

#4207
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TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

December 5, 2012

TO: Internal File

THRU: Steve Christensen, Permit Supervisor *SIC*

FROM: April A. Abate, Environmental Scientist III and Team Lead *AAA 12-20-2012*

RE: Midterm Permit Review, Wellington Preparation Plant, NEICO Inc., C/007/0012, Task ID #4207

SUMMARY:

In accordance with R645-303-211, the Division of Oil, Gas, and Mining (the Division) is required to review each active permit during its term. The Division commenced the Midterm Review for the Wellington Preparation Plant on March 13, 2012. All commitments and permit conditions relating to administrative completeness and hydrology requirements of the R645-301-100 & 700 sections of the Utah Coal Rules were reviewed. On May 30, 2012, the Division issued a deficiency letter based on mostly out of date information found in the Wellington Prep Plant Mining and Reclamation Plan.

The Permittee issued a response to the midterm review on November 20, 2012. This memo reviews the response to Administrative Completeness and Hydrology requirements based on the Permittee's responses to the Divisions deficiency letter.

FINDINGS:

[R645. 731.222.1]: The Permittee has proposed to temporarily suspend collecting flow measurements from SW-2. The rationale was that this location no longer diverts or discharges water because the facility is no longer located there. In addition, degrading conditions of the stream bank over time have made the stream unsafe for access to collect a flow measurement.

The Permittee is required to collect flow measurements from all surface water sample locations in accordance with 731.222.1 and would therefore be out of compliance if flow cannot be collected at this sampling point. Please make the necessary upgrades to safely collect a flow measurement at SW-2 (or SW-2A). Alternatively, the Permittee may propose a different location to collect the required data.

TECHNICAL MEMO

RECOMMENDATIONS:

Midterm approval is not recommended until the deficiency associated with surface flow collection at SW-2 is resolved.

GENERAL CONTENTS

The following deficiencies were found based on a review of the General Contents section of the MRP:

[R645-301-113.300]: Violation Notices The MRP lists the most recent update of the violations database in 2004. This information should be updated.

[R645-301-114.100]: Right of Entry The ROE information provided in the section deals solely with the COVOL lease and their ROE agreement with NEICO. The remainder of the section includes the lease agreement between NEICO and COVOL. There was no information in this section discussing the legal right of entry for the Permittee themselves. This section should reference a deed and/or any other lease agreements that are in place for the Permittee to demonstrate legal ROE in order to comply with this regulation.

[R645-301-116.100]: Permit Term Information The information regarding the permit term was last updated in 1994. If any information about the long-term operational plan for the site has changed, than that information should be updated in this section also.

Section 113.300 Violation Notices

A check of the AVS database and the Division's E Citation databases found no notice of violations associated with any of the Officers and Directors or of the permit area itself for the past three years.

The Division's copy of the MRP listed the most recent update of the violations database in 2004. The information in this submittal updated the text to show that no violations associated with underground or surface mining have been issued in the past five years.

Section 114.100 Right of Entry

Right of Entry provided in the section was updated to reflect that NEICO is the sole owner and operator of the property since 1995. The information pertaining to the COVOL lease

and their ROE agreement with NEICO has been removed. This section references a Warranty Deed dated January 11, 1995 and adequately demonstrates legal ROE.

Section 116.100 Permit Term Information

The information regarding the permit term and operational activities was updated as part of this submission. This information is considered adequate to address the deficiency.

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

Analysis:

Cross sections, maps and plans are referenced in Volume 4 of the MRP. The hydrologic monitoring map should be updated accordingly if there are any changes to the water sampling locations that result from the revised PHC.

Findings:

The maps showing the water monitoring locations do not need to be updated at this time.

HYDROLOGY

The following deficiencies were found based on a review of the Hydrology section of the MRP:

[R645-301-722.100]: Location and Extent of Ground Water This section discusses the nature and extent of groundwater within the permit area. The section references Table 722.1 with water level readings collected in 1990. This table provides data current up through 1998. The table should be updated to include more recent groundwater gauging levels while preserving the historic data for comparison. The reference in the narrative text should also then be updated.

[R645-301-722.400]: Location and Depth of Water Wells This regulation is missing from the plan. Please add a reference to the map showing the locations of all groundwater monitoring wells and any other water wells within and adjacent to the permit area. A reference to the well location map and Table 7.22-1 should be referenced here.

