



# COLORADO

## Department of Public Health & Environment

### WATER QUALITY CONTROL DIVISION

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COMPLIANCE ORDER ON CONSENT

NUMBER: SC-150420-1

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IN THE MATTER OF:        **BLACK DIAMOND MINERALS, LLC and  
MEMORIAL RESOURCE DEVELOPMENT CORP.  
CDPS PERMIT NO. COR-030000  
CERTIFICATION NO. COR-03D798  
GARFIELD COUNTY, COLORADO**

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The Colorado Department of Public Health and Environment (“Department”), through the Water Quality Control Division (“Division”), issues this Compliance Order on Consent (“Consent Order”), pursuant to the Division’s authority under §§25-8-602 and 605, C.R.S. of the Colorado Water Quality Control Act (“Act”) §§25-8-101 to 803, C.R.S. and its implementing regulations, with the express consent of Black Diamond Minerals, LLC (“Black Diamond”) and Memorial Resource Development Corp. (“Memorial Resource”). The Division, Black Diamond, and Memorial Resource may be referred to collectively as “the Parties.”

#### STATEMENT OF PURPOSE

1. The mutual objectives of the Parties in entering into this Consent Order are to resolve, without litigation, the civil penalties associated with alleged violations cited herein and in the Notice of Violation / Cease and Desist Order, Number: SO-141015-1 (the “NOV/CDO”), that the Division issued to Black Diamond on October 15, 2014.

#### DIVISION’S FINDINGS OF FACT AND DETERMINATION OF VIOLATIONS

2. Based upon the Division’s investigation into and review of the compliance issues identified herein, and in accordance with §§25-8-602 and 605, C.R.S., the Division has made the following determinations regarding Black Diamond and Memorial Resource, and Black Diamond’s compliance with the Act and its permit issued pursuant to the Act.
3. At all times relevant to the violations cited herein, Black Diamond was a Delaware limited liability company in good standing and registered to conduct business in the State of Colorado. On June 18, 2014, Black Diamond relinquished its authority to transact business or conduct activities in Colorado.



4. Memorial Resource is a Delaware corporation in good standing and registered to conduct business in the State of Colorado. On June 18, 2014, the ownership interests in Black Diamond were transferred to Memorial Resource and Black Diamond merged into Memorial Resource.
5. Black Diamond and Memorial Resource are each a “person” as defined by §25-8-103(13), C.R.S. and its implementing permit regulation, 5 CCR 1002-61, §61.2(73).
6. On approximately November 5, 2008, Black Diamond initiated construction activities on the Tepee Park Ranch Exploration Project with a total project area of approximately 4,350 acres and a planned disturbance area of approximately 30 acres of land at 39°24’03” N and 107°50’16” W on USFS Road 824, in unincorporated Garfield County, Colorado (the “Project”).
7. Black Diamond’s construction activities at the Project were covered under the Colorado Discharge Permit System (“CDPS”) General Permit, Number COR-030000, for Stormwater Discharges Associated with Construction Activity (the “Permit”).
8. On May 27, 2008, the Division provided Black Diamond with Certification Number COR-03D798 authorizing Black Diamond to discharge stormwater from the construction activities associated with the Project to the Beaver Creek and the Colorado River under the terms and conditions of the Permit. Certification Number COR-03D798 became effective July 9, 2013.
9. Beaver Creek and the Colorado River are “state waters” as defined by §25-8-103(19), C.R.S. and its implementing permit regulation, 5 CCR 1002-61, §61.2(102).
10. Pursuant to 5 CCR 1002-61, §61.8, Black Diamond was required to comply with all the terms and conditions of the Permit, and violations of such terms and conditions may be subject to civil and criminal liability pursuant to §§25-8-601 through 25-8-612, C.R.S.
11. On April 16, 2014, a representative from the Division (the “Inspector”) conducted an on-site inspection of the Project pursuant to the Division’s authority under §25-8-306, C.R.S., to determine Black Diamond’s compliance with the Water Quality Control Act and the Permit. During the inspection, the Inspector interviewed Project representatives, reviewed the Project’s stormwater management system records, and performed a physical inspection of the Project.

