



**FACILITY PERMIT TO OPERATE  
BP WEST COAST PROD.LLC BP CARSON REF.**

**SECTION I: PLANS AND SCHEDULE**

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, with the following exceptions:

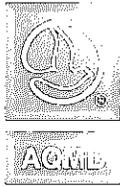
- a. The operator does not have to comply with NOx or SOx emission limits from rules identified in Table 1 or Table 2 of Rule 2001(j) which become effective after December 31, 1993.
- b. The operator does not have to comply with NOx or SOx emission limits from rules identified in Table 1 or Table 2 of Rule 2001(j) after the facility has received final certification of all monitoring and reporting requirements specified in Section F and Section G.

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        |
|---------------|-------------|
| 395243        | 2002        |
| 395244        | 1176        |
| 395245        | 1404        |
| 408099        | 1123        |
| 476874        | 1105.1      |
| 487876        | 1178        |
| 495549        | 463         |
| 510012        | 1173        |
| <u>520022</u> | <u>1166</u> |

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.



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov

**PLAN ISSUE DATE:** June xx, 2011

**COMPANY I.D #:** 131003

**MITIGATION PLAN #:** A/N 520022

**Company:** BP West Coast Products, LLC  
2350 E. 223<sup>rd</sup> Street  
Carson, CA 90810

**Site:** BP Carson Refinery—2350 E. 223<sup>rd</sup> Street, Carson, CA 90810

**Attn:** Eric Daley

**Phone:** (310) 847-5636      **Fax:** (310) 847-5780

## SITE SPECIFIC RULE 1166 VOC-CONTAMINATED SOIL MITIGATION PLAN

Reference is made to your application (A/N 520022) for the excavation and handling of VOC-contaminated soil at **BP CARSON REFINERY**. In accordance with our Rule 1166(c), this plan is required by the South Coast Air Quality Management District (AQMD) prior to commencing excavation of any underground storage tank or transfer piping, which has previously been used to store or transfer volatile organic compounds (VOC), and during the excavation, handling, and storage of VOC-contaminated soil.

The rights and privileges granted through the issuance of this plan are restricted exclusively to the plan holder listed above to whom it was issued, and are non-transferable, even with the written or expressed consent of the plan holder. No other VOC-contaminated soil mitigation plan issued by the AQMD can be used at the same locations within this refinery site.

This mitigation plan has been approved under the provisions of AQMD Rule 1166 and is subject to the following conditions:

### PLAN CONDITIONS

#### SECTION I - GENERAL REQUIREMENTS

1. THIS EXCAVATION PLAN SHALL EXPIRE JUNE XX, 2013.
2. A SIGNED COPY OF THIS PLAN SHALL BE PRESENT AT THE EXCAVATION SITE AT ALL TIMES AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
3. THIS PLAN IS NOT VALID FOR THE EXCAVATION OF VOC-CONTAMINATED SOILS AT LANDFILLS OR SITES USED FOR DISPOSAL OF REFUSE OR OTHER TYPES OF WASTES.
4. THIS PLAN SHALL NOT BE USED IN CONJUNCTION WITH ANY ON-SITE TREATMENT PROCESS, WITHOUT ADDITIONAL EVALUATION BY THE AQMD. THIS PLAN DOES NOT ALLOW TREATMENT OF VOC-CONTAMINATED SOIL BY THERMAL, CHEMICAL, OR MECHANICAL PROCESS UNLESS THE TREATMENT PROCESS HAS A PERMIT TO OPERATE FROM THE AQMD.
5. THE COMBINED TOTAL QUANTITY OF VOC-CONTAMINATED SOIL EXCAVATED UNDER THIS PLAN SHALL NOT EXCEED 10,000 CUBIC YARDS AT VARIOUS PROJECT SITES WITHIN THE REFINERY. AT NO TIME SHALL THE COMBINED TOTAL QUANTITY OF VOC CONTAMINATED SOIL STOCKPILED AT THIS REFINERY SITE EXCEEDS 2,000 CUBIC YARDS.

