



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Norman H. Bangarter  
Governor

Dee C. Hansen  
Executive Director

Dianne R. Nielson, Ph.D.  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340

October 21, 1992

Mr. David Pearce  
Sunnyside Cogeneration Associates  
P.O. Box 58087  
Salt Lake City, Utah 84158-0087

Dear Mr. Pearce:

Re: Completeness Deficiencies, Sunnyside Cogeneration Associates, Coarse Refuse at the Sunnyside Mine, PRO/007/035, Folder #2, Carbon County, Utah

Enclosed please find the administrative completeness reviews and/or memos for the Sunnyside Cogeneration Associates' Coarse Refuse Facility at the Sunnyside Mine. Please adequately respond to these completeness deficiencies so that a Determination of Completeness may be made and the four week publication period may be begin.

I have informally faxed or given these reviews to Alane Boyd, Eckhoff, Watson, and Preator and my staff has met with her and discussed these issues.

If you have any questions, please call me.

Sincerely,

A large, stylized handwritten signature in black ink, appearing to read "Pamela Grubaugh-Littig".

Pamela Grubaugh-Littig  
Permit Supervisor

Enclosure

cc: Lowell Braxton, Associate Director, Mining  
Brian Burnett, Callister, Duncan, and Nebeker  
Alane Boyd, Eckhoff, Watson, and Preator

ADMINISTRATIVE COMPLETENESS REVIEW WORKSHEET

~~REMINING~~ - surface mining  
MINING

(R645-301-150)

PAP received 8/20/92  
Reviews due 9/20/92

DATE: \_\_\_\_\_, 199\_\_

REVIEWER(S): \_\_\_\_\_

APPLICANT: Sunnyside Cogeneration Associates

PERMIT NAME: Sunnyside Course Refuse FILE NO. PR0/002/035

"Administratively Complete Application" means an application for permit approval or approval for coal exploration, where required, which the Division determines to contain information addressing each application requirement of the State Program and to contain all information necessary to initiate processing and public review.

Instructions: The categories listed below correspond to the minimum requirements for information necessary to initiate processing and public review. If a category is checked the Applicant has met the Completeness requirement for that category. If a category is not checked, the Completeness requirements have not been met. The comments column will identify the deficiency and what is necessary to correct it.

Comments

Category	Requirement	Completion	Comments
01-112	Identification of Interests	_____	<i>Susan</i>
100	Applicant's Business Structure	_____	<i>This is not a transfer - all rot. must be checked Is a joint venture a business entity?</i>
210	Applicant's Name/Address/Phone	_____ ✓	
220	Resident Agent's Name/Address/Phone	_____ ✓	
230	Name/Address/Phone of AML Fees Payer	_____	<i>Not given</i>
300	Corporate Structure & Ownership	_____	<i>Percentage of ownership not given.</i>
400	Identify Other Mining Operations in US	_____ ✓	
500	Surface & Mineral Ownership	_____ ✓	
600	Ownership Contiguous to Permit	_____ ✓	
700	MSHA Numbers	_____ ✓	
800	Interest in Contiguous Lands	_____ ✓	

Comments

301-113	Violation Information <u>✓</u>	
100	Suspension or Revocation Information <u>✓</u>	
300	List of Violations - 3 Previous Years <u>✓</u>	
301-114	Right of Entry <u>✓</u>	
301-115	Status of Unsuitability Claims <u>✓</u>	
301-116	Permit Term <u>✓</u>	
301-117	....Insurance <u>✓</u> ....Proof of Publication <u>✓</u> ....Facilities and Structures Used in Common <u>✓</u>	
301-118	Filing Fee <u>✓</u>	

