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DIVISION OF OIL, GAS AND MINING

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May 10, 2000

TO: Internal File  
FROM: Peter Hess, Reclamation Specialist III, Team Lead *Smith*  
RE: Notice of Intent to Conduct Minor Coal Exploration, Gob Vent Borehole(s), Plateau Mining Corporation, Willow Creek Mine, ACT/007/038-EX00B

**SUMMARY:**

Plateau Mining Corporation is proposing to drill up to forty gob vent boreholes during 2000 from fifteen drill pad locations in the area of the Willow Creek Mine in Carbon County, Utah. The drill site designated as P-G25 is located on Plateau owned fee ground in Skinny Canyon. The exploration hole is necessary to determine coal thickness and quality in the "D" seam in the area. The site may also be used to directional drill large diameter gob vent boreholes to assist combustible gas extraction from the Mine's workings. Other site locations, which exist on Bureau of Land Management surface, are under full jurisdiction by that agency. UDNR/OGM comments relative to those drilling sites have been forwarded to the BLM in a separate document.

The following technical analysis relates to exploration hole/gob vent borehole(s) P-G25 only.

**TECHNICAL ANALYSIS:**

**COAL EXPLORATION: INTRODUCTION**

Regulatory Reference: R645-200.

**SCOPE**

Regulatory Reference: R645-200-100., -200-110, -200-120, -200-121, -200-122, -200-123.

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**Analysis:**

**Minor Coal Exploration**

One hole will be drilled in Skinny Canyon on fee ground to determine the thickness and quality of coal in the "D" seam in that area. Less than 250 tons of coal will be recovered.

**Findings:**

Relative to R645-200-122, this amendment qualifies as a minor coal exploration amendment.

**RESPONSIBILITIES**

Regulatory Reference: R645-200-200., -200-210, -200-220, -200-230.

**Analysis:**

The applicant has not committed to comply with the coal exploration program rules of R645-200-200, -200-210, -200-220, and -200-230.

**Findings:**

**R645-200-200, -210, -220, -230,** The minimum regulatory requirements have not been met.

**COAL EXPLORATION: REQUIREMENTS FOR  
EXPLORATION APPROVAL**

Regulatory Reference: R645-201.

**NOTICES OF INTENTION TO CONDUCT MINOR COAL  
EXPLORATION**

Regulatory Reference: R645-201-200., -201-210, -201-220, -201-221, -201-222, -201-223, -201-224, -201-225.

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**Analysis:**

The applicant has addressed the requirements of R645-201-200 et al. with regard to names and addresses of applicant, the authorized representative of same, description and location of the exploration area, the exploration time period, method of exploration, and the methods used to negate adverse environmental impacts to the area.

**Findings:**

The minimum regulatory requirements of R645-201-200 et al. have been addressed and are adequate.

## **COAL EXPLORATION: COMPLIANCE DUTIES**

Regulatory Reference: R645-202.

### **PERFORMANCE STANDARDS**

Regulatory Reference: R645-202-200., -202-210, -202-220, -202-230, -202-231, -202-232, -202-233, -202-234, -202-235, -202-236, -202-240, -202-241, -202-242, -202-243, -202-244.

**Analysis:**

**Operational Standards (Habitats of Endangered Species)**

Regulatory Reference: R645-202-202-230, -202-231.

There are no known threatened or endangered species within the designated area of exploration.

The Price River and Willow Creek drainages are the only perennial streams within the exploration area which are capable of supporting fish. Water for the drilling of GVB's will be pumped from the mouth of Skinny Canyon at Section 30, T12S, R10E, or hauled with 4x4 3000-gallon water trucks. Water for exploratory core drilling will be hauled to the drill sites by water truck or pumped to the sites from the nearby Creek through high pressure lines. Plateau Mining has various water rights in the area and temporary changes in the point of diversion will be obtained, when needed, from the State Engineer prior to the start up of the exploration program.

**Findings:**

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The permittee has addressed the minimum regulatory requirements of R645-202-230 and -202-231.