TECHNICAL MEMO

[R645-301-723]: Sampling and Analysis This section describes the water sampling plan for the site. This will likely be updated when the Probable Hydrologic Consequences (PHC) section of the plan gets updated. In addition, there is language in this section discussing COVOL's water monitoring responsibilities. This information should be updated. Furthermore, this section discusses the need to monitor groundwater for the presence of BTEXN and propylene glycol compounds. This action was based on the operational activities at the COVOL wash plant when additives were used in the coal washing process. Since these compounds were not detected in significant concentrations, continued monitoring no longer appears necessary. The language in this section should be updated to reflect the historic operations at the COVOL wash plan.

[R645-301-724]: Water Quality This section references water quality data up through May 1997. This section summarizes the tabulated data found in Table 7.24.3. This information should all be updated based on the outcome of the PHC evaluation. The Permittee may want to consider consolidating some of these data tables or removing them altogether from the plan since this data is all available electronically through the Division's electronic water quality database.

[R645-301-724.400]: Climatological Information This section requires climatological information of the permit area. Seasonal temperature ranges were provided; however, seasonal precipitation ranges and prevailing wind direction and velocity information were not. The information provided in the MRP lists only the average annual precipitation total. Please provide seasonal precipitation averages, prevailing wind direction and velocity information.

[R645-301-724.600]: Survey of Renewable Resource Lands This section discusses COVOL operations in the present tense and should be updated.

[R645-301-727]: Alternative Water Resource Information This section discusses a water right held by the Permittee for water from the Price River. The section also discusses a lease agreement with COVOL. This section should now be updated to reflect historic water usage when COVOL operated their facility. Paragraph 3 also lists the State Department of Health as the regulatory authority over the Price River. This should be changed to the Utah Department of Environmental Quality.

[R645-301-728]: Probable Hydrologic Consequences (PHC) Based on ongoing discussions with the Permittee and their hydrologic consultant, it was agreed that a revised PHC should be prepared for the site as part of the 2012 midterm permit review.

[R645-301-731.122 and -.222]: Water Monitoring these sections should be updated based on the outcome of the revised PHC.

[R645-301-731.800]: Water Rights and Water Replacement Information on the operational status of COVOL and its use of 5 cfs of water requires updating.

[R645-301-733.220]: Permanent and Temporary Impoundments

The MRP currently states that no permanent impoundments are proposed. Based on the midterm field visit, a discussion initiated with regard to the Dryer Pond indicating that it could be a candidate for a permanent impoundment given the continuous source of water being fed to it via a culvert. Alluvial water is contained in the impoundment creating a wetland feature of high esthetic value. The Division feels that the quality of the water in the impoundment meets the criteria set forth in 733.220 thru 733.226. The permanent wetland impoundment would have to be added to the reclamation plan and an application for a land-use change, should it be transferred to industrial use.

Analysis:

Section 722.100 Location and Extent of Ground Water

This section discusses the nature and extent of groundwater within the permit area. The text was updated to reference Table 722.1 presenting water level readings from May 1990, 1999, and 2012. The text was also amended to state that water levels from June 2012 were generally consistent with previous values. Table 722.1 was updated to compare water level readings collected in 1990, 1999, and 2012.

Section 722.400 Location and Depth of Water Wells

This regulation was initially missing from the plan. The Permittee updated this section by adding it to the plan and listing a reference to the map showing the locations of all groundwater monitoring wells and depths to water provided in Table 7.22-1.

Section 723 Sampling and Analysis

This section describes the water sampling plan for the site and contained outdated language discussing COVOL's water monitoring responsibilities. This section was updated to remove the COVOL water monitoring locations and analysis requirements.

Section 724 Water Quality

The Permittee has updated the references in the text to indicate that all water quality data is all available electronically through the Division's electronic water quality database. Minor updates were also made to the text under the groundwater and surface water quality sections of the plan.

Section 724.400 Climatological Information

TECHNICAL MEMO

This section was updated to provide the required additional climatological information. The information was updated to provide seasonal precipitation averages, prevailing wind direction and velocity information.

Section 724.600 Survey of Renewable Resource Lands

This language in this section discussing the former COVOL operations was updated.

Section 727 Alternative Water Resource Information

This section was updated to reflect historic operations relating to water usage when COVOL operated their facility. Paragraph 3 was also updated to change the regulatory authority from the State Department of Health over the Price River to the Utah Department of Environmental Quality.

Section 7.28 Probable Hydrologic Consequences (PHC)

Based on ongoing discussions with the Permittee and their hydrologic consultant, it was agreed that a revised PHC should be prepared for the site as part of the 2012 midterm permit review. Several updates were made to this section.