Comments

301-123	Notarized Signature of Responsible Official _____	<i>Not given. This is referenced but not found.</i>
301-130	Information Collection: Technical Data Accompanied by Names of Persons or Organizations that Collected and Analyzed the Data - Dates of Collections - and Analysis of the Data and Description of the Methodology Used to Collect and Analyze Data _____	
301-200	<i>Henry</i> Soils _____	<i>See memo</i>
211	Description of Premining Soil Resources <u>NA</u>	
221	Prime Farmland Investigation _____	
222	Soil Survey _____	
224	Substitute Topsoil Info (When Proposed) _____	
230	Operation Plan: Topsoil Handling/Removal/Storage _____	
240	Reclamation Plan: Soil Redistribution/Stabilization _____	

Comments

01-300	<i>Susan</i> Biology	
320	Vegetation Information	- Wetland area at bottom of refuse - no data. - Reference area is a survey cell. Need new standards and data. - TAE studies from 1980. This is not acceptable. - Productivity info. from 1981 not acceptable, may be updated.
322	Fish and Wildlife Information	
323	Maps/Photos: Vegetation-Fish-Wildlife Areas	Plate 3-1, Vegetation Resources Map is not legible or of sufficient scale to be useful. Saltbush/Willow reference area not shown.
330	Operation Plan: Vegetation-Fish-Wildlife Protection	
341	Reclamation Plan for Revegetation	
342	Fish & Wildlife Plan for Reclamation Phase	

01-400	<i>Susan</i> Land Use and Air Quality	
411	Pre-Mining Land Use Information (Includes Cultural Resources)	Maps not clear. No current demonstration of coordination with SHPO.
412	Post-Mining Land Use Information	

Comments

301-500	<i>Jose</i> Engineering	<u>✓</u>	
510 and 520	General Description of Operation Plan: (Maps, Locations, Cross-Sections, Narrative, Descriptions & Calculations) <u>INCOMPLETE</u>		Maps are illegible and lack adequate topographic detail. Maps and plans must be certified according to R645-301-512. Permit area and disturbed area markers must be in place during operation, <u>not</u> just during final reclamation (see page 500-7).
522	Coal Recovery Description	<u>✓</u>	
523	Mining Methods	<u>✓</u>	
524	Blasting and Explosives Plan	<u>NA</u>	
525	Subsidence Control Plan	<u>NA</u>	
526	Mine Facilities Description (Narrative, Plans, Maps) Including Existing Structures & Support Facilities	<u>✓</u>	
527	Transportation Facilities (Including Plans & Maps)	<u>INCOMPLETE</u>	Roads shown in Table 1 must be indicated on Plates 5-1. Also, roads must be classified as either primary or ancillary.
528	Coal Mine Waste Plans (Description & Designs)	<u>INCOMPLETE</u>	There is no plan for the refuse pile.
529	Management of Mine Openings (Design)	<u>NA</u>	
531	General Plans for Structures	<u>✓</u>	
532	Sediment Control	<u>✓</u>	
533	Impoundments	<u>✓</u>	

Comments

01-534	Roads (Plans, Drawings, Designs, & Specifications) <u>INCOMPLETE</u>	The plan must demonstrate that road embankments have a static stability safety factor of at least 1.3 (see 534.130).
535	Spoil <u>NA</u>	
536	Coal Mine Waste <u>INCOMPLETE</u>	There is no plan for the refuse pile. The plan must show the pile's ultimate limits and configuration and must demonstrate that the pile has a static stability safety factor of at least 1.5.
537	Regraded Slopes <u>✓</u>	
540 541-542	Reclamation Narrative, Maps and Plans <u>INCOMPLETE</u>	There is no map of the anticipated final surface configuration and no earthwork quantity estimate. There is also no reclamation cost estimate on which to base a reclamation bond amount.
551	Casing and Sealing: Underground Openings <u>NA</u>	
553	Backfilling and Grading Description <u>INCOMPLETE</u>	See 540, 541, 542 above. Note also that the plan must demonstrate a static stability safety factor of at least 1.3 for reclaimed slopes.