#### **Deficient and/or Incomplete Stormwater Management Plan**

12. Pursuant to Part I.B. of the Permit, Black Diamond was required to prepare and maintain a Stormwater Management Plan (“SWMP”) in accordance with good engineering, hydrologic, and pollution control practices. The SWMP was required to identify all potential sources of pollution, which may be reasonably expected to affect the quality of stormwater discharges associated with construction activity from the Project. In addition, the plan was required to describe and ensure the implementation of Best Management Practices (“BMPs”) at the Project, which will be used to reduce the pollutants in stormwater discharges associated with construction activity.
13. Pursuant to Part I.C. of the Permit, the Project’s SWMP shall include, at a minimum, the following items:
  - a. Site Description - The SWMP shall clearly describe the construction activity, including:
    - i. The nature of the construction activity.
    - ii. The proposed sequence for major activities.
    - iii. Estimates of the total area of the site and the area of the site that is expected to undergo clearing, excavation or grading.



- iv. A summary of any existing data used in the development of the construction plans or SWMP that describe the soil or existing potential for soil erosion.
  - v. A description of the existing vegetation at the site and an estimate of the percent vegetative ground cover.
  - vi. The location and description of all potential pollution sources, including ground surface disturbance, vehicle fueling, storage of fertilizers or chemicals, etc.
  - vii. The location and description of any allowable sources of non-stormwater discharge, such as springs, landscape irrigation return flow, construction dewatering, and concrete washout.
  - viii. The name of the receiving water(s) and the size, type, and location of any outfall or, if the discharge is to a municipal separate storm sewer, the name of that system, the location of the storm sewer discharge, and the ultimate receiving water(s).
- b. Site Map - The SWMP shall include a legible site map(s), showing the entire site, identifying:
- i. Construction site boundaries.
  - ii. All areas of ground surface disturbance.
  - iii. Areas of cut and fill.
  - iv. Areas used for storage of building materials, equipment, soil, or waste.
  - v. Locations of dedicated asphalt or concrete batch plants.
  - vi. Locations of all structural BMPs.
  - vii. Locations of all non-structural BMPs.
  - viii. Locations of springs, streams, wetlands and other surface waters.
- c. Stormwater Management Controls - The SWMP must include a description of all stormwater management controls that will be implemented as part of the construction activity to control pollutants in stormwater discharges, including:
- i. SWMP Administrator - The SWMP shall identify a specific individual(s), position or title that is responsible for developing, implementing, maintaining, and revising the SWMP.
  - ii. Identification of Potential Pollutant Sources - The SWMP shall identify and describe those sources determined to have the potential to contribute pollutants to stormwater discharges.
  - iii. BMPs for Stormwater Pollution Prevention - The SWMP shall identify and describe appropriate BMPs that will be implemented at the facility to reduce the potential of pollution sources to contribute pollutants to stormwater discharges. The SWMP shall clearly describe the installation and implementation specifications for each BMP identified in the SWMP.
    - (1) Structural Practices for Erosion and Sediment Control - The SWMP shall clearly describe and locate all structural practices implemented at the site to minimize erosion and sediment transport. Practices may include, but are not limited to: straw bales, wattles/sediment control logs, silt fences, earth dikes, drainage swales, sediment traps, subsurface drains, pipe slope drains, inlet protection, outlet protection, gabions, and temporary or permanent sediment basins.
    - (2) Non-Structural Practices for Erosion and Sediment Control - The SWMP shall clearly describe and locate all non-structural practices implemented



at the site to minimize erosion and sediment transport. Description must include interim and permanent stabilization practices, and site-specific scheduling for implementation of the practices. Non-structural practices may include, but are not limited to: temporary vegetation, permanent vegetation, mulching, geotextiles, sod stabilization, slope roughening, vegetative buffer strips, protection of trees, and preservation of mature vegetation.

- (3) Phased BMP Implementation - The SWMP shall clearly describe the relationship between the phases of construction and the implementation and maintenance of BMPs. The SWMP must identify the stormwater management controls to be implemented during the project phases, which can include, but are not limited to, clearing and grubbing, road construction, utility and infrastructure installation, vertical construction, final grading, and final stabilization.
- (4) Materials Handling and Spill Prevention - The SWMP shall clearly describe and locate all practices implemented at the site to minimize impacts from procedures or significant materials that could contribute pollutants to runoff.
- (5) Dedicated Concrete or Asphalt Batch Plants - The SWMP shall clearly describe and locate BMPs to control stormwater pollution from dedicated concrete batch plants or dedicated asphalt batch plants.
- (6) Vehicle Tracking Control - The SWMP shall clearly describe and locate all practices implemented at the site to control potential sediment discharges from vehicle tracking.
- (7) Waste Management and Disposal, Including Concrete Washout - The SWMP shall clearly describe and locate the practices implemented at the site to control stormwater pollution from all construction site wastes, including concrete washout activities.
- (8) Groundwater and Stormwater Dewatering - The SWMP shall clearly describe and locate the practices implemented at the site to control stormwater pollution from the dewatering of groundwater or stormwater from excavations, wells, etc.

