

BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

IN THE MATTER OF ALLEGED VIOLATIONS OF THE ) CAUSE NO. 1V  
RULES AND REGULATIONS OF THE COLORADO OIL )  
AND GAS CONSERVATION COMMISSION BY **OXY USA** ) DOCKET NO. 1004-OV-04  
**WTP LP, GARFIELD COUNTY, COLORADO** )

NOTICE OF HEARING

Prior to July 27, 2007, Oxy USA, Inc. (Oxy USA, Inc., Operator #66561, and Oxy USA WTP LP, Operator #66571, which are subsidiaries of Occidental Petroleum Corporation and are collectively referred to as "OXY") constructed the OXY 697-09-61 well pad (the "Well Pad"), which is located in the SW¼ SE¼ of Section 9, Township 6 South, Range 97 West, 6<sup>th</sup> P.M. As originally constructed, the Well Pad included an unlined drilling pit, which measured approximately 80 feet long, 50 feet wide and 12 feet deep with a capacity of approximately 4,000 barrels with two feet of freeboard. At various times, the Director ("Director") of the Colorado Oil and Gas Conservation Commission ("Commission" or "COGCC") approved twenty two (22) Applications for Permit-to-Drill, Form 2s, for various bottomhole locations to be drilled from the Well Pad.

On July 27, 2007, OXY spud the Cascade Creek #697-9-60D Well (API No. 05-045-14298) and on September 6, 2007, OXY spud the Cascade Creek #697-09-52B Well (API No. 05-045-14445) (referred to collectively as the "Wells") with both wells drilled and placed on production from the Well Pad.

In preparation for additional drilling from the Well Pad, on May 6, 2008, OXY shut-in the Wells, and, subsequently, constructed an extension to the drilling pit, which measured approximately 30 feet long, 20 feet wide, and 10 feet deep with an additional capacity of approximately 800 barrels with two feet of freeboard. After excavating the extension, OXY lined both the original drilling pit and the extended drilling pit with a 36 mil liner underlain with a geo-synthetic layer. On June 11, 2008, OXY temporarily abandoned the Wells by placing subsurface plugs within the wellbores.

There are two springs located in Section 9, Township 6 South, Range 97 West, 6<sup>th</sup> P.M., which are located approximately 630 feet southwest and downgrade of the location of the unlined production pit on the Well Pad. For purposes of this Notice, the northernmost spring is referred to as the "North Spring" or "N Spring" and the southernmost spring is referred to as the "South Spring". These springs and a number of other smaller ground water seeps discharge from an approximately 1,000 foot long stretch along the eastern bank of the unnamed tributary. The spring waters discharge from the eastern bank of and into an unnamed tributary which, in turn, joins Cascade Canyon in Section 9, Township 6 South, Range 97 West, 6<sup>th</sup> P.M. Impacts to the springs on the eastern bank, the unnamed tributary, and Cascade Canyon are the subject of this Notice.

In addition to North and South Springs, there is also an improved spring that supplies water to a private cabin (locally known as Conn Camp) which is used for livestock watering. The improved spring is known locally as Conn Camp Spring. Conn Camp Spring discharges into the unnamed tributary. Conn Camp Spring has not been impacted by the releases of exploration and production ("E&P") wastes that are the subject of this Notice.

The Well Pad is immediately adjacent to an area that has been designated as sensitive wildlife habitat by the Colorado Division of Wildlife for the benefit of the greater sage grouse.

Water produced in association with hydrocarbons ("produced water") and condensate from the Wells were placed in the unlined drilling pit located on the Well Pad – the pit was placed into operation at or around the date of first completion (October 24, 2007). The original drilling pit on the Well Pad was continually used as an unpermitted and unlined production pit from the date of well completion until May 6, 2008 when the Wells were shut-in.

a. Pre-April 1, 2009 rules (2 CCR 404-1, "Rules" or individually, "Rule"), that were in effect when the production pit on the Well Pad was constructed required production pits in sensitive areas to be permitted (former Rule 903.a.(1).B.).

b. During this period of time the Rules defined sensitive area as "an area vulnerable to potential significant adverse groundwater impacts, due to factors such as the presence of shallow economically usable groundwater or pathways for communication with deeper economically usable groundwater; proximity to surface water, including lakes, rivers, perennial or intermittent streams, creeks, irrigation canals, and wetlands." 100-Series Rules.

c. The production pit on the Well Pad was located in an area vulnerable to potential significant adverse ground water impacts and therefore it was located in a sensitive area based on the following criteria:

