3.0. SEQUENCE OF LOCKOUT AND TAG PROCEDURE**

- 3.1. Notify all affected employees and other employees whose work operations are or may be in the area (before and/or after) about the lockout/tagout procedure and about the prohibition relating to attempts to restart or re-energize equipment locked/tagged out.
- 3.2. If the equipment is operating, shut it down by the normal stopping procedure (depress STOP button, open toggle switch, etc.).
- 3.3. Turn main power switch OFF, close valve, or other energy isolating device so that the energy source(s) (electrical, mechanical, hydraulic, etc.) are disconnected or isolated from the equipment. Stored energy such as that stored in capacitors or hydraulic, air, gas, steam, or water pressure accumulators, and other energy sources must be

dissipated and rendered safe. If there is a possibility of re-accumulation of stored energy to a hazardous level, verification of isolation shall be continued until the work is complete.

- 3.4. Lockout and tag the energy isolating devices with an approved personal lock. Be sure to sign and date the tag.
- 3.5. No lock shall be affixed without a tag stating who locked out the equipment and the date it was locked out and the reason for lockout.
- 3.6. If more than one group is working on the same item (including different maintenance crafts) each person from each group will place a lock on the multiple hasp and will sign and date the DANGER, DO NOT START, or equivalent, tag.
- 3.7. After ensuring that all personnel are clear, the equipment must be tested to verify that it is properly locked out and will not operate.

NOTE: Be sure to return the switch or START button, which was used to test the lockout, back to OFF or NEUTRAL.

- 3.8. If electrical circuit elements or electrical parts of equipment in excess of 50V are to be exposed or worked on, a qualified employee (see Electrical Safety section) must use test equipment to test the exposed equipment and verify complete de-energization. The test will also determine if any energized condition exists as a result of inadvertently induced voltage or unintended voltage backfeed. If the circuit to be tested is over 500 volts nominal, the test equipment must be checked for proper operation immediately before and after the test to ensure reliability.
- 3.9. The equipment is now locked out and ready for work.
- 3.10. At the beginning of each shift, or after any prolonged absence from the job, any craft who has equipment locked out will check the equipment and the disconnecting device to determine that all equipment is safe for work and has not been returned to service in their absence.

#### **4.0. RESTORING SERVICE TO EQUIPMENT**

- 4.1. The individual restoring energy to the equipment must:
  - 4.1.1. Inspect the work to ensure that nonessential items have been removed.
  - 4.1.2. Ensure that the equipment components are operationally intact.
  - 4.1.3. Check the work area to ensure all employees are safely positioned or removed from the equipment.
  - 4.1.4. Notify all affected employees.

- 4.2. Only the person who placed his lock and signed the tag may remove his lock. In the event a person is unavailable to remove his lock, the following procedure must be followed:
  - 4.2.1. Verify that the employee is not at the facility.
  - 4.2.2. Ensure the employee knows the lock/tag will be removed before removing the lock and resuming work at the facility.
  - 4.2.3. The employee's immediate supervisor, or the employee's relief are authorized to use the above procedure and then remove the lock/tag.

**5.0. LOCKS AND TAGS**

- 5.1. Each facility should provide standardized tags and individually keyed locks as required to execute the above outlined procedure. The keyed locks shall be of a specific design used only for the lockout/tagout program.
- 5.2. BP tags or their equivalent shall be used. Tags are available any safety supply catalog.

**6.0. PERIODIC INSPECTION**

- 6.1. Each facility must conduct a periodic inspection of this program (at least annually) to ensure the procedure is being followed. This inspection must be documented.
- 6.2. The inspection shall be performed by a trained employee other than one currently utilizing the lockout/tagout being inspected. This will include a review between the inspector and each employee utilizing the lockout/tagout of the responsibilities under the procedure being inspected. Appendix B contains a sample inspection checklist that may be used for the inspection and inspection documentation.

**7.0. TRAINING**

- 7.1. All employees who participate in the lockout/tagout program or who may be affected by the program must be trained prior to their participation in the program.
- 7.2. The training should ensure that the purpose and function of the lockout/tagout program is understood and that the knowledge and skills required for the safe application, usage and removal of energy controls are conveyed to the employees.
- 7.3. Training should specifically encompass recognition of hazardous energy sources, type and magnitude of energy in the workplace, methods and means necessary for energy control and the purpose and use of the lockout/tagout program.
- 7.4. Retraining shall be provided whenever there is a change in the lockout/tagout program and whenever job changes or changes in equipment present a new hazard.

