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August 25, 1994

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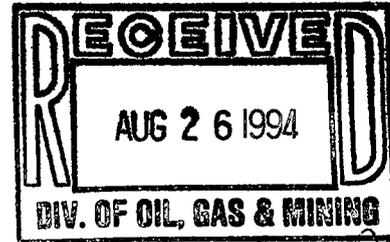
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TO CALL WRITER DIRECT

HAND DELIVERED

James W. Carter, Director
Division of Oil, Gas and Mining
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203



Re: Proposed Drilling Plan to Characterize the Refuse Pile for
Acid/Toxic Materials
Sunnyside Cogeneration Associates, Permit No. ACT/007/035

Dear Jim:

Enclosed please find a draft letter from Sunnyside Cogeneration Associates ("SCA") regarding the proposed drilling plan to characterize the refuse pile for acid/toxic materials.

As we discussed, SCA believes that the drilling plan is unnecessary. SCA requests an exemption from the regulations requiring this information because as set forth in Utah Admin. Code R645-301-626 "...the collection and analysis of such data is unnecessary because other information having equal value or effect is available...".

The attached letter sets out the reasons in more detail, but basically SCA has committed to cover the waste coal pile with four feet of approved borrow material in connection with final reclamation. In other words, SCA has already assumed that the waste coal pile is acid and toxic forming for the purposes of the reclamation plan. Additional studies now will not change SCA's reclamation plan. If, in later years, the annual surface samples indicate problems, adjustments can be made to the final reclamation plan.

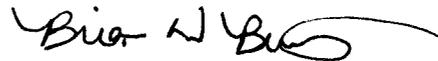
SCA has a September 1, 1994 filing deadline for submitting more detailed methods and procedures for the drilling plan. If we cannot reach an agreement regarding waiver of this requirement, SCA intends to ask the Board of Oil, Gas and Mining to grant relief on this issue.

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Please review this information and call me so that we can discuss this issue. Thank you for your cooperation in this regard. If you have any questions, please feel free to contact me.

Very truly yours,

CALLISTER NEBEKER & McCULLOUGH

A handwritten signature in black ink, appearing to read "Brian W. Burnett", with a stylized flourish at the end.

Brian W. Burnett

cc: David Pearce
Alane Boyd

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SUNNYSIDE COGENERATION ASSOCIATESPOST OFFICE BOX 58087
SALT LAKE CITY, UTAH 84158-0087

August 25, 1994

James W. Carter
Director - Division of Oil, Gas & Mining
3 Triad Center, Suite 350
Salt Lake City, UT 84180-1203
Phone: (801) 538-5340

RE: **Proposed Drilling Plan to Characterize the Refuse Pile for Acid/Toxic Materials
Sunnyside Cogeneration Associates, Permit No ACT/007/035**

Dear Jim:

For the past two years Sunnyside Cogeneration Associates (SCA) and their consultants have been working to reach an agreement with DOGM concerning an appropriate application of the R645 rules concerning acid- or toxic-forming materials and the action required to identify the location and quantity of these suspected materials throughout the existing refuse pile. This pile was created by Sunnyside Coal Company (SCC) over the past several decades and is being excavated and burned by SCA in the new, zero discharge, power plant.

The purposes for identifying acid-/toxic-forming materials are to assist in the reclamation plan and ensure adequate bond to bury with four feet of non-toxic/non-acid material and/or treat these materials which may adversely affect water quality, or be detrimental to vegetation or to public health and safety. When acid-/toxic-forming materials are encountered, the generally accepted practice is to bury with four feet and/or treat the material as soon as possible, or to control the immediate effects on surface and subsurface waters and bond for its future burying and/or treatment.

The nature of the SCA project is reclamation by removal of the waste coal material deposited by SCC. SCA believes that the substantial expense to conduct the DOGM requested drilling plan to characterize the entire refuse pile and quantify the suspected acid/toxic materials is unnecessary. The existing Worst Case Scenario Reclamation Plan and the associated bond allow for the removal and/or covering of all coal refuse materials with four feet of approved borrow material. It is the intent of SCA to remove and/or cover the acid/toxic materials encountered throughout the operations on this pile.

In accordance with R645-301-626, SCA requests the DIVISION to waive in whole the requirements of R645-301-624.200 and R645-301-624.300. Other information has sufficient value and effect to meet the needs of the permit. SCA is in the process of removing the refuse pile and is bonded for the required four feet of cover, in the event that bond forfeiture occurs at a time when the entire exposed refuse pile is comprised of acid-/toxic-forming material.

SCA proposes that annual surface samples be taken to identify the current conditions, instead of conducting this major proposed drilling plan.