- i. The production pit was located in close proximity (approximately 630 feet) to the Conn Camp Spring, the North Spring and the South Spring, and these springs are sources of water for an unnamed intermittent tributary to Cascade Canyon, which is a perennial stream.
- ii. Shallow groundwater was impacted by a release of produced water and condensate from a pit, which indicates that pathways for communication between the ground surface and groundwater exist.
- iii. The water discharged at the North and South Springs is shallow economically usable groundwater, which was used by ranchers for watering livestock and by wildlife.
- iv. The water discharged at the Conn Camp Spring is shallow economically usable groundwater, which is used by ranchers for watering livestock and by wildlife.

d. The permitting of pits is an essential component of the COGCC regulatory scheme to ensure best management practices by operators to protect public health, safety, and welfare and the environment, including soil, waters of the state, and wildlife, from significant adverse environmental, public health, or welfare impacts from E&P waste. If this pit had been permitted, COGCC may have required OXY to line it and if the pit had been properly lined and maintained releases of produced water and condensate would have been far less likely to occur and the risk of impacts to ground water may have been greatly reduced.

On June 16, 2008, OXY notified COGCC Staff of the potential contamination of surface water emanating from natural springs and entering an unnamed intermittent tributary of upper Cascade Canyon, located in Section 9, Township 6 South, Range 97 West, 6<sup>th</sup> P.M. Following the notification, OXY initiated mitigation measures by installing two dams to contain all flow from the unnamed tributary. Dam 1 was located downstream of the North Spring in the vicinity of the Conn Camp corral. Dam 2 was located on the unnamed tributary, just upstream of the confluence with Cascade Canyon. Piping and pumps were installed and water was pumped to the lined pit on the Well Pad.

On June 17, 2008, OXY installed a series of hydrocarbon absorbing booms and straw bales in the unnamed tributary and in Cascade Canyon below the confluence with the unnamed tributary. In all, approximately ½-mile of the unnamed tributary was impacted either by direct discharge of contaminated ground water or by emergency response and mitigation measures conducted by OXY.

On June 17, 2008, COGCC Staff inspected the impacted springs, surface water, the Well Pad, and production pit. It was observed that condensate was emanating from the North and South Springs and the presence of an associated sheen on the water flowing in the unnamed tributary. In addition, hydrocarbon stained soil and rock were observed in the bottom of a portion of the original drilling pit.

On June 18, 2008, at COGCC's request, OXY constructed two interceptor trenches (referred to as the N Interceptor Trench, located between the Well Pad and near the North Spring, and the S1 Interceptor Trench, located between the Well Pad and near the South Spring) to restrict the flow of contaminants to the unnamed tributary. COGCC Staff collected water samples from the Conn Camp cabin, the Conn Camp Spring, and the South Spring. Benzene, toluene, ethylbenzene, and xylenes (referred to collectively as "BTEX") were not detected in samples from the Conn Camp cabin or spring, however, BTEX and other hydrocarbons were detected in the water sample collected from the South Spring at concentrations which exceeded Colorado Department of Public Health and Environment ("CDPHE") Water Quality Control Commission ("WQCC") ground water standards implemented by the COGCC.

On June 19, 2008, OXY replaced existing fencing and installed additional fencing to facilitate movement of cattle to a new grazing area and to restrict access by livestock and wildlife to the contaminated water. At COGCC's request, OXY initiated a tracer study as a method to estimate the amount of time it would take water to travel from the pit on the Well pad to the springs along the unnamed tributary. Fluorescein, a fluorescent dye, was placed in the production pit, however, the dye was not detected at either trench along the springs by subsequent monitoring.

On June 19, 2008, COGCC Staff collected water samples from the North Spring, the S1 Interceptor Trench, and the unnamed tributary in the vicinity of the S1 Interceptor Trench. Analytical results indicated that ground water and surface water were impacted by hydrocarbon compounds at concentrations which exceeded Colorado Department of Public Health and Environment ("CDPHE") Water Quality Control Commission ("WQCC") ground water standards implemented by the COGCC.

On June 19, 2008, OXY initiated a second tracer study as a method to estimate the amount of time it would take water to travel from the pit on the Well Pad to the springs along the unnamed tributary. Rhodamine, a fluorescent dye, was placed in the production pit, and was first detected at the N Interceptor Trench on July 25, 2008 with peak concentrations measured on July 29, 2008. The results of the second

tracer study indicated that the pit on the Well Pad is hydraulically connected to the springs along the east side of the unnamed tributary to Cascade Canyon, and that the travel time is between three to seven days (approximately 91 to 212 feet per day) under those conditions that existed at the time of the study. These results suggest preferential flow through naturally fractured and weathered bedrock.