6. THE AQMD SHALL BE IMMEDIATELY NOTIFIED OF ANY COMPLAINTS RECEIVED AS A RESULT OF ACTIVITIES CONDUCTED UNDER THIS PLAN. SUCH NOTIFICATION SHALL INCLUDE THE NATURE OF THE COMPLAINTS, NUMBER OF COMPLAINANTS, COMPLAINANT NAMES, ADDRESSES, PHONE NUMBERS AND ACTIONS TAKEN BY THE PLAN HOLDER TO MITIGATE THE SOURCE OF THE COMPLAINTS.
7. (A) DURING EACH STEP OF THE PROCESS UP TO AND INCLUDING THE REMOVAL AND DISPOSAL OF VOC-CONTAMINATED SOIL, ALL PRECAUTIONS AND MITIGATION MEASURES SHALL BE TAKEN TO MINIMIZE THE RELEASE OF VOC, ODOR AND DUST FROM THE SOIL INTO THE ATMOSPHERE. THESE SHALL INCLUDE, BUT ARE NOT LIMITED TO, COVERING THE SOIL WITH ADDITIONAL PLASTIC SHEETS AND/OR SPRAYING WATER OR APPROVED VAPOR SUPPRESSANT ON THE EXPOSED SOIL SURFACES, WORK AREAS, AND MAINTAINING PAVED PUBLIC STREETS FREE OF SOIL DEPOSITS.  
  
(B) DURING EXCAVATION, IF A CONSIDERABLE NUMBER OF COMPLAINTS ARE RECEIVED, ALL EXCAVATION ACTIVITIES SHALL CEASE, AND THE APPROVED MITIGATION MEASURES SHALL BE IMPLEMENTED IMMEDIATELY. OTHER MITIGATION MEASURES WHICH ARE DEEMED APPROPRIATE BY AQMD PERSONNEL TO ABATE THE NUISANCE CONDITION SHALL BE ALSO IMPLEMENTED UPON REQUEST.  
  
(C) VOC CONTAMINATED SOIL SHALL NOT BE SPREAD ON-SITE OR OFF-SITE THAT CAUSES THE UNCONTROLLED EVAPORATION OF VOC INTO THE ATMOSPHERE. ANY UNNECESSARY MOVEMENT/AGITATION OF THE SOIL, RESHAPING AND RELOCATION OF THE SOIL STOCKPILES ARE NOT ALLOWED UNDER THIS PLAN.

#### **SECTION II – PRIOR TO EXCAVATION**

8. AT LEAST 24 HOURS PRIOR TO COMMENCING EXCAVATION ACTIVITIES, THE EXECUTIVE OFFICER SHALL BE NOTIFIED BY FAX OF ALL INFORMATION SPECIFIED BY AQMD RULE 1166(c)(1)(B) INCLUDING THE NAME OF THE COMPANY PERFORMING THE EXCAVATION, AND MITIGATION PLAN NUMBER SHOWN ABOVE. THE NOTIFICATION SHALL BE MADE BY FAXING THE NOTIFICATION FORM TO (909) 396-3342 DURING NORMAL BUSINESS HOURS. FAX NOTIFICATION WILL RECEIVE A REFERENCE NUMBER BY RETURN FAX OR CAN BE OBTAINED BY CALLING THE AQMD. THE REFERENCE NUMBER SHALL BE RETAINED AS PROOF OF COMPLIANCE WITH THIS CONDITION.

REFERENCE NO: \_\_\_\_\_ NOTIFICATION DATE: \_\_\_\_\_

9. PRIOR TO COMMENCING EXCAVATION ACTIVITIES, ALL PARTIES SHALL COMPLETE AND SIGN THE VERIFICATION STATEMENT SHOWN IN CONDITION NO. 29.