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PRE-LAW STRUCTURE

The most efficient manner of characterizing a waste pile is to periodically sample and test the material at the surface as the pile is being constructed. The Division did not require the former owners and operators of this refuse area to conduct such sampling at the time that they were constructing the West Slurry Cell and the Refuse Pile because these are pre-law structures. The Division did not require characterization of the refuse pile in order to meet performance standards at the time that SMCRA took affect. Nonetheless, more than a decade following SMCRA, SCA is being asked to conduct a major drilling plan to identify and quantify the acid/toxic materials throughout the entire pile.

ANALYSIS of SURFACE SAMPLES

SCA collected four grab samples from the surface of the West Slurry Cell in August 1993. These were analyzed for the parameters listed in Table 6 in the DOGM Guidelines for Management of Topsoil and Overburden. All of the parameters analyzed were determined to be "Good," with the exception of electrical conductivity and one sample for available water capacity which were determined "Fair", according to the criteria listed in Table 2 of the Guidelines. Based on the criteria contained in the DOGM Guidelines, these four samples were not considered to be acid-forming nor toxic-forming. The report from this sampling is in the SCA permit under Appendix 6-6.

Theories indicate that the chemical nature of refuse material may be altered over time if exposed to weathering. SCA realizes that these four surface samples may not be representative of the entire pile.

WATER QUALITY

At the insistence of DOGM, SCA began an aggressive water monitoring program of the flows from the seep at the toe of the coarse refuse pile this past Spring. The Division of Water Quality (DWQ) participated in drafting the monitoring schedule and reviewing the data. This monitoring program has consisted of installing three weirs to obtain accurate flow measurements, and conducting weekly field measurements and monthly composite sampling and analysis. This program is being conducted in addition to the baseline monitoring which includes monthly field measurements and quarterly sampling. The data to date indicates relatively consistent seep flows (7.1 to 8.5 gpm) and pH ratings of 6.5 or higher. The natural treatment system existing in the drainage appears to reduce the measured amount of metals and increase the pH prior to leaving the permit area.

Iceland Creek, the receiving stream for all waters potentially leaving the permit site, has not shown to be adversely affected by activities related to the operations of SCA.

VEGETATION

SCA recently completed an interim reclamation project on the outer slopes of the refuse pile by covering the lower lifts not intended to be mined in the next year. Because this is interim reclamation and these lifts are expected to be mined in the future, only two feet of cover material was applied. The approved interim seed mix was broadcast by hydro-seeding in March 1994. Vegetation is already progressing on the reclaimed areas and is expected to be stronger after this next winter season.

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EXAMPLES FROM OTHER UTAH STATE COAL MINING OPERATIONS

PLATEAU MINES (PM) is currently constructing their refuse pile as a result of mining activities, according to a conversation with Ben Grimes of PM. As a requirement for permit renewal, a study was conducted in 1988 to characterize the PM refuse pile under construction for Acid/Toxic potential. At the time of the study, the pile was approximately 80 feet deep. The study was conducted by digging 10-15 holes with a track-excavator to a depth of 20-25 feet and taking a sample. Data did not show the problem levels of selenium suspected by DOGM. Samples are being taken periodically as the pile is being constructed to monitor the material going onto the pile.

The WELLINGTON PREP PLANT (WPP) is currently involved in a study of their refuse pile which covers approximately 130 acres, according to Patrick Collins of Mt Nebo Scientific, a consultant for the WPP. The purpose of the study is to demonstrate that the WPP pile is not Acid/Toxic forming and that they can bond to reclaim with less than four feet of cover.

ALTERNATIVE PROPOSAL

SCA proposes that, instead of conducting this major proposed drilling plan, annual surface samples (one grab sample per acre of newly exposed surface mined area) be taken to identify the current conditions regarding acid/toxic potential. This type of sampling would provide information needed to determine the required depth of cover in the event that reclamation was required prior to complete removal of the existing refuse pile. The surface precipitation runoff is all treated by impoundments throughout the permit area and the seep at the toe of the refuse pile is being monitored regularly.

CONCLUSION

SCA believes that the cost associated with the drilling program requested by DOGM would not provide information necessary to implement any improvements to the environment of the SCA permit area beyond those already in scheduled to take place for the permitted site.

- The West Slurry Cell and the Refuse Pile are pre-law structures. This type of characterization was not required by the Division at the time that SMCRA took affect. SCA (the only operator in the history of this refuse area that intends to clean up the site by removing the waste) should not be required to conduct such a major drilling project to identify the acid/toxic materials throughout the entire pile.
- The four surface samples taken from the West Slurry Cell in August 1993 were determined to be non-acid and non-toxic.
- Coal mining and reclamation operations are conducted to minimize water pollution and changes in flow.
- Recent water monitoring at the seep has not shown to have an adverse affect on water quality of the receiving stream of Iceland Creek.