On June 20, 2008, OXY submitted a Form 19, Spill/Release Report, to the COGCC (COGCC Spill Tracking No. 1983098).

On June 20, 2008, COGCC Staff issued OXY the Notice of Alleged Violation ("NOAV") #200191192 for the Cascade Creek #697-9-60D Well and NOAV #200191194 for the Cascade Creek #697-09-52B Well and its operations at the Well Pad, which impacted waters at the North and South Springs. The NOAV cited violations of the following COGCC rules:

a. Rule 209, which requires operators to exercise due care in the protection of coal seams and water-bearing formations, with special precautions taken in drilling wells to guard against any loss of artesian water from the stratum in which it occurs and the contamination of fresh water by objectionable water, oil, or gas;

b. Rule 324A.a., which requires operators to take precautions to prevent significant adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare and to prevent the unauthorized discharge of oil, gas or E&P waste;

c. Rule 324A.b., which provides that no operator, in the conduct of any oil or gas operation shall perform any act or practice which shall constitute a violation of water quality standards or classifications established by CDPHE-WQCC for waters of the state;

d. Rule 902.a., which requires that a pit used for E&P shall be constructed and operated to protect public health, safety, and welfare and the environment, including soil, waters of the state, and wildlife, from significant adverse environmental, public health, or welfare impacts from E&P waste;

e. Rule 906.a., which provides that spills/releases of E&P waste, including produced fluids, shall be controlled and contained immediately upon discovery to protect the environment, public health, safety, and welfare, and wildlife resources, and that impacts resulting from spills/releases shall be investigated and cleaned up as soon as practicable;

f. Rule 906.b.(3), which provides that spills/releases of any size which impact or threaten to impact any waters of the state shall be verbally reported to the COGCC Director as soon as practicable, but not more than twenty-four (24) hours, after discovery;

g. Rule 907.a.(1), which provides that operators shall ensure that E&P waste is properly stored, handled, transported, treated, recycled, or disposed to prevent threatened or actual significant adverse environmental impacts to air, water, soil or biological resources or to the extent necessary to ensure compliance with the concentration levels in Table 910-1, with consideration to WQCC ground water standards and classifications; and

h. Rule 907.a.(2), which requires that E&P waste management activities shall be conducted, and facilities constructed and operated, to protect the waters of the state from significant adverse environmental impacts from E&P waste.

Said NOAV required OXY, by July 7, 2008, to provide written descriptions of: (1) any pits constructed or used on the Well pad, including size, volume, whether or not the pit was lined, (2) all fluids (water, drilling, completion, and frac fluids, flowback, etc.) placed in the pit, including volumes, dates, etc., and provide haul tickets for all fluids brought from offsite to the pit(s), (3) whether condensate was observed in the pit(s) during flowback or completion; and (4) tanks or other containers that were used at this site to manage fluids and any spills/releases that occurred. Further, OXY was to submit: (1) a Form 27, *Site Investigation and Remediation Workplan*, for COGCC review, and (2) all analytical data collected to date. OXY was also to consult with COGCC and mitigate impacts to the springs, including, (1) fencing impacted surface water to restrict access by livestock and wildlife, and (2) providing a supply of water for drinking and other household use and for watering livestock.

COGCC records reveal that the pit on the Well Pad was never legally permitted for use as a production pit (nor was application made by OXY to permit said pit); consequently, OXY used the pit on the Well Pad to manage produced water from on or around the date of first completion (October 24, 2007) through the date the release was discovered (June 16, 2008), a period of 232 days, without an approved Form 15 pit permit, as required by Rule 903.a. (formerly Rule 903.a.(1)B.).

Rule 523. specifies a base fine of One Thousand dollars (\$1,000) for each day of violation of Rules 324A.a., 324A.b., 902.a., 903.a., 907.a.(1), and 907a.(2). Rule 523.a.(3) specifies that "the maximum penalty for any single violation shall not exceed ten thousand dollars (\$10,000) regardless of the number of

days of such violation,” unless the violation results in significant waste of oil and gas resources, damage to correlative rights, or a significant adverse impact on public health, safety or welfare or the environment.

OXY should be found in violation of **Rule 324A.a.** because it placed produced water and condensate in the unlined production pit on the Well Pad, which failed to contain the fluids which percolated into the underlying bedrock and impacted groundwater, and by so doing, OXY failed to take precautions to prevent significant adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare and to prevent the unauthorized discharge of oil, gas or E&P waste. COGCC Staff allege that this rule violation resulted in a significant adverse impact on public health, safety or welfare or the environment.