#### **SECTION III – EXCAVATION ACTIVITIES**

10. DURING THE EXCAVATION PROCESS, AN ORGANIC VAPOR ANALYZER (OVA) SHALL BE ON SITE AT ALL TIMES. THE OVA SHALL BE MAINTAINED IN GOOD WORKING ORDER AT ALL TIMES AND SHALL BE CALIBRATED BY THE MANUFACTURER AT LEAST ONCE EVERY THREE MONTHS. THE ACCURACY OF THE OVA SHALL BE VERIFIED USING CERTIFIED CALIBRATION GAS AT THE BEGINNING OF EACH WORKING DAY FOLLOWING THE PROCEDURES SPECIFIED BY THE MANUFACTURER. IF A CALIBRATION GAS OTHER THAN HEXANE IS USED, EACH MEASUREMENT SHALL BE CORRELATED TO AND EXPRESSED AS HEXANE, USING THE EQUIVALENCY FACTOR PROVIDED BY THE MANUFACTURER. IN THE EVENT THAT INCONSISTENT OR ERRATIC READINGS ARE EXPERIENCED, OR THE OVA BECOMES OTHERWISE INOPERABLE, ALL EXCAVATION ACTIVITIES SHALL CEASE UNTIL THE OVA IS REPAIRED OR REPLACED.
11. ALL MONITORING SHALL BE CONDUCTED AT A DISTANCE NO MORE THAN 3 INCHES ABOVE THE SOIL SURFACE USING AN OVA IN COMPLIANCE WITH CONDITION NO. 10 ABOVE. MONITORING SHALL BE INITIALLY CONDUCTED AT A MINIMUM FREQUENCY OF ONE READING EVERY FIFTEEN MINUTES. UPON DETECTION OF VOC-CONTAMINATED SOIL, MONITORING SHALL BE CONDUCTED AT A MINIMUM RATE OF ONE READING FOR EVERY FIVE CUBIC YARDS OF SOIL EXCAVATED. ALL MEASUREMENTS SHALL BE TAKEN NO LATER THAN THREE MINUTES AFTER THE SOIL IS EXCAVATED.

12. ALL MONITORING SHALL BE CONDUCTED BY TRAINED PERSONNEL WHO ARE PROFICIENT IN THE USE OF THE HYDROCARBON MONITOR SELECTED FOR USE AT THIS SITE.
13. WRITTEN RECORDS OF OVA READINGS AND CALIBRATIONS REQUIRED ABOVE SHALL BE KEPT IN A FORMAT APPROVED BY THE AQMD. THE APPROVED FORMAT IS SHOWN IN THE ATTACHMENT OF THIS PLAN. ALL RECORDS SHALL BE CERTIFIED, SIGNED AND DATED ON THE DAY THE MEASUREMENTS ARE TAKEN.
14. UPON DETECTION OF VOC-CONTAMINATED SOIL (READINGS 50 PPM OR GREATER), THE EXECUTIVE OFFICER SHALL BE NOTIFIED **WITHIN 24 HOURS** OF THE FIRST DETECTION OF VOC CONTAMINATION. THE NOTIFICATION SHALL BE MADE BY FAXING THE NOTIFICATION FORM TO (909) 396-3342. A REFERENCE NUMBER WILL BE FAXED BACK OR WILL BE ISSUED WHEN THE FAX NOTIFICATION IS RECEIVED. THE FAX NOTIFICATION SHALL BE FOLLOWED BY MAILING THE NOTIFICATION FORM TO THE AQMD POSTMARKED **WITHIN 48 HOURS** OF THE FIRST DETECTION OF VOC-CONTAMINATED SOIL. THE REFERENCE NUMBER WILL BE RETAINED AS PROOF OF COMPLIANCE WITH THIS CONDITION.