- 7.5. All training must be documented, including the date and employee names attending the training.

**8.0. REFERENCES**

- 8.1. Occupational Safety and Health Administration, Department of Labor, 29 CFR 1910.147 and 1910.133.
- 8.2. National Fire Protection Association; NFPA 706, 5-3.
- 8.3. American National Standards Institute; ANSI 2244.1-1982.

## **TANK CLEANING PROCEDURES**

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### **1.0. GENERAL**

- 1.1. The Terminal Manager and Area Engineer is responsible for the safety of employees during tank entry/cleaning operations and the enforcement of this program.
- 1.2. The HSE Advisor is responsible for assisting the Terminal Manager and Area Engineer as necessary.
- 1.3. The requirements of the Confined Space Entry, Blinding (isolation), Hot Work, and Lockout/Tagout programs must be followed for all tank cleaning jobs that require personnel to enter the tank.
- 1.4. Tanks scheduled for cleaning must be prepared so they are rendered as safe as possible for personnel. This may include, but should not be limited to:
  - 1.4.1. Preliminary preparations, including external inspection of the tank and surveying the immediate area, training and indoctrination of the crew, and inspection of equipment.
  - 1.4.2. Determining that the dike area is free of flammable or toxic materials before personnel are permitted to enter the tank.
  - 1.4.3. Controlling sources of ignition in, around, and on the tank.
  - 1.4.4. Emptying the tank by pumping and floating with water. This is probably the most commonly used procedure, but other methods may be employed.
  - 1.4.5. Blinding off the tank and de-energizing electrical circuits after as much as the contents as possible have been removed.
  - 1.4.6. Vapor-freeing the tank.
  - 1.4.7. Testing the tank for oxygen, hydrocarbon vapors, and toxic gases.
  - 1.4.8. Opening the tank for entry and removal and disposal of sludge.

### **2.0. PREPARATION FOR CLEANING**

- 2.1. The job supervisor should first determine the type of product in the tank and products contained in the past, the amount of sludge and the physical condition of the tank itself.
- 2.2. The job supervisor should survey the surrounding area to determine whether it is safe to perform cleaning operations.
- 2.3. Equipment used for tank cleaning operations should be inspected to ensure it is free of defects and adequate for its intended purpose.

## **TANK CLEANING PROCEDURES**

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- 2.4. Job supervisor should ensure tank cleaners have received instruction in the use of the equipment, safety precautions, fire and health hazards, and rescue procedures.

### **3.0. CONTROL OF SOURCES OF IGNITION**

- 3.1. All sources of ignition including smoking, welding, electrical, internal combustion engines, etc. should be eliminated from the area where flammable vapors may be present or may travel.
- 3.2. A Hot Work Permit should be completed before introducing an ignition source into the dike area and should be suspended when conditions change.
- 3.3. Vacuum trucks should be located outside the dike where possible and preferably upwind.
- 3.4. Artificial lighting must be approved for the area where it will be used.

### **4.0. EMPTYING THE TANK**

- 4.1. Before the tank is opened, all residual product should be pumped or drained off to the lowest possible level.
- 4.2. Pumping or draining may be augmented by adding water through existing piping connections to float any remaining residual out of the tank. Options should be carefully considered with staff assistance (e.g., engineer, environmental and HSE Advisor).

### **5.0. BLINDING OFF AND ELECTRICALLY ISOLATING THE TANK**

- 5.1. After all possible residual has been removed, all piping connected to the tank should be blinded off as close as possible to the tank on the tank side of the valve. Refer to the Blinding and Equipment Isolation standard of this manual for further information.
- 5.2. Electrical connections to equipment associated with tank operation must be locked out. Refer to the location Lockout/Tagout Program for more complete information.
- 5.3. If the tank bottom is protected from corrosion externally by an impressed current system, a bond wire should be used when disconnecting pipe flanges.
- 5.4. All tank ground cables and cable clamps should be inspected to ensure grounding and bonding integrity.

### **6.0. VAPOR-FREEING THE TANK**

- 6.1. In the initial stage of vapor-freeing, while the tank still contains a flammable mixture, work in the area should be kept to a minimum.
- 6.2. Mechanical, steam or natural ventilation can be chosen as the method to vapor-free the tank.