d. Final Stabilization and Long-Term Stormwater Management - The SWMP shall clearly describe the practices used to achieve final stabilization of all disturbed areas at the site, and any planned practices to control pollutants in stormwater discharges that will occur after construction operations have been completed at the site.

e. Inspection and Maintenance - The SWMP shall clearly describe the inspection and maintenance procedures implemented at the site to maintain all erosion and sediment control practices and other protective practices in good and effective operating condition.

14. During the April 16, 2014 inspection, the Inspector reviewed the Project's SWMP and identified that the SWMP did not clearly identify all items required by Part I.C. of the Permit, as described in Paragraphs 14(a-g) below:

- a. The site description section of the SWMP failed to include an estimate of the disturbed area acreage.
- b. The site description section of the SWMP failed to identify all potential pollutant sources, including but not limited to stored produced water.
- c. The SWMP site map failed to identify the construction site boundaries.

- d. The SWMP site map failed to identify all areas where surface disturbance was observed, including but not limited to the piles near the produced water pit.
  - e. The SWMP site map failed to identify the fuel and equipment storage site that was observed at the Project.
  - f. The stormwater management controls section of the SWMP failed to indicate where the structural and non-structural control measures would be used at the Project.
  - g. The stormwater management controls section of the SWMP failed to include installation and implementation specifications for the temporary slope drains and sediment traps used at the Project.
15. The Division has determined that Black Diamond failed to prepare and maintain a complete and accurate SWMP for the Project.
16. Black Diamond's failure to prepare and maintain a complete and accurate SWMP for the Project constitutes violation(s) of Part I.B. and Part I.C. of the Permit.

**Failure to Perform and/or Document Inspections of Stormwater Management System**

17. Pursuant to Part I.D.6.a. of the Permit, for active sites where construction has not been completed, Black Diamond was required to make a thorough inspection of the Project's stormwater management system at least every 14 calendar days; within 24 hours of any precipitation or snowmelt event that causes surface erosion; and within 72 hours of any precipitation or snowmelt event that causes surface erosion when the site is temporarily idle.
18. Pursuant to Part I.D.6.b.2. of the Permit, inspection reports must identify any incidents of non-compliance, a description of the corrective action, dates the corrective action(s) were taken, measures taken to prevent future violations, and a signed statement indicating the site is in compliance with the permit to the best of the signer's knowledge and belief.
19. During the April 16, 2014 inspection, the Inspector reviewed the available inspection records for the Project for the period from June 5, 2013 - October 29, 2013. The Inspector determined that Black Diamond failed to perform an inspection of the Project's stormwater management system at least once every 14 calendar days between: June 5, 2013 and July 3, 2013; July 3, 2013 and August 13, 2013; and August 27, 2013 and September 17, 2013.
20. During the April 16, 2014 inspection, the Inspector reviewed the available inspection records for the Project for the period from June 5, 2013 - October 29, 2013. The Inspector determined that Black Diamond failed to perform any post-storm inspections. National Oceanic & Atmospheric Administration records show that measurable precipitation in the Rifle area occurred 60 times during the time period noted above.
21. During the April 16, 2014 inspection, the Inspector reviewed the available inspection records and the July 3, 2013 inspection identified that culvert inlets needed to be cleaned out and check dams needed repairs. Available inspection records did not provide the dates these corrective actions were completed; what measures were taken to prevent future violations; or a signed statement indicating the site is in compliance with the permit to the best of the signer's knowledge and belief.
22. Black Diamond's failure to properly perform and document inspections of the Project's stormwater management system constitutes violation(s) of Parts I.D.6.a. and I.D.6.b.2. of the Permit.