01-600	<i>Hugh</i> Geology _____	
621	Description of Geology (Permit & Adjacent Area) <u>NA</u>	
622	Geologic Cross-Sections, Maps, and Plans <u>NA</u>	
630	Plans for Casing and Sealing Holes _____	

Comments

01-700	Hydrology _____	
721	Description of Hydrologic Resources: (Permit and Adjacent Area) ✓	
722	Cross-Sections and Maps: Subsurface Water - Surface Water - Monitoring Stations - Wells _____	<p>Plate 7-1, 7-2, 7-3, not certified, (Some maps Environ. show cover crop + met SCA. certified for per area)</p> <p>Plate 7-5, 7-6 certified by SCC personal?</p> <p>Plate 7-4 shows permit boundary for Sunnyside Fuel Crsg. NOT SCA; contour on Plate 7-2</p>
723	Sampling and Analysis ✓	
724	Baseline Information: Ground Water - Surface Water - Geology - Climatological & Supplemental; If Needed _____	<p>Baseline data presented as for discharges from point 004; Not baseline water quality of area. Streams. NEED Baseline for <del>the</del> <del>area</del> + Ocean</p> <p>say which discharging point it is! I believe could use ALL TOXIC &amp; volatile!</p>
728	PHC Determination ✓	<p>NO data on page 10-11 of Table III.</p> <p>need data on CRB + CRB</p>
730	General Operation Plan: Minimize Disturbance to Hydrologic Balance & Compliance with Clean Water Act _____	<p>UPDES permits lists 9 discharge points</p> <p>Plate 7-3 only show 6 points + Missing 013, 014, + 015, but these are associated w/ the power plant and not refuse pits.</p>
731	Ground and Surface Water Protection	<p>731.22<sup>0</sup> need to discuss TDS problem.</p> <p>731.22<sup>1</sup> need to discuss equipment, - structures planned.</p>
732	Ground and Surface Water Monitoring ✓	<p>Quarterly samples from spring + wash, monthly field parameters unless high TSS or TDS</p>

Comments

301-740

Plans and Designs: Operation and Reclamation Plan  
 Sediment Control Measures

....Siltation Structures

See memo

....Sediment Ponds

See memo to much to list

....Other Treatment Facilities

need good map  
 need to comply w/ 731.720 section 7.1

....Diversions

need good map; No  
 See memo i plate 7.1 per front

....Road Drainage

✓ Can't read maps for drainage  
 need all pond designs

....Impoundments

discharge structure regs do  
 apply & need to be shown as well  
 as designs for them

....Disposal of Excess Spoil

deferred to 746

....Coal Mine Waste

✓ No final configuration of refuse pile

....Disposal of Non-Coal Mine Waste

✓

....Casing and Sealing of Wells

✓

only wells are boreholes in  
 the refuse pile proper

## ANALYSIS

### R645-301-221 Prime Farmland Investigation

The applicant must include the results of a reconnaissance inspection of the permit area to indicate whether prime farmland exist. The determination must include the legal description of the lands encompassed by the reconnaissance inspection. The applicant must submit a statement regarding the existence of prime farmland and the basis upon which the stated conclusion was reached.

### R645-301-222 Soil Survey

The applicant must provide adequate soil survey information (i.e., R645-301-222.100 through 222.223) for those portions of the permit area to be affected by surface operations incident to surface coal mining and reclamation activities. This would include all areas where new disturbance and/or redisturbances of lands disturbed prior to the enactment of P.L. 95-87 is proposed (i.e., R-1 New Haul Road, all topsoil borrow areas, etc.)

An Order I soil survey, conducted in accordance with the National Cooperative Soil Survey, is recommended for lands to be disturbed. The survey must be based on site specific, representative soil profile descriptions. The map identification of the proposed topsoil borrow areas (i.e., Plate 2-2) is inadequate and must be increased to a scale of at least 1:6000.

An Order III soil survey is adequate for the remainder of the permit area. However, the map submitted (i.e., Plate 2-1) is difficult to interpret given that two separate map units are depicted within the same boarder, soil boundaries are extended into the refuse material and some soil map unit delineations are open ended and extended indefinitely.