## **TANK CLEANING PROCEDURES**

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- 6.3. The air mover or nozzle of the steam hose should be electrically bonded to the tank.
- 6.4. It is preferable to discharge vapors at the top of the tank to allow maximum mixing with outside air reducing the chances of a flammable mixture reaching a source of ignition. No work should be permitted on top of the tank while vapors are being ducted.
- 6.5. To be effective, steam must be introduced into a tank at a rate high enough to raise the temperature inside the tank to at least 170 degrees F (77 degrees C).

### **7.0. VAPOR TESTING**

- 7.1. The person conducting the tests should be thoroughly familiar with the reading and handling of the instrument.
- 7.2. The instrument should be calibrated and used according to the manufacturer's instructions.
- 7.3. Vapor testing is preferable at the exhaust outlet.
- 7.4. Ventilation should be shut down for 15 minutes prior to and while tests are being made.

### **8.0. INITIAL CLEANING FROM OUTSIDE THE TANK**

- 8.1. Initial cleaning should be performed from outside the tank when the vapor concentration has been reduced to 50 percent or less of the lower flammable limit.
- 8.2. All water nozzles should be bonded to the tank and ventilation continued to maintain an inflow of air at shell manways.

### **9.0. TANK ENTRY**

- 9.1. A tank that has not previously contained leaded gasoline may be regarded as safe for entry without respiratory protection if it has been determined that:
  - 9.1.1. Oxygen content is at least 19.5 percent.
  - 9.1.2. The vapor indicator readings do not exceed 10 percent of the lower flammable limit.
  - 9.1.3. Toxic substances (e.g., benzene) are not present at levels above the personal exposure limit set by OSHA (29 CFR 1910.1000).
- 9.2. The BP Confined Space Entry Procedures, and the OSHA Permit-Required Confined Spaces standard (29 CFR 1910.146) must be followed.

## **TANK CLEANING PROCEDURES**

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- 9.3. A tank with a history of leaded service or with an unknown history should be considered as providing a lead hazard until the following conditions have been satisfied:
- 9.3.1. The tank has been cleaned and all sludge removed.
  - 9.3.2. Loosely adherent materials have been removed from the portion of the tank that has been in direct contact with sludge.
  - 9.3.3. The tank is essentially dry and free from liquids or puddles.
  - 9.3.4. A satisfactory lead-in-air analysis has been obtained after the three previous steps have been completed.

### **10.0. WORKING IN THE TANK**

- 10.1. Ventilation should be continued until product and sludge have been removed.
- 10.2. Tests for flammable and toxic vapors should be repeated at frequent intervals throughout the entire cleaning period, especially before re-entry following any extended interruption of work.
- 10.3. Vacuum trucks must be kept in a vapor-free area outside the path of probable vapor travel (upwind).
- 10.4. Additional precautions must be considered as other potential hazards are introduced into the confined space.

### **11.0. REFERENCES**

- 11.1. American Petroleum Institute; API 2015, Cleaning Petroleum Storage Tanks.
- 11.2. American Petroleum Institute; API 2015A, Guide for Controlling the Lead Hazard Associated with Tank Entry and Cleaning.

5. For internal floating roof tanks:
  - o Using an explosimeter, measure the concentration of the vapor space above the internal floating roof in terms of lower explosive limit (LEL), and record the reading in section (E) of the report.
  - o Conduct a visual inspection of the roof openings and the secondary seal, if applicable, and record findings on the report.
6. Complete all necessary calculations and record all required data accordingly on the report.

## SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

## RULE 463 COMPLIANCE REPORT

\*\* PLEASE COMPLETE FORM LEGIBLY IN BLACK INK \*\*

Tank No. \_\_\_\_\_ SCAQMD Permit No. \_\_\_\_\_ Inspection Date \_\_\_\_\_ Time \_\_\_\_\_

Is This a Follow-up Inspection? No  Yes  If yes, Date of Previous Inspection \_\_\_\_\_