**Analysis:**

**Operational Standards (Exploration Roads)**

Regulatory Reference: R645-202-232.

The drilling of the numerous exploration and gob vent boreholes in Skinny Canyon will require the construction of approximately 10,600 feet of road, of which 2,000 feet will be on fee ground owned by the applicant. The road system in Skinny Canyon will likely be used to house a buried gas pipeline to transport collected methane to a compressor facility to the north. Although this road will be developed for exploration purposes, it will probably be retained for monitoring/maintenance of the gas pipeline which will be installed to transport the methane. No classification has been made for this road.

**Findings:**

**R645-202-232**, The Skinny Canyon road which will lie on private fee ground has not been classified. The requirements of R645-202-232 have not been met.

**Analysis:**

**Operational Standards (Topsoil Removal, Storage, and Redistribution)**

Regulatory Reference: R645-202-233.

These rules have not been addressed for P-G25, which is located on fee ground.

**Findings:**

**R645-202-233**, This submittal is deficient relative to R645-202-233 topsoil requirements on the access road and drill pad for P-G25, which is located on fee ground.

**Analysis:**

**Operational Standards (Diversions of Overland Flows/Streams)**

Regulatory Reference: R645-202-234.

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These regulations have not been addressed.

**Findings:**

**R645-202-234**, This submittal is deficient relative to addressing the requirements of R645-202-234.

**Analysis:**

**Operational Standards (Impacts to Hydrologic Balance)**

Regulatory Reference: R645-202-235.

These regulations have not been addressed.

**Findings:**

**R645-202-235**, The minimum regulatory requirements for R645-202-235 have not been addressed. Please see the below-cited section on R645-301-356.300 and -356.400 (Revegetation: Standards for Success, under the Reclamation Plan section).

**Analysis:**

**Operational Standards (Acid or Toxic Forming Materials)**

Regulatory Reference: R645-202-236.

This regulation has not been addressed.

**Findings:**

**R645-202-236**, The submittal does not meet the minimum regulatory requirements for R645-202-236.

**Analysis:**

**Reclamation Standards**

Regulatory Reference: R645-202-240, -202-241, -202-242, -202-242.100, -202-242.200.

Page 14 of the submittal commits to returning the drill pad to the contour configuration

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existing prior to the exploration activity relative to BLM surface boreholes. For reclamation, all new disturbance will be scarified and re-seeded utilizing the seed mix which meets BLM requirements. Seeding will be done during the first season following completion of the drilling activities.

Reclamation of P-G25, which exists on fee ground must meet R645 reclamation requirements including utilization of the pre-approved seed mix (Table 5.3-2) in the Willow Creek mining and reclamation plan.

**Findings:**

**R645-202-240, -241, -242, -242.100, -242.200,** This minor coal exploration application is deficient in that it does not specifically address the R645-202-240, -241, -242, -242.100, and -242.200 minimum reclamation requirements specific to P-G25.

**Analysis:**

**Reclamation Standards (Reclamation of Boreholes)**

Regulatory Reference: R645-202-243.

The submittal commits to plugging **all** exploration holes (P-G25) for their entire depth upon completion of the drilling and geologic logging activities. This will be performed by the licensed driller. Gob vent boreholes will be left open until after their useful life is finished, which will be determined by coordination of the permittee's mine ventilation requirements and various government agencies.

**Findings:**

The submittal meets the minimum regulatory requirements of the R645-202-243, as they relate to P-G25.

**Analysis:**

**Reclamation Standards (Equipment Removal/Site Reclamation)**

Regulatory Reference: R645-202-244, -202-244.100, -202-244.200, -202-244.300.

The submittal commits to removing all drilling equipment from all sites and reclaiming same to the standards established by the BLM rules. The removal of drilling equipment from site P-G25 can be inferred, and the meeting of this R645 reclamation requirement has been

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previously addressed. The minimum regulatory requirements have been met.

**Findings:**

The minimum regulatory requirements for R645-202-244, -244.100, -244.200, and -244.300 have been met.