REFERENCE NO: \_\_\_\_\_ NOTIFICATION DATE: \_\_\_\_\_

15. ALL VOC-CONTAMINATED SOIL BELOW 1000 PPM SHALL BE STOCKPILED, COVERED WITH PLASTIC SHEETING AND STORED SEPARATELY FROM NON-VOC-CONTAMINATED SOIL, OR IMMEDIATELY TRANSPORTED TO A TREATMENT FACILITY. CONTAMINATED SOIL ONCE EXCAVATED AND STOCKPILED WILL BE CONSIDERED VOC-CONTAMINATED SOIL AT ALL TIMES AND CANNOT BE USED TO BACKFILL UNLESS TREATED TO LESS THAN 50 PPM LEVELS WITH PRIOR AQMD APPROVAL USING PERMITTED EQUIPMENT.
16. A VOC-CONTAMINATED SOIL STOCKPILE SHALL NOT BE GREATER THAN 500 CUBIC YARDS.
17. IF OVA MEASUREMENT SPECIFIED BY CONDITION NO. 11 IS GREATER THAN 50 PPMV, BUT LESS THAN 1000 PPM, FOLLOWING MITIGATION MEASURES SHALL BE TAKEN IMMEDIATELY:
  - (A) THE AFFECTED WORK AREA AND EVERY LOAD OF SOIL SHALL BE SPRAYED WITH WATER AND/OR APPROVED VAPOR SUPPRESSANT.
  - (B) VOC-CONTAMINATED SOIL IN STOCKPILE SHALL BE COVERED WITH PLASTIC SHEETING WHICH OVERLAP A MINIMUM OF TWENTY FOUR INCHES AND ARE SECURED SO THAT NO PORTION OF THE CONTAMINATED SOIL IS EXPOSED TO THE ATMOSPHERE. IN THE COURSE OF HANDLING THE STOCKPILE, ONLY THE WORKING FACE OF THE STOCKPILE MAY BE UNCOVERED.
18. IF THE OVA MEASUREMENT SPECIFIED BY CONDITION NO. 11 EQUALS OR IS GREATER THAN 1000 PPMV, NOTIFY THE AQMD IMMEDIATELY (WITHIN ONE HOUR) AS SPECIFIED BY CONDITION # 14, AND FOLLOWING MITIGATION MEASURES SHALL BE TAKEN IMMEDIATELY:
  - (A) THE AFFECTED SOIL AND WORKING AREA SHALL BE IMMEDIATELY SPRAYED WITH WATER AND/OR AN APPROVED VAPOR SUPPRESSANT, AND ONE OF THE FOLLOWING MEASURES SHALL BE TAKEN:
    - (B) THE VOC-CONTAMINATED SOIL WILL BE IMMEDIATELY PLACED IN AQMD APPROVED SEALED CONTAINERS, EQUIPPED WITH VAPOR TIGHT LIDS, OR
    - (C) THE VOC-CONTAMINATED SOIL WILL BE DIRECTLY LOADED IN TRUCKS, MOISTENED WITH ADDITIONAL WATER, COVERED, AND TRANSPORTED IMMEDIATELY OFF SITE TO AN APPROVED TREATMENT FACILITY, OR