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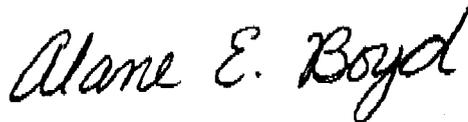
- The suspected acid-/toxic-forming material of the refuse pile has not shown to be detrimental to vegetation on the outer slopes nor to public health.
- The examples cited from other mines in the state which have been required to conduct similar studies do not apply to the conditions of the SCA refuse pile. These studies were required of a permanent refuse pile under construction (PM) and a permittee wishing to bond for less than four feet of cover over a permanent refuse pile (WPP).
- SCA is removing the refuse pile and is bonded for the required four feet of cover.
- SCA proposes annual surface sampling to provide current information concerning the acid/toxic potential.

In accordance with R645-301-626, SCA requests the DIVISION to waive in whole the requirements of R645-301-624.200 and R645-301-624.300. Other information has sufficient value and effect to meet the needs of the permit. SCA is in the process of removing the refuse pile and is bonded for the required four feet of cover, in the event that bond forfeiture occurs at a time when the entire exposed refuse pile is comprised of acid-/toxic-forming material.

Sincerely,



David R. Pearce
Authorized Member, Management Committee



Alane E. Boyd
Senior Engineer

Attached: General History of Communication and Actions Taken Regarding Characterization
of the Refuse Pile
Selected R645-301 Rules Associated with Acid-/Toxic-Forming Material

cc: Brian Burnett, CDN

AEB:asc

**GENERAL HISTORY OF COMMUNICATION AND ACTIONS TAKEN REGARDING
CHARACTERIZATION OF THE REFUSE PILE**

- Aug 92 John T. Boyd sent split drill samples to CT&E for storage until testing
- Jan 93 SCA proposed a testing plan of samples for Acid/Toxic potential
Bond calculations include 4' of cover over slurry and coarse refuse
SCA committed to conduct water monitoring of seep at toe of refuse pile
- Apr 93 DOGM requested sample screening plan
- Jun 93 SCA identified drill holes to be re-sampled to determine the effects of storage at CT&E
- Aug 93 SCA tested four grab samples from the West Slurry Cell surface, see permit Appx 6-6
- Aug 93 SCA notified DOGM that drill samples had been discarded by CT&E prior to testing
- Sept 93 SCA proposed drilling 10 holes to sample and test for Acid/Toxic potential
- Oct 93 DOGM - Henry Sauer conducted resistivity study of refuse pile
- Feb 94 Meeting held at DOGM to discuss review of September proposed drilling plan
- Mar 94 SCA submitted revised drilling plan
- Apr 94 DOGM review of revised drilling plan
- May 94 SCA response to Apr 94 DOGM review letter
- Aug 94 DOGM response to May 94 SCA letter and requests a more detailed discussion of the analytical methods and procedures to be used in the slurry sampling plan to be submitted no later than Sept 1, 1994.
- Aug 94 SCA requests the DIVISION to wave requirements of R645-301-624.200 and R645-301-624.300