## A. COMPANY INFORMATION:

Company Name \_\_\_\_\_

Location Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

Mailing Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

Contact Person \_\_\_\_\_ Title \_\_\_\_\_

Phone \_\_\_\_\_

## B. INSPECTION CONDUCTED BY:

Name \_\_\_\_\_ Title \_\_\_\_\_

Company Name \_\_\_\_\_ Phone \_\_\_\_\_

Mailing Address \_\_\_\_\_ City \_\_\_\_\_ Zip \_\_\_\_\_

## C. TANK INFORMATION:

Capacity \_\_\_\_\_ (bbls) Installation Date \_\_\_\_\_ Tank Diameter \_\_\_\_\_ (ft) Tank Height \_\_\_\_\_ (ft)

Product Type \_\_\_\_\_ Product RVP \_\_\_\_\_ If Crude, H<sub>2</sub>S Content \_\_\_\_\_ (ppm weight)Type of Tank: Riveted  Welded  Other  (describe) \_\_\_\_\_

Color of Shell \_\_\_\_\_ Color of Roof \_\_\_\_\_

Roof Type: Pontoon  Double Deck  Other (describe) \_\_\_\_\_External floating roof  Internal floating roof 

## D. GROUND LEVEL INSPECTION:

1) Product Temperature \_\_\_\_\_ °F 2) Product Level \_\_\_\_\_ (ft)

3) List type and location of leaks found in tank shell.

4) List any discrepancies between the existing equipment and the equipment description on the Permit.

5) Is tank in compliance with Permit conditions? No  Yes . If no, explain:

## E. INTERNAL FLOATING ROOF TANK:

1) Check vapor space between floating roof and fixed roof with explosimeter. \_\_\_\_\_ % LEL

2) Conduct visual inspection of roofs and secondary seals, if applicable.

3) Are all roof openings covered? No  Yes . If no, explain in Comments section (J) and proceed to part H (6).

**F. EXTERNAL FLOATING ROOF TANK:**

- 1) On the diagram (below) indicate the location of the ladder, roof drain(s), anti-rotation device(s), platform, gauge well, and vents or other appurtenances. *Note information in relation to North (to the top of the worksheet).*
- 2) Describe any uncovered openings found on the roof in the Comments section (J). (Refer to Rule 463 (a)(1)(F)):
- 3) Identify any tears in the seal fabric. Describe and indicate on diagram (below) :

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4) Secondary Seal Inspection

- a) Type of Secondary Seal: \_\_\_\_\_
- b) Does 1/2" probe drop past seal? No [ ] ; Yes [ ] - if yes, measure length(s) and show on diagram
- c) Does 1/8" probe drop past seal? No [ ] ; Yes [ ] - if yes, measure length(s) and show on diagram.
- d) Record dimensions of gap for gaps > 1/8" \_\_\_\_\_ > 1/2" \_\_\_\_\_

*NOTE: Record the actual width and cumulative length of gaps in feet and inches.*

*(Do not include gaps > 1/2" in 1/8" measurements)*

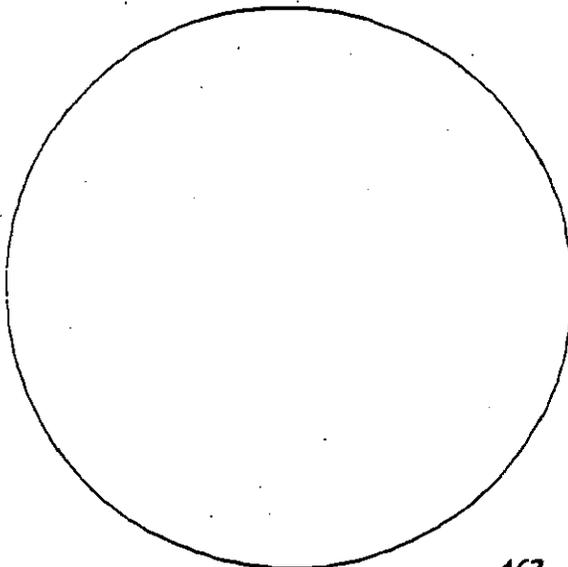
5) Primary Seal Inspection

- a) Type of Primary Seal: [ ] Shoe; [ ] Tube; [ ] Other \_\_\_\_\_
- b) (shoe seal) does 1 1/2" probe drop past seal? No [ ] ; Yes [ ] - if yes, measure length(s) and show on diagram
- c) (shoe seal) does 1/2" probe drop past seal? No [ ] ; Yes [ ] - if yes, measure length(s) and show on diagram.
- d) (tube seal) does 1/2" probe drop past seal? No [ ] ; Yes [ ] - if yes, measure length(s) and show on diagram.
- e) (all seal types) does 1/8" probe drop past seal? No [ ] ; Yes [ ] - if yes, measure length(s) and show on diagram.
- f) Record dimensions of gaps for gaps > 1/8" \_\_\_\_\_ > 1/2" \_\_\_\_\_  
 > 1 1/2" \_\_\_\_\_ *NOTE: Record the actual width and cumulative length of gaps in feet and inches.*