- (D) THE VOC-CONTAMINATED SOIL SHALL BE IMMEDIATELY STORED OR TRANSPORTED OFFSITE USING AN ALTERNATIVE METHOD THAT HAS PRIOR WRITTEN APPROVAL FROM THE AQMD.
19. DURING EXCAVATION, THE EXPOSED VOC-CONTAMINATED SOIL SHALL BE RESTRICTED ONLY TO THE IMMEDIATE WORKING AREA OF THE STOCKPILE. ALL OTHER PORTIONS OF THE STOCKPILE SHALL BE COVERED WITH PLASTIC SHEETING, WITH SEAMS OVERLAPED A MINIMUM OF 24 INCHES AND ARE SECURED WITH DUCT TAPE. ALL EXPOSED VOC-CONTAMINATED SOIL SURFACES AND WORK FACES SHALL BE KEPT MOIST WITH WATER AND/OR APPROVED VAPOR SUPPRESSANTS AT ALL TIMES. VOC-CONTAMINATED SOIL SHALL BE COVERED DURING PERIODS OF INACTIVITY LONGER THAN ONE HOUR. AT THE END OF EACH WORKING DAY, ALL STOCKPILES SHALL BE COMPLETELY COVERED AND SECURELY ANCHORED TO PREVENT ANY EXPOSURE OF SOIL TO THE ATMOSPHERE.
  20. VOC-CONTAMINATED SOIL ONCE STOCKPILED AND COVERED WITH PLASTIC SHEETING SHALL REMAIN COVERED AND UNDISTURBED UNTIL IT IS REMOVED FROM THE SITE.
  21. UNDER THIS PLAN, SOIL ONCE DETERMINED TO BE VOC-CONTAMINATED SOIL WILL REMAIN AS VOC-CONTAMINATED SOIL UNTIL THE SOIL IS TREATED PURSUANT TO AN APPROVED AQMD TREATMENT PROCESS.
  22. DAILY INSPECTION SHALL BE CONDUCTED OF ALL COVERED VOC-CONTAMINATED SOIL STOCKPILES TO ENSURE THE INTEGRITY OF THE PLASTIC COVER. SUCH INSPECTION SHALL INCLUDE A VISUAL INSPECTION OF ALL SEAMS AND PLASTIC COVER SURFACES. ANY HOLES, TEARS OR ANY OTHER POTENTIAL SOURCES OF FUGITIVE EMISSIONS SHALL BE REPAIRED IMMEDIATELY. DAILY RECORDS SHALL BE MAINTAINED TO ENSURE COMPLIANCE WITH THIS CONDITION.
  23. A WRITTEN REPORT SHALL BE PREPARED, WHICH INCLUDES:
    - (A) THE FACILITY SELECTED TO TREAT THE VOC-CONTAMINATED SOIL, QUANTITY OF SOIL REMOVED FROM SITE, STATUS OF EXCAVATION PIT, AND ANY VOC CONTAMINATED SOIL REMAINING ON SITE.
    - (B) A BRIEF SUMMARY INDICATING IF ADDITIONAL CLEAN UP EFFORTS ARE NECESSARY, THE ADDITIONAL QUANTITY OF VOC CONTAMINATED SOILS TO BE EXCAVATED AND THE PROJECTED SCHEDULE OF THE EXCAVATION.
  24. ALL VOC-CONTAMINATED SOIL SHALL BE REMOVED FROM THE SITE WITHIN 30 DAYS OF ITS EXCAVATION.
  25. ALL VOC-CONTAMINATED SOIL REMOVED FROM THE SITE SHALL COMPLY WITH THE FOLLOWINGS:
    - (A) BE TRANSPORTED TO AN APPROVED TREATMENT/DISPOSAL FACILITY. IT SHALL BE THE RESPONSIBILITY OF THE PLAN HOLDER TO ENSURE THAT THE RECEIVING TREATMENT/DISPOSAL FACILITY HAS RECEIVED APPROVAL FROM THE APPROPRIATE ENVIRONMENTAL OVERSIGHT AGENCIES TO HANDLE AND TREAT THE VOC-CONTAMINATED SOIL.
    - (B) WHEN LOADING IS COMPLETED AND DURING TRANSPORTATION, NO EXCAVATED MATERIAL SHALL EXTEND ABOVE THE SIDES OR REAR OF THE TRUCK OR TRAILER.
    - (C) PRIOR TO COVERING/TARPING, LOADED VOC-CONTAMINATED SOIL SHALL BE WETTED BY SPRAYING WITH MIST INHIBITOR.
    - (D) THE TRUCK OR TRAILER SHALL BE COMPLETELY COVERED WITH A TARP PRIOR TO LEAVING THE SITE TO PREVENT PARTICULATE EMISSIONS TO THE ATMOSPHERE.
    - (E) THE EXTERIOR OF THE TRUCKS (INCLUDING THE TIRES) SHALL BE CLEANED OFF PRIOR TO THE TRUCKS LEAVING THE EXCAVATION SITE.