## **OPERATION PLAN**

### **ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES**

Regulatory Reference: 30 CFR Sec. 784.24, 817.150, 817.151; R645-301-521, -301-527, -301-534, -301-732.

**Analysis:**

**Road Systems (Maintenance Plan)**

Regulatory Reference: R645-301-527.230.

This R645 rule has not been addressed.

**Findings:**

**R645-301-527.230**, The application is deficient relative to R645-301-527.230.

**Analysis:**

**Road Systems (Road Specifications/Maintenance/Reclamation)**

Regulatory Reference: R645-301-534.100.

The following rules have not been addressed: R645-301-534.100, -534.110, -534.120, -534.130, -534.140, -534.150, and -534.200.

**Findings:**

**R645-301-534.100, -534.110, -534.120, -534.130, -534.140, -534.150, and -534.200.**, The submittal is deficient relative to R645-301-534.100, -534.110, -534.120, -534.130, -534.140, -534.150, and -534.200.

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**HYDROLOGIC INFORMATION**

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

**Analysis:**

**Ground-water Monitoring**

Regulatory Reference: R645-301-731.100, -731.110, -731.111.

The submittal does not address the requirements of R645-301-731.100, -731.110, and -731.111.

**Findings:**

**R645-301-731.100, -731.110, and -731.111**, The minimum regulatory requirements of -731.100, -731.110 and -731.111 as they relate to minor coal exploration have not been met.

**Analysis:**

**Ground-water Monitoring**

Regulatory Reference: R645-301-731.112, -731.200, -731.210, -731.211, -731.212, -731.213, -731.214, -731.214.2, -731.215, -731.220, -731.221, -731.222.

Regulation R645-301-731.112 relates to surface coal mining and reclamation activities. It is not relative to this minor coal exploration application.

Hole P-G25 is an exploration/gob vent borehole. Thus, its primary purpose is to obtain geologic information about the thickness of the "D" seam and its relative quality. The potential for this hole becoming a gob vent borehole (having multiple angle holes from the same location) is also great, but this will depend upon the ventilation requirements of the Mine. The hole will not be used for water monitoring purposes.

**Findings:**

The following regulations are not applicable: R645-301-731.112, -731.200, -731.210, -731.211, -731.212, -731.213, -731.214, -731.214.2, -731.215, -731.220, -731.221, -731.222. Borehole P-G25 will not be used for water monitoring purposes.

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**Analysis:**

**Surface-water Monitoring**

Regulatory Reference: R645-301-731.120, -731.121, -731.122.

Previous exploration submittals from Plateau Mining have committed to protecting surface water quality by capturing all drilling fluids in a mud pit where evaporation will decrease the volume of material present. Remaining material was to be contained in pits near the surface. The mud pits will be built to ensure protection of surface water. If the pits became overly full during the drilling cycle, they were pumped down and the material was hauled to an approved disposal site within the permit area.

Pad runoff was controlled through the use of berms, water bars, silt fences and straw bales. These criteria should be implemented at site P-G25 (fee ground), as well.

**Findings:**

**R645-301-731.100, -731.110, and -731.100**, The minimum regulatory requirements of R645-301-731.120, -731.121, and -731.122 have been met, but they need to be specifically directed at the exploration/GVB site P-G25, which is on fee ground. Based on nonspecific wording, the submittal is deficient.

**Analysis:**

**Surface-water Monitoring**

Regulatory Reference: R645-301-731.800.

This regulation is relative to surface coal mining and reclamation operations.

**Findings:**

Regulation R645-301-731.800 is not applicable.

**Analysis:**

**Diversions**

Regulatory Reference: R645-301-742.300.

Diversions have not been addressed within this submittal under R645-202-234.

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Revised: May 10, 2000

**Findings:**

**R645-301-742.300**, See "Findings" under R645-202-234. (The minimum regulatory requirements of R645-202-234 have not been met.)

**Analysis:**

**Siltation Structures**

Regulatory Reference: R645-301-742.200, -742.210, -742.211, -742.212, -742.213, -742.214.

The application has not discussed the use of catch basins for sediment control purposes. The aforementioned regulations are not applicable.