*(Do not include gaps > 1/2" in 1/8" measurements, or gaps > 1 1/2" in 1/2" measurements)*

NOTE: Show defects using symbols. Show seal gaps and lengths.

N



**LEGEND:**

Equipment:

- ..... Antirotational device
- ..... Gauge well
- T ..... Leg stand
- ..... Roof drain
- \* ..... Emergency roof drain
- ∞ ..... Vacuum breaker
- ▲ ..... Vent
- ..... Platform & ladder

Defects:

- ..... Leg top
- ‡ ..... Leg pin
- ..... Open hatch
- ∨ ..... Torn seal
- | - P - | ..... Primary seal gap
- | - S - | ..... Secondary seal gap

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
RULE 463 COMPLIANCE REPORT

\*\* PLEASE COMPLETE FORM LEGIBLY IN BLACK INK \*\*

Tank No. \_\_\_\_\_ SCAQMD Permit No. \_\_\_\_\_

IF INTERNAL FLOATING ROOF TANK, PROCEED TO PART H (6).

G. CALCULATIONS - complete all applicable portions of the following:

Record dimensions of indicated gaps [from F(4)(d), F(5)(b), and F(5)(f)]. Record in feet and inches.

Gaps in primary seal between 1/8 and 1/2 inch: \_\_\_\_\_

Gaps in primary seal between 1/2 and 1 1/2 inch: \_\_\_\_\_

Gaps in primary seal greater than 1 1/2 inches: \_\_\_\_\_

Gaps in secondary seal between 1/8 and 1/2 inch: \_\_\_\_\_

Gaps in secondary seal greater than 1/2 inch: \_\_\_\_\_

Multiply diameter (ft) of tank to determine appropriate gap limits:

5% circumference = diameter X 0.157 = \_\_\_\_\_ 60% circ. = diam. X 1.88 = \_\_\_\_\_

10% circumference = diameter X 0.314 = \_\_\_\_\_ 90% circ. = diam. X 2.83 = \_\_\_\_\_

30% circumference = diameter X 0.942 = \_\_\_\_\_ 95% circ. = diam. X 2.98 = \_\_\_\_\_

H. DETERMINE COMPLIANCE STATUS OF TANK:

- 1) Were any openings found on the roof? No [ ] Yes [ ]
2) Were any tears in the seals found? No [ ] Yes [ ]
3) Is the product level lower than the level at which the roof would be floating? No [ ] Yes [ ]
4) Secondary Seal:
Did 1/2" probe drop between shell and seal? No [ ] Yes [ ]
Did cumulative 1/8"-1/2" gap exceed 95% circumference length? No [ ] Yes [ ]
5) Primary Seal:
Shoe - Did 1 1/2" probe drop between shell and seal? No [ ] Yes [ ]
Did cumulative 1/2"-1 1/2" gap exceed 30% circumference length, and
Did cumulative 1/8"-1/2" gap exceed 60% circumference length? No [ ] Yes [ ]
Did any single continuous 1/8" - 1 1/2" gap exceed 10% circ. length? No [ ] Yes [ ]
Tube - Did 1/2" probe drop between shell and seal? No [ ] Yes [ ]
Did cumulative 1/8"-1/2" gap exceed 95% circumference length? No [ ] Yes [ ]
6) Internal floating roof (installed before 6/1/84) did LEL exceed 50%? No [ ] Yes [ ]
(installed after 6/1/84) did LEL exceed 30%? No [ ] Yes [ ]
7) Does tank have permit conditions? No [ ] Yes [ ]
Does tank comply with these conditions? No [ ] Yes [ ]

I. IF INSPECTION WAS TERMINATED PRIOR TO COMPLETION FOR ANY REASON, PLEASE EXPLAIN:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