SELECTED R645-301 RULES ASSOCIATED WITH ACID-/TOXIC-FORMING MATERIAL

- 553.252. Following final grading of the refuse pile, the coal mine waste will be covered with a minimum of four feet of the best available, **NONTOXIC** and noncombustible material, in a manner that does not impede drainage from the underdrains. The Division may allow less than four feet of cover material based on physical and chemical analyses which show that the requirements of R645-301-244.200 and R645-301-353 through R645-301-357.
- 553.300. Exposed coal seams, **ACID-** and **TOXIC-**forming materials, and combustible materials exposed, used, or produced during mining will be adequately covered with **NONTOXIC** and noncombustible materials, or treated, to control the impact on surface and ground water in accordance with R645-301-731.100 through R645-301-731.522 and R645-301-731.800, to prevent sustained combustion, and to minimize adverse effects on plant growth and the approved postmining land use.
623. Each application will include geologic information in sufficient detail to assist in:
- 623.100. Determining all potentially **ACID-** or **TOXIC-**forming strata down to and including the stratum immediately below the coal seam to be mined;
- 623.200. Determining whether reclamation as required by R645-301 and R645-302 can be accomplished; and
- 624.200. For the purposes of **UNDERGROUND COAL MINING AND RECLAMATION ACTIVITIES**, any portion of a permit area in which the strata down to the coal seam to be mined will be removed or are already exposed, and for the purposes of **SURFACE COAL MINING AND RECLAMATION ACTIVITIES**, samples will be collected and analyzed from test borings; drill cores; or fresh, unweathered, uncontaminated samples from rock outcrops down to and including the deeper of either the stratum immediately below the lowest coal seam to be mined or any aquifer below the lowest coal seam to be mined which may be adversely impacted by mining. The analyses will result in the following:
- 624.210. Logs showing the lithologic characteristics including physical properties and thickness of each stratum and location of ground water where occurring;
- 624.220. Chemical analyses identifying those strata that may contain **ACID-** or **TOXIC-**forming, or alkalinity-producing materials and to determine their content except that the Division may find that the analysis for alkalinity-producing material is unnecessary; and
- 624.230. Chemical analysis of the coal seam for **ACID-** or **TOXIC-**forming materials, including the total sulfur and pyritic sulfur, except that the Division may find that the analysis of pyritic sulfur content is unnecessary.
- 624.300. For lands within the permit and adjacent areas of **UNDERGROUND COAL MINING AND RECLAMATION ACTIVITIES** where the strata above the coal seam to be mined will not be removed, samples will be collected and analyzed from test borings or drill cores to provide the following data:
- 624.310. Logs of drill holes showing the lithologic characteristics, including physical properties and thickness of each stratum that may be impacted, and location of ground water where occurring;
- 624.320. Chemical analyses for **ACID-** or **TOXIC-**forming or alkalinity-producing materials and their content in the strata immediately above and below the coal seam to be mined;
- 624.330. Chemical analyses of the coal seam for **ACID-** or **TOXIC-**forming materials, including the total sulfur and pyritic sulfur, except that the Division may find that the analysis of pyrite sulfur content is unnecessary; and
- 624.340. For standard room and pillar mining operations, the thickness and engineering properties of clays of soft rock such as clay shale, if any, in the stratum immediately above and below each coal seam to be mined.
625. If determined to be necessary to protect the hydrologic balance, to minimize or prevent subsidence, or to meet the performance standards of R645-301 and R645-302, the Division may require the collection, analysis and description of geologic information in addition to that required by R645-301-624.

626. An applicant may request the Division to waive in whole or in part the requirements of R645-301-624.200 and R645-301-624.300. The waiver may be granted only if the Division finds in writing that the collection and analysis of such data is unnecessary because other information having equal value or effect is available to the Division in a satisfactory form.

731.100. **Hydrologic-Balance Protection.**

731.110. **Ground-Water Protection.** In order to protect the hydrologic balance, coal mining and reclamation operations will be conducted according to the plan approved under R645-301-731 and the following:

731.111. Ground-water quality will be protected by handling earth materials and runoff in a manner that minimizes **ACIDIC**, **TOXIC** or other harmful infiltration to ground-water systems and by managing excavations and other disturbances to prevent or control the discharge of pollutants into the ground water; and

731.112. For the purposes of **SURFACE COAL MINING AND RECLAMATION ACTIVITIES** ground-water quantity will be protected by handling earth materials and runoff in a manner that will restore approximate premining recharge capacity of the reclaimed area as a whole, excluding coal mine waste disposal areas and fills, so as to allow the movement of water to the ground-water system.

731.120. **Surface-Water Protection.** In order to protect the hydrologic balance, coal mining and reclamation operations will be conducted according to the plan approved under R645-301-731 and the following:

731.121. Surface-water quality will be protected by handling earth materials, ground-water discharges and runoff in a manner that minimizes the formation of **ACIDIC** or **TOXIC** drainage; prevents, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow outside the permit area; and, otherwise prevent water pollution. If drainage control, restabilization and revegetation of disturbed areas, diversion of runoff, mulching or other reclamation and remedial practices are not adequate to meet the requirements of R645-301-731.100 through R645-301-731.522, R645-301-731.800 and R645-301-751, the operator will use and maintain the necessary water treatment facilities or water quality controls; and

731.300. **ACID- and TOXIC-Forming Materials.**

731.310. Drainage from **ACID-** and **TOXIC-**forming materials and underground development waste into surface water and ground water will be avoided by:

731.311. Identifying and burying and/or treating, when necessary, materials which may adversely affect water quality, or be detrimental to vegetation or to public health and safety if not buried and/or treated; and

731.312. Storing materials in a manner that will protect surface water and ground water by preventing erosion, the formation of polluted runoff and the infiltration of polluted water. Storage will be limited to the period until burial and/or treatment first become feasible, and so long as storage will not result in any risk of water pollution or other environmental damage.

731.320. Storage, burial or treatment practices will be consistent with other material handling and disposal provisions of R645 Rules.

745. **Disposal of Excess Spoil.**

745.100. **General Requirements.**

745.110. Excess spoil will be placed in designated disposal areas within the permit area, in a controlled manner to:

745.113. Adequately cover or treat excess spoil that is **ACID-** and **TOXIC-**forming with **NONACID NONTOXIC** material to control the impact on surface and ground water in accordance with R645-301-731.300 and to minimize adverse effects on plant growth and the approved postmining land use.