### R645-301-230 Operation Plan

The applicant has not addressed the following:

- 231.100. Description of the methods for removing and storing topsoil, subsoil, and other materials;

- 231.300. Testing plan for evaluating the results of topsoil handling and reclamation procedures related to revegetation; and
- 231.400. Narrative that describes the construction, modification, use and maintenance of topsoil handling and storage areas.

#### R645-301-233 Topsoil Substitute and Supplements

The requirements of this section must be adequately addressed.

The applicant describes various means of fulfilling the requirements of this section. However, the plan is not consistent as to whether or not substitute topsoil material will be employed during final reclamation. The suitability of the proposed substitute topsoil material must be determined now. The surface area which will receive borrow area soil and the surface area upon which the disturbed fill will be utilized as a plant growth medium must be clarified. The applicant must subsequently identify and physicochemically characterize, to the planned excavation depth, the proposed substitute topsoil material. Topsoil mass balances must be provided and be accompanied by adequate areal and cross-sectional maps (see Item R645-301-222) which accurately represent all material proposed as substitute topsoil. Topsoil mass balances must be provided and be accompanied by adequate areal and cross-sectional maps which accurately represent all material proposed as substitute topsoil.

#### R645-301-234 Topsoil Storage

The topsoil stockpile cross-sections provided are inadequate. Volume estimates of stored topsoil cannot be calculated utilizing the information provided. The applicant must submit contour maps and cross-sections which include: volume of material stockpiled, maximum and minimum height, slopes and all pertinent dimensions which accurately represent the stockpiles.

#### R645-301-240 Reclamation Plan

The applicant, has not committed to a depth of topsoil redistribution for the reclamation of the disturbed area.

Statements are made regarding topsoil placement "to the extent that slopes allow" and revegetation techniques are qualified by criteria such as "steep slopes", "level to gently sloping", "If slopes steeper than 2.5:1 are to be revegetated",

etc. These qualifying statements must be precisely defined. Commitments to fulfill the requirements of particular regulations without specific plans are unacceptable.

The plan for topsoil handling, replacement, seedbed preparation (including the nutrient and amendment plan) and topsoil protection is completely inadequate. Essentially, a reclamation plan does not exist and the applicant must adequately address R645-301-240 throughout 244.

R645-301-623.100 Geology

The applicant must fulfill the requirements of this section for the CRP and the SP. Physicochemical characterization of all potentially acid- or toxic-forming strata down to and including the stratum immediately below the coal seam to be mined must be accomplished.

R645-301-731.300 Acid- and Toxic-Forming Materials

The applicant makes statements asserting that there is no acid- and/or toxic-forming materials on site. However, no supporting information or data is provided. There is no analyses of the coarse refuse material or slurry material which substantiates the applicants assertion.

The applicant must submit an operational and reclamation plan for the collection and analyses of the materials which will remain after separation and "repositioning" in the coarse refuse pile and the east and west coal slurry ponds to identify potential acid- and/or toxic-, or alkalinity-producing materials. The plan must include a discussion of the potential for, and mitigation of, water quality impacts and/or revegetation problems attendant to the above-mentioned areas/materials. Therefore, the following sections of the regulations must be adequately addressed:

- 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.

RECOMMENDATION

The aforementioned issues must be addressed prior to a determination of completeness.

jbe  
SCA.ICR



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355 West North Temple

3 Triad Center, Suite 350

Salt Lake City, Utah 84180-1203

801-538-5340

October 7, 1992

TO: Pamela Grubaugh-Littig, Permit Supervisor

FROM: Ken Wyatt, Reclamation Hydrologist *KW*

RE: Administrative Completeness review, Sunnyside Cogeneration Associates, Sunnyside Coarse Refuse, PRO/007/035, Folder # 3, Carbon County, Utah

## SYNOPSIS

On August 20, 1992, Sunnyside Cogeneration Associates submitted a proposed plan for utilizing the material from Sunnyside Mine's coarse refuse and tailings ponds as a fuel source for electrical power generation. The proposal is to create a separate mine facility for this activity which is considered to be a new surface mining operation. This memo serves to review the hydrological section of the submittal for Administrative Completeness.