**Failure to Install, Maintain, or Properly Select Best Management Practices**

23. Pursuant to Part I.C.3.c. of the Permit, Black Diamond was required to implement BMPs to reduce the potential of pollution sources from contributing pollutants to stormwater discharges, including minimizing erosion and sediment transport from the Project. The Permit specifies that structural site management practices may include, but are not limited to: straw bales, wattles/sediment control logs, silt fences, earth dikes, drainage swales, sediment traps, subsurface drains, pipe slope drains, inlet protection, outlet protection, gabions, and temporary or permanent sediment basins. The Permit specifies that non-structural site management practices may include, but are not limited to: temporary vegetation, permanent vegetation, mulching, geotextiles, sod stabilization, slope roughening, vegetative buffer strips, protection of trees, and preservation of mature vegetation.
24. Pursuant to Part I.D.2. of the Permit, Black Diamond was required to select, design, install, implement and maintain appropriate BMPs, following good engineering, hydrologic, and pollution control practices. The BMPs implemented at the site must be adequately designed to provide control for all potential pollutant sources associated with construction activity at the Project.
25. Pursuant to Part I.B.3. of the Permit, Black Diamond was required to implement the provisions of the Project's SWMP as written and updated, from commencement of construction activity until final stabilization is complete.
26. During the April 16, 2014 inspection, the Inspector identified the following deficiencies related to BMP installation and maintenance at the Project, as described in Paragraphs 26(a-i) below:
  - a. The Inspector observed a diversion ditch control measure inadequately implemented along the north and west edge of the disturbed area located at Well Pad 36A to manage stormwater runoff. Installation and implementation specifications were included in the SWMP for perimeter control BMPs that included earth dikes and drainage swales. However, the diversion ditch identified for this area did not have: a bottom of at least 2 feet, side slopes of 2:1 or flatter, or a compacted fill slope, as specified in the SWMP. No additional control measures were implemented down gradient of the diversion ditch and stormwater from this area of the Project flows overland to Beaver Creek.
  - b. The Inspector observed that control measures were not implemented to manage stormwater runoff from disturbed areas located at the North corner of Well Pad 36A and Northeast side of Well Pad 25A. The SWMP site map identified a temporary slope drain control measure to manage stormwater runoff from each of these disturbed areas. However, the identified control measures were not installed. No additional control measures were implemented down gradient of where the temporary slope drains were indicated on the SWMP and stormwater from these areas of the Project flows overland to Beaver Creek.
  - c. The Inspector observed there were no control measures implemented to manage stormwater runoff from stockpiles located at the Northern corner of Well Pad 25A. The SWMP identified temporary stabilization (seed and mulch) for stockpiles that are inactive for 60 days or more to manage stormwater runoff. However, the identified control measures were not installed. No additional control measures were implemented down gradient of the stockpile and stormwater from this area of the Project flows overland to Beaver Creek.



- d. The Inspector observed there were no control measures implemented to manage stormwater runoff from chemical waste from portable toilets located at Well Pad 25A. The SWMP specified that temporary sanitary facilities be secured to the ground to prevent overturning. However, the identified control measures were not installed. Stormwater from this area of the Project flows overland to Beaver Creek.
  - e. The Inspector observed that the sediment trap control measures implemented at Well Pads 25A and 36A were not large enough to manage stormwater runoff from the disturbed areas, defined as 4.24 acres and 4.42 acres respectively. Installation and implementation specifications for sediment traps were not included in the SWMP. The Environmental Protection Agency's Stormwater Best Management Practices design criteria include specifications for sediment traps of 1,800 ft<sup>3</sup> of storage per disturbed acre. The sediment traps at each location were observed to not meet the above design criteria. No additional control measures were implemented down gradient of the sediment traps and the stormwater from these areas of the Project flows overland to Beaver Creek.
  - f. The Inspector observed an earthen berm control measure inadequately implemented down gradient of Well Pad 25A on the northeast side. Installation and implementation specifications were included in the SWMP for perimeter control BMPs that included earth dikes and drainage swales. However, the earthen berm identified for this area was not compacted, did not have positive drainage to an outlet, and did not convey runoff to a sediment trapping control measure. Additional inadequate control measures were implemented down gradient of the earthen berm (see paragraph 25(a)) and stormwater from this area of the Project flows overland to Beaver Creek.
  - g. The Inspector observed there were no control measures implemented to manage stormwater runoff from the disturbed area located at the fuel and equipment storage site, including down gradient of the fuel and equipment storage site. Stormwater from this area of the Project flows overland to Beaver Creek.
  - h. The Inspector observed there were no control measures implemented to manage stormwater runoff from the piles of sediment mixed with snow located near the produced water pit. Stormwater from this area of the Project flows overland to Beaver Creek.
  - i. The Inspector observed there were no control measures implemented to manage stormwater runoff adjacent to the road to the quarry, the road to the fuel and equipment storage site, and the main road between Well Pad 36A and Well Pad 25A. The SWMP site map identified check dam control measures to manage stormwater runoff adjacent to the roads described above. However, the identified control measures were not installed. No additional control measures were implemented and the stormwater from these areas of the Project flows to Beaver Creek.
27. The Division has determined that Black Diamond failed to implement and/or maintain functional BMPs for all potential pollutant sources at the Project, following good engineering, hydrologic, and pollution control practices.
28. Black Diamond's failure to implement and/or maintain functional BMPs to protect stormwater quality during construction activities at the Project constitutes violations of Part I.C.3.c., Part I.D.2., and Part I.B.3. of the Permit.