OXY should be found in violation of **Rule 324A.b.** because it placed produced water and condensate in a unlined production pit on the Well Pad, which failed to contain the fluids which allowed fluids to percolate into the underlying bedrock and impact groundwater, and by so doing, OXY performed an oil and gas related act or practice which constituted a violation of the water quality standards or classifications established by CDPHE-WQCC for waters of the state. COGCC Staff allege that this rule violation resulted in a significant adverse impact on public health, safety or welfare or the environment.

OXY should be found in violation of **Rule 902.a.** because it placed produced water and condensate in a unlined production pit on the Well Pad, which failed to contain the fluids which percolated into the underlying bedrock and impacted groundwater, and by so doing, OXY failed to construct and operate an E&P pit to protect public health, safety, and welfare and the environment, including soil and water from significant adverse impacts from E&P waste. COGCC Staff allege that this rule violation resulted in a significant adverse impact on public health, safety or welfare or the environment.

OXY should be found in violation of **Rule 903.a.** because it used an unpermitted pit to manage produced water from on or around the date of well completion (October 24, 2007) through the date the release was discovered (June 16, 2008), a period of 232 days, which resulted in a significant adverse impact on public health, safety or welfare or the environment. COGCC Staff allege that this rule violation resulted in a significant adverse impact on public health, safety or welfare or the environment.

OXY should be found in violation of **Rule 907.a.(1)** because it placed produced water and condensate in an unlined production pit on the Well Pad which failed to contain the fluids which allowed fluids to percolate into the underlying bedrock and impact groundwater, and by so doing, OXY failed to ensure that E&P waste is properly stored, handled, transported, treated, recycled, or disposed to prevent threatened or actual significant adverse environmental impacts to air, water, soil or biological resources or to the extent necessary to ensure compliance with the concentration levels in Table 910-1, with consideration to WQCC ground water standards and classifications. COGCC Staff allege that this rule violation resulted in a significant adverse impact on public health, safety or welfare or the environment.

OXY should be found in violation of **Rule 907.a.(2)** because it placed produced water and condensate in a unlined production pit on the Well Pad, which failed to contain the fluids which percolated into the underlying bedrock and impacted groundwater, and by so doing, OXY failed to conduct and operate E&P waste management activities in a manner which ensured the protection of the waters of the state from significant adverse environmental impacts from E&P waste. COGCC Staff allege that this rule violation resulted in a significant adverse impact on public health, safety or welfare or the environment.

NOTICE IS HEREBY GIVEN, that the Oil and Gas Conservation Commission of the State of Colorado, pursuant to the above, has scheduled the above-entitled matter for hearing on:

Date: Thursday, April 29, 2010  
Friday, April 30, 2010

Time: 9:00 a.m.

Place: Suite 801, The Chancery Building  
1120 Lincoln Street  
Denver, Colorado 80203

In accordance with the Americans with Disabilities Act, if any party requires special accommodations as a result of a disability for this hearing, please contact Margaret Humecki at (303) 894-2100 ext. 5139, prior to the hearing and arrangements will be made.

Pursuant to said hearing in the above-entitled matter at the time and place aforesaid, or at any adjourned meeting, the Commission will enter such orders as it deems appropriate to protect the health, safety and welfare of the public and to prevent the waste of oil and gas, either or both, in the operations of said field, and to carry out the purposes of the statute.

**In accordance with Rule 509., any interested party desiring to protest the granting of the application or to intervene on the application should file with the Commission a written protest or intervention no later than April 15, 2010, briefly stating the basis of the protest or intervention.**

Such interested party shall, at the same time, serve a copy of the protest or intervention to the person filing the application. An original and 13 copies shall be filed with the Commission. **Anyone who files a protest or intervention must be able to participate in a prehearing conference during the week of April 19, 2010.** Pursuant to Rule 503.f., if a party who has received notice under Rule 503.b. wishes to receive further pleadings in the above-referenced matter, that party must file a protest or intervention in accordance with these rules. In accordance with the practices of the Commission, should no protests or interventions be filed in this matter by **April 15, 2010, the Applicant may request that an administrative hearing be scheduled during the week of April 19, 2010.** In the alternative, pursuant to Rule 511., if the matter is uncontested, the applicant may request, and the Director may recommend approval on the basis of the merits of the verified application and the supporting exhibits.

IN THE NAME OF THE STATE OF COLORADO

OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

By \_\_\_\_\_  
Carol Harmon, Secretary

Dated at Suite 801  
1120 Lincoln Street  
Denver, Colorado 80203  
April 8, 2010