

BEFORE THE

DEPARTMENT OF ENVIRONMENTAL QUALITY

STATE OF WYOMING

**FILED**

**AUG 14 2012**

IN THE MATTER OF THE NOTICE OF )  
VIOLATION AND ORDER ISSUED TO: )  
)  
)  
Anadarko Petroleum )  
PO Box 10 )  
Midwest, WY 82643 )  
)

Jim Ruby, Executive Secretary  
Environmental Quality Council

**DOCKET NUMBER 5030-12**

NOTICE OF VIOLATION AND ORDER

**NOTICE IS HEREBY GIVEN THAT:**

1. Anadarko Petroleum (Anadarko) is the owner/operator of numerous oil and gas operations in the Salt Creek Field, Natrona County, Wyoming. Some of the operations include re-injecting carbon dioxide (CO2) into geological formations to assist in oil and gas recovery processes.
2. On July 30, 2012 Wyoming Department of Environmental Quality personnel met with Anadarko personnel and visited a site where gas was observed bubbling into Castle Creek (class 3B). Anadarko personnel informed DEQ the bubbles were possibly the result of the injected CO2 gas. During the site visit water samples were collected and field tests were conducted with results indicating pH levels below the water quality standards for Wyoming surface waters. Chemical reactions resulting from changes in pH in water can cause death to fish and other organisms.
3. The U.S. Fish and Wildlife Service also visited the site prior to the DEQ and collected six dead ducks to be analyzed for the possible cause of death.
4. The discharge of CO2 to waters of the state is not permitted under any Department of Environmental Quality permits held by Anadarko from the locations referenced above.
5. Castle Creek is a "water of the state" as defined under W.S. 35-11-103 (c)(vi).
6. Chapter 1 of the Wyoming Water Quality Rules and Regulations, section 26 pH states "For all Wyoming surface waters, wastes attributable to or influenced by the activities of man shall not be present in amounts which will cause the pH to be less than 6.5 or greater than 9.0 standard units.
7. Chapter 2 of the Wyoming Water Quality Rules and Regulations (WWQRR) defines pollution as "contamination or other alterations of the physical, chemical, or biological properties of any waters of the state, including change in temperature, taste, color, turbidity or odor of the waters or any discharge of any acid or toxic material.
8. By discharging pollution into waters of the state Anadarko is in violation of W.S. 35-11-301 (a)(i) of the Wyoming Environmental Quality Act (Act) and Chapter 2 of the Wyoming Water Quality Rules and Regulations (WWQRR) which state that no person, except when authorized by a permit issued by the Department of Environmental Quality, shall cause, threaten or allow the discharge of any pollution or wastes into the waters of the state.
9. Pursuant to Wyoming Statute 35-11-901(a), any person who violates, or any director, officer or agent of a corporate permittee who willingly and knowingly authorizes, orders or carries out the violation of any provision of the Environmental Quality Act (Act), or any rule, regulation, standard or permit adopted hereunder or who violates any determination or order of the council pursuant to this act or any rule, regulation, standard, permit, license or variance is subject to a penalty not to exceed ten thousand dollars and no cents (\$10,000.00) for each

violation for each day during which the violation continues, a temporary or permanent injunction, or both a penalty and an injunction. The penalty may be recovered in a civil action brought by the Attorney General in the name of the People of the State of Wyoming. Nothing herein shall preclude the department from negotiating stipulated settlements involving the payment of a penalty, implementation of compliance schedules or other settlement conditions, as appropriate, in lieu of litigation.

**ORDER**

**BEFORE THE ENVIRONMENTAL QUALITY COUNCIL – STATE OF WYOMING**

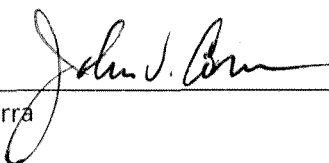
**WHEREFORE IT IS HEREBY ORDERED THAT:**

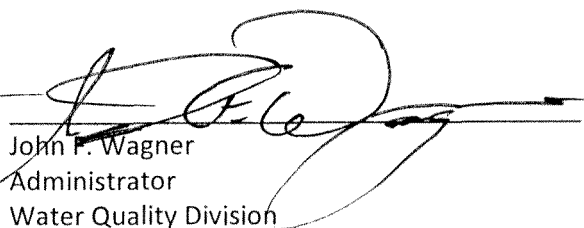
1. The owner/operator shall immediately begin to identify the source of the release and upon discovery shut down the cause and cease releasing CO2 into the water.
2. The owner/operator shall monitor the pH level of the water quality above and below the release location on a weekly basis and record it for future reference. This monitoring shall continue until three consecutive sample results are within the water quality standards of 6.5-9.0.
3. The owner/operator shall submit within 30 days of completion of corrective actions a written response to include the cause of the release and ongoing efforts to ensure this type of release does not happen again.

This ORDER is final unless, no later than ten (10) days after the date this notice is received; it is appealed by filing two written requests for a hearing before the Environmental Quality Council. If a hearing is requested, the first hearing petition shall be mailed to the Chairman, Wyoming Environmental Quality Council, Room 1714 Herschler Building, 1<sup>st</sup> Floor West, 122 West 25<sup>th</sup> St., Cheyenne, Wyoming 82002. The second petition shall be mailed to the Director, Wyoming Department of the Environmental Quality, Herschler Building, 4<sup>th</sup> Floor West, 122 West 25<sup>th</sup> St., Cheyenne, Wyoming 82002. Both petitions must be sent by certified mail, return receipt requested.

**NOTHING IN THIS NOTICE OF VIOLATION (NOV) AND ORDER** shall be interpreted to in any way limit or contravene any other remedy available under the Environmental Quality Act, nor shall this NOV AND ORDER be interpreted as being a condition precedent to any other enforcement action.

Signed this 14<sup>th</sup> day of August, 2012.

  
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John V. Corra  
Director  
Department of Environmental Quality

  
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John F. Wagner  
Administrator  
Water Quality Division

**PLEASE DIRECT ALL INQUIRIES TO:** Kevin M. Wells, WYPDES Natural Resource Program Manager, Wyoming Department of Environmental Quality, Water Quality Division, Herschler Building, 4<sup>th</sup> Floor West, 122 West 25<sup>th</sup> Street, Cheyenne, Wyoming 82002. Telephone 307-777-8669.

JVC/JFW/KMW/bb/12-0728

cc: David Gwisdalla, 8ENF-W-NP, EPA Region 8 (PDF)  
Jim Eisenhauer, WYPDES Inspection Program Coordinator (PDF)  
Bill DiRienzo ► Kevin M. Wells ► David Waterstreet (PDF)  
Environmental Quality Council  
Director, DEQ  
Keith Guille, DEQ Public Information Office (PDF)