**Findings:**

R645-301-742.200, -742.210, -742.211, -742.212, -742.213, and -742.214, as they relate to siltation structures are irrelevant with regard to this minor coal exploration submittal.

**Analysis:**

**Sedimentation Ponds**

Regulatory Reference: R645-301-742.220, -742.221, -742.222, -742.223, -742.224, -742.225.

There are no sediment ponds associated with this minor coal exploration application. The aforementioned regulations are not applicable.

**Findings:**

R645-301-742.220, -742.221, -742.222, -742.223, -742.224, and -742.225, as they relate to sediment ponds are irrelevant with regard to this minor coal exploration submittal.

**Analysis:**

**Impoundments**

Regulatory Reference: R645-301-512.240, -514.300, -533.100, -533.210, -533.220, -533.300, -533.400, -533.500, -533.600.

These regulations have not been addressed.

**Findings:**

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**R645-301-512.240, -514.300, -533.100, -533.210, -533.220, -533.300, -533.400, -533.500, -533.600,** This submittal does not address the aforementioned regulations and is considered deficient relative to same.

## **MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS**

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

### **Analysis:**

#### **Mining Facilities Maps (Primary Roads)**

Regulatory Reference: R645-301-512.250.

These regulations have not been addressed.

### **Findings:**

**R645-301-512.250,** The submittal does not meet the minimum regulatory requirements for R645-301-512.250; this regulation has not been addressed.

### **Analysis:**

#### **Mining Facilities Maps (Road Classification)**

Regulatory Reference: R645-301-526.200.

This regulation has not been addressed.

### **Findings:**

**R645-301-526.200,** This submittal is deficient relative to R645-301-526.200.

## **RECLAMATION PLAN**

## **HYDROLOGIC INFORMATION**

Regulatory Reference: 30 CFR Sec. 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-760, -301-761.

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**Analysis:**

**Siltation Structures**

Regulatory Reference: R645-301-763.

There are no siltation structures associated with this minor coal exploration application.

**Findings:**

Regulation R645-301-763 is not applicable.

**Analysis:**

**Impoundments**

Regulatory Reference: R645-301-513.200, -515.200.

These regulations have not been addressed.

**Findings:**

**R645-301-513.200, -515.200**, This submittal does not address R645-301-513.200 or -515.200. This document is deficient.

**REVEGETATION**

Regulatory Reference: 30 CFR Sec. 785.18, 817.111, 817.113, 817.114, 817.116; R645-301-244, -301-353, -301-354, -301-355, -301-356, -302-280, -302-281, -302-282, -302-283, -302-284.

**Analysis:**

**Standards for Success**

The following regulations have not been addressed: R645-301-356.300 and -356.400.

**Findings:**

**R645-301-356300, -356.400**, The minimum regulatory requirements for R645-301-356.300 and -356.400 have not been addressed. Please see the cited section on R645-202-235 (Operational Standards for impacts to hydrologic balance).

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**BONDING AND INSURANCE REQUIREMENTS**

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

**Analysis:**

**Form of Bond (Reclamation Agreement)**

The current bond amount for the Willow Creek site is \$11, 949, 205.00. A reclamation cost figure of \$24,000 per borehole for amendment 98D was established through cooperation with Mr. Wayne Western, Reclamation Specialist (bond evaluations) of the SLC-DOGM. This amount is 0.2 percent of the total bond amount, which is less than the minimum 5 percent rule requiring bond revision. Verbiage relative to bonding for the reclamation of P-G25 has not been included in the submittal.

**Findings:**

**R645-301-800**, Although it is not necessary to revise the bond amount in order to reclaim P-G25, the minimum regulatory requirements of R645-301-800 require that reclamation bonding be addressed for all disturbance relative to coal mining and reclamation activities.

**RECOMMENDATIONS:**

Submittal ACT/007/038-EX00B does not adequately addresses the minimum regulatory requirements for performance standards relative to coal exploration and reclamation activities.

It is recommended that this submittal be classed as deficient until the permittee can adequately address the aforementioned R645 rules.