Outdated language in the Baseline Information section was deleted that discussed operational activities under Castle Valley Resource.

Outdated language discussing COVOL sampling requirements for additional parameters to include BETX-N and propylene glycol sampling from surface water sampling stations SW-4 and SW-5 and also from groundwater monitoring wells GW-4 and GW-6. After an analysis of historical data, there was no indication that these parameters were ever detected in any significant concentrations and therefore, the Division recommended that these requirements be removed from the text of the plan.

Language from the Uses and Rights section of the plan was removed discussing COVOL removing 5cfs of water from the Price River for operational activities.

Language from the Impacts to the Hydrologic Balance section was removed discussing COVOL operational activities.

Language from the Water Quality Impacts section was removed discussing COVOL operational activities.

Language from the Groundwater and Surface water availability section was removed discussing the COVOL operational activities

Section 731.122 and -.222 Water Monitoring

Under the Adequacy of Existing Monitoring Plan section, as previously mentioned BTEX-N and propylene glycol testing at GW-4, GW-6, SW-4 and SW-5 were removed from the plan as a result of the decommissioning of the COVOL wash plant and due to the fact that these compounds were never historically detected in significant concentrations. For these reasons, it is not necessary to continue to monitor these wells and surface water locations for these constituents.

In addition, the Permittee made modifications to the groundwater sampling plan to eliminate groundwater monitoring well GW-12 from quarterly sampling. The rationale for removing the well is that there are two nearby monitoring wells GW-7 and GW-14 that are also located west of the Price River/east of the railroad tracks that can adequately monitor the groundwater in this area. Past experience sampling this well has demonstrated that the well location is often flooded and the potential for surface water runoff infiltration is high, causing the groundwater quality data to be compromised. Based on a historical analysis of the groundwater data between these three wells, the Division did not find any significant anomalies in the concentrations of constituents from these wells that would provide any compelling evidence to keep this well active.

The Permittee also removed laboratory-analyzed pH and laboratory specific conductance from the groundwater monitoring plan. These parameters are collected in the field and are considered reliable and accurate.

The Permittee is proposing to make a modification to the surface water sampling plan to temporarily suspend collecting flow measurements from SW-2. The rationale was that this location no longer diverts water or discharges water because the facility is no longer located there. Degrading conditions of the stream bank over time have made the stream bank unsafe for accessing to collect a flow measurement. Water quality measurements are collected from SW-2A the Farnham ditch diversion but flow measurements are not collected at this location. The Permittee is required to collect flow measurements from surface water sample locations in accordance with 731.222.1 and would therefore be out of compliance if flow cannot be collected at this sampling point.

The Permittee also removed laboratory-analyzed pH and laboratory specific conductance from the plan. These parameters are collected in the field and are considered reliable and accurate.

Language from Water Monitoring section was removed discussing the COVOL operational activities has been removed from the plan.

TECHNICAL MEMO

Section 731.800 Water Rights and Water Replacement

Language from this section regarding the operational status of COVOL and its use of 5 cfs of water has been removed.

Section 733.220 Permanent and Temporary Impoundments

The MRP currently states that no permanent impoundments are proposed. Based on the midterm field visit, a discussion initiated with regard to the Dryer Pond indicating that it could be a candidate for a permanent impoundment given the continuous source of water being fed to it via a culvert. Alluvial water is contained in the impoundment creating a wetland feature of high esthetic value. The Division feels that the quality of the water in the impoundment meets the criteria set forth in 733.220 thru 733.226. The permanent wetland impoundment would have to be added to the reclamation plan and an application for a land-use change, should it be transferred to industrial use.

This comment by the Division was not required to be addressed in the MRP. No changes were made to this section by the Permittee.

Findings:

[R645. 731.222.1]: The Permittee has proposed to temporarily suspend collecting flow measurements from SW-2. The rationale was that this location no longer diverts or discharges water because the facility is no longer located there. In addition, degrading conditions of the stream bank over time have made the stream unsafe for access to collect a flow measurement. The Permittee is required to collect flow measurements from all surface water sample locations in accordance with 731.222.1 and would therefore be out of compliance if flow cannot be collected at this sampling point. Please make the necessary upgrades to safely collect a flow measurement at SW-2 (or SW-2A). Alternatively, the Permittee may propose a different location to collect the required data.

RECOMMENDATION:

Midterm approval is not recommended until the deficiency associated with surface flow collection at SW-2 is resolved.