## ORDER AND AGREEMENT

29. Based on the foregoing factual and legal determinations, pursuant to its authority under §§25-8-602 and 605, C.R.S., and in satisfaction of the civil penalties associated with the alleged violations cited herein and in the NOV/CDO, the Division orders Black Diamond and Memorial Resource to comply with all provisions of this Consent Order, including all requirements set forth below.
30. Black Diamond and Memorial Resource agree to the terms and conditions of this Consent Order. Black Diamond and Memorial Resource agree that this Consent Order constitutes a notice of alleged violation and an order issued pursuant to §§25-8-602 and 605, C.R.S., and is an enforceable requirement of the Act. Black Diamond and Memorial Resource also agree not to challenge directly or collaterally, in any judicial or administrative proceeding brought by the Division or by Black Diamond and/or Memorial Resource against the Division:
- a. The issuance of this Consent Order;
  - b. The factual and legal determinations made by the Division herein; and
  - c. The Division's authority to bring, or the court's jurisdiction to hear, any action to enforce the terms of this Consent Order under the Act.
31. Notwithstanding the above, Black Diamond and Memorial Resource do not admit to any of the factual or legal determinations made by the Division herein, and any action undertaken by Black Diamond and Memorial Resource pursuant to this Consent Order shall not constitute evidence of fault and liability by Black Diamond or Memorial Resource with respect to the conditions of the Project. Black Diamond and Memorial Resource expressly reserve their rights to deny any of the Division's factual or legal determinations or defend themselves in any other third party proceeding relating to the information identified in this Consent Order.

## CIVIL PENALTY

32. Based upon the factors set forth in §25-8-608(1), C.R.S., and consistent with Departmental policies for violations of the Act, Memorial Resource shall pay Ninety Thousand Two Hundred Twenty-Five Dollars (\$90,225.00) in civil penalties. The Division intends to petition the Executive Director, or his designee, to impose the Ninety Thousand Two Hundred Twenty-Five Dollar (\$90,225.00) civil penalty for the above violation(s) and Memorial Resource agrees to make the payment within thirty (30) calendar days of the issuance of an Order for Civil Penalty by the Executive Director or his designee. Method of payment shall be by certified or cashier's check drawn to the order of the "Colorado Department of Public Health and Environment," and delivered to:

Eric T. Mink  
Colorado Department of Public Health and Environment  
Water Quality Control Division  
Mail Code: WQCD-CWE-B2  
4300 Cherry Creek Drive South  
Denver, Colorado 80246-1530

### SCOPE AND EFFECT OF CONSENT ORDER

33. The Parties agree and acknowledge that this Consent Order constitutes a full and final settlement of the civil penalties associated with the violations cited herein and in the NOV/CDO.
34. This Consent Order is subject to the Division's "Public Notification on Administrative Enforcement Actions Policy," which includes a thirty (30) day public comment period. The Division, Black Diamond, and Memorial Resource each reserve the right to withdraw consent to this Consent Order if comments received during the 30 day period result in any proposed modification to the Consent Order.
35. This Consent Order constitutes a final agency order or action upon the date when the Executive Director or his designee imposes the civil penalty following the public comment period. Any violation of the provisions of this Consent Order by Black Diamond or Memorial Resource, including any false certifications, shall be a violation of a final order or action of the Division for the purpose of §25-8-608, C.R.S., and may result in the assessment of civil penalties of up to ten thousand dollars per day for each day during which such violation occurs.
36. Notwithstanding paragraph 31 above, the violations described in this Consent Order will constitute part of Black Diamond's compliance history.