## ANALYSIS

The submittal proposes to remove the coarse refuse piles, tailings ponds and associated sediment control facilities from the Sunnyside Coal Company's (SCC) existing permit area and place it into the Sunnyside Cogeneration Associates' (SCA) permit area.

The poor quality of this submittal makes a completeness analysis difficult due to the scattered nature of the sections and cross referencing throughout the plan. Many drawings are difficult to decipher due to poor size, poor reproductions or lack of care in preparation. Following is a list of the problems as noted on this review.

### SEDIMENT PONDS GENERAL DEFICIENCY

A map showing the drainage areas for each sediment pond would be helpful in checking the watersheds associated with each pond's design. Many areas of the text reference drawings, maps and tables that are probably included in the Sunnyside Coal Mine permit and which have been omitted here. These references need to be removed or the appropriate drawing, map or table should be included if that information is required.

Plate 7-1 is very poor quality which makes it very difficult to decipher the

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Memo to PGL  
PRO/007/035  
October 7, 1992

designed layout. I can't find the so called Disturbed area lines. This map needs to be redraw.

Pasture Sediment Pond

No design drawings are provided. The text discussed the design. In this text portion, references are made to figures, tables, pages and drawings that are not included in this submittal. These need to be included or deleted as appropriate.

Slurry Ponds 1 & 2, and Clear Water Pond

Plate 5-3 shows Sunnyside Fuel Corporation not SCA

Plate 5-3 not certified.

Plate 7-4 is not currently certified due to changes.

The text section in appendix 5-1 describes the design. Again throughout the text portion references are made to figures, tables, pages and drawings that are not included in this submittal. These need to be included or deleted as appropriate. Again a map showing the watersheds associated with each pond is needed. According to Henry Sauer, inspector for the Sunnyside Coal Mine, these ponds are no longer using the design that was submitted with this plan. This should be checked.

East Slurry Cell

Plate 5-4 not legible.

West Slurry Cell

Plate 5-4 not legible.

Borrow Area Pond

Plates 5-5 and 5-6 has no current certification due to changes in map.

Plate 5-6: tables not legible.

Old Coarse Refuse Road Sediment Pond

Plate 5-7 not certified with current certification due to change.

Plate 5-8 not current certification due to change in drawing

Rail Cut Sediment Pond

Is there a difference between the Rail Cut Sediment pond and the Rail Cut Pond? I could not find designs for the Rail Cut Sediment pond only the Rail Cut Pond, however plates 7-1 and 5-1 show two distinct ponds. Designs for both are required.

Page 3  
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#### Rail Cut Pond

No design drawing provided. The text section in appendix 5-1 describes the design. Again throughout the text portion references are made to figures, tables, pages and drawings that are not included in this submittal. These need to be included or deleted as appropriate. Again a map showing the watersheds associated with each pond is needed.

#### Coarse Refuse Toe Sediment Pond

No design drawings.

Text discusses the design criteria but references several drawings and plates that do not exist in this plan.

#### Sediment control designs

Plate 5-11 not certified, small print illegible.

#### Diversions

No cross sections provided.

Plates 5-1, 5-2 and 7-1 do not adequately show drainage ditches in the permit area. These drawings are very difficult to read.

There are undisturbed diversions to carry undisturbed runoff around the areas discussed on page 700-20. Yet the diversion section on page 700-17 does not indicate any diversions other than disturbed area diversions. This needs to be clarified.

#### **RECOMMENDATION**

The hydrology section of this permit is NOT COMPLETE. Many maps and design drawing and tables are not legible. Design drawings for all ponds within the SCA permit area are not included. Overall the quality of the drawings that are present are poor and hard to decipher. When adequate maps are drawn and submitted a more complete completeness review can be performed.

This plan needs work to make the designs and drawing legible. Additional work should be used to delete inappropriate references and to insert appropriate references where they are needed to correlate the text with drawings, tables, and maps. A current Professional Engineer certification is required on these drawings especially since they have been altered from those found in the Sunnyside Coal Mine MRP.