40 CFR PART 60 APPENDIX A, EPA METHOD 21 SECTION 3, "DETERMINATION OF VOLATILE ORGANIC COMPOUND LEAKS, MONITORING INSTRUMENT SPECIFICATIONS. The monitor shall be capable of being calibrated using hexane at a range of 0 parts per million by volume (PPMV) to 50 PPMV, and at a detection range of at least 30 PPMV to 1100 PPMV.

**Responsible Party** For the purposes of this plan, the party financially responsible for initiating the excavation. This may include the property owner or the operator of the transfer, storage equipment. This excludes contractors working for the property owner or operator, and any other party that lacks the direct authority to immediately treat VOC-contaminated soil generated at this site.

**VOC-Contaminated Soil** Soil that registers a concentration of 50 PPM or greater of volatile organic compounds as measured before suppression materials have been applied and at a distance of no more than three inches from the surface of the excavated soil with an organic vapor analyzer calibrated with hexane.

**Volatile Organic Compound (VOC)** Any volatile compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and exempt compounds. Exempt compounds are defined in AQMD Rule 102 - Definitions of Terms.

Once issued, this plan is subject to further review by the AQMD and may be revoked if excavation activities are found in violation of plan conditions or AQMD's Rules and Regulations. Failure to comply with one or more of the conditions contained within this plan constitutes a violation of AQMD Rules 221 and 1166.

Other governmental agencies may require approval before any excavation begins. It shall be the responsibility of the applicant to obtain that approval. The AQMD shall not be responsible or liable for any losses because of the measures required or taken pursuant to the requirements of this approved Rule 1166 VOC-Contaminated Soil Mitigation Plan.

If you have any questions concerning this plan, please call Ms. Hanh Le at (909) 396-2522.

Sincerely,

Jay Chen  
Senior Engineering Manager  
Refinery/Waste Management/Terminals Permitting

Attachment  
cc: Application File  
Compliance

## Rule 1166 Soil Monitoring Records

|  |  |
|--|--|
| COID: Company ID No. 131003<br><br>BP West Coast Products, LLC<br>2350 E. 223 <sup>rd</sup> Street<br>Carson, CA 90810 | <b>Facility/Site Information</b><br>Name:<br><br>Address:<br><br>City: <span style="float: right;">Zip:</span> |
| Reference No(s).   | City: <span style="float: right;">Zip:</span>  |

| Monitor Information | Calibration Data | Monitoring Personnel | Excavation Summary<br><small>(Upon completion of each page)</small> |
|---------------------|------------------|----------------------|---|
| Brand:              | Gas:             | Name:                | Total Cubic Yds<br>(This page)                                      |
| Model:              | Date:            | Company:             | Total Cubic Yds<br>(To date)  |
| Type:               | By:              | Phone:               | Removed from<br>Site (To date)                                      |

| Time | VOC Concentration (PPMV) @<br>Excavated Load |         |                  | Comment | Time | VOC Concentration (PPMV) @<br>Excavated Load |                  |         | Comment |
|------|--|---------|------------------|---------|------|--|------------------|---------|---------|
|      | Every<br>15 min.                             | Reading | Hexane<br>Factor |         |      | Adjusted<br>Reading                          | Every<br>15 min. | Reading |         |
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I certify that the information contained in the above document is true and correct. I further certify that the above listed hydrocarbon monitor was operated in a manner consistent with the manufacturer's specifications and the conditions specified within this plan. In addition, I certify that the above readings represent the actual measurements I observed and recorded during the excavation process.

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_