### LIMITATIONS, RELEASES, AND RESERVATION OF RIGHTS AND LIABILITY

37. Upon the effective date of this Consent Order, and during its term, this Consent Order shall stand in lieu of any other enforcement action by the Division with respect to civil penalties for the specific instances of violations cited herein and in the NOV/CDO. The Division reserves the right to bring any action to enforce this Consent Order, including actions for penalties or the collection thereof, and/or injunctive relief.
38. This Consent Order does not grant any release of liability for any violations not specifically cited herein.
39. Black Diamond and Memorial Resource reserve their rights and defenses regarding the Project other than proceedings to enforce this Consent Order.
40. Nothing in this Consent Order shall preclude the Division from imposing additional requirements necessary to protect human health or the environment and to effectuate the purposes of the Consent Order. Nor shall anything in this Consent Order preclude the Division from imposing additional requirements in the event that additional information is discovered that indicates such requirements are necessary to protect human health or the environment.
41. Black Diamond and Memorial Resource release and covenant not to sue the State of Colorado or its employees, agents or representatives as to all common law or statutory claims or counterclaims or for any injuries or damages to persons or property resulting from acts or omissions of Black Diamond and Memorial Resource, or those acting for or on behalf of Black Diamond and Memorial Resource, including its officers, employees, agents, successors, representatives, contractors, consultants, or attorneys in carrying out activities pursuant to this Consent Order. Nothing in this Consent Order shall constitute an express or implied waiver of immunity otherwise applicable to the State of Colorado, its employees, agents, or representatives.

## NOTICES

42. Unless otherwise specified, any report, notice, or other communication required under the Consent Order shall be sent to:

For the Division:

Eric T. Mink  
Colorado Department of Public Health and Environment  
Water Quality Control Division  
Mail Code: WQCD-CWE-B2  
4300 Cherry Creek Drive South  
Denver, Colorado 80246-1530  
Telephone: 303-692-2312  
E-mail: eric.mink@state.co.us

For Black Diamond Minerals, LLC and Memorial Resource Development Corp.:

Brad Coffey, Corporate Counsel  
Memorial Resource Development Corp.  
500 Dallas Street, Suite 1800  
Houston, TX 77002

## MODIFICATIONS

43. This Consent Order may be modified only upon mutual written agreement of the Parties.

## NOTICE OF EFFECTIVE DATE

44. This Consent Order shall be fully effective, enforceable and constitute a final agency action upon the date when the Executive Director or his designee imposes the civil penalty following closure of the public comment period referenced in paragraph 34. If the penalty as described in this Consent Order is not imposed, or an alternate penalty is imposed, this Consent Order becomes null and void.

## BINDING EFFECT AND AUTHORIZATION TO SIGN

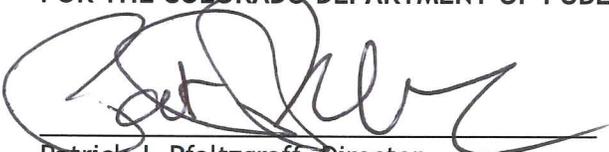
45. This Consent Order is binding upon Black Diamond and Memorial Resource, and their corporate subsidiaries or parents, their officers, directors, employees, successors in interest, and assigns. The undersigned warrant that they are authorized to legally bind their respective principals to this Consent Order. In the event that a party does not sign this Consent Order within thirty (30) calendar days of the other party's signature, this Consent Order becomes null and void. This Consent Order may be executed in multiple counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same Consent Order.

FOR MEMORIAL RESOURCE DEVELOPMENT CORP.:

  
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Brad Coffey, Corporate Counsel  
Memorial Resource Development Corp.

Date: 4/13/15

FOR THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT:

  
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Patrick J. Pfaltzgraff, Director  
WATER QUALITY CONTROL DIVISION

Date: 20 Apr 15