7/30

Pam,

None of these are on your list of outstanding amendments. I can't see that they were finaled or put into the permit.

I don't know if you know anything about them!

Janean

This amendment temporary refuse storage is adequate. The other amendments are associated w/ violations & other amendment needs still exist. Thanks Henry

From the desk of
Pam Grubaugh-Littig

5/18

Henry—

Have they made any of the Amendments that you were concerned about? Sorry I can't remember.

Thanks.

PAM

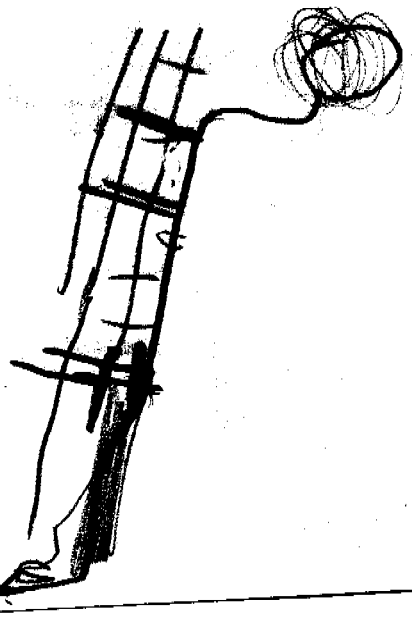
Amendment headed:

Ponds:
- Culverts sized (Ditch Design)
- Pond okay)
- Correct Plate III-5a (Not as shown)

Con

hway 123 •

March 5,



3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Dear

3/17

Pam,

Everything is here and okay.
We'd better run this by Henry to make sure the section entitled 'Sampling and Testing' is adequate.

Henry - Just to make sure all is well before I approve. Thx Pam Jess

Per y sation
on M of the
Nove :

Part III, Page 34, 1st Paragraph:

A sentence was inserted stating, "The diversions will be maintained
ckage."

3/12

Pam,
The diversion of disturbed area runoff from Stucco Flats as depicted on Plate III-5a is not an accurate portrayal of on-the-ground circumstances. Again we are waiting for amendment,
Henry

ıber 18, 1991, Sunnysi
ıse Storage Amendme

, 6th Paragraph:

y storage of coarse re

Jesse -
Ward
You please
make sure
everything is here
and okay - thx
Pam

ice
Street
) 80202
348
825-8626

West Coast Divi
1345 Astoria Dri
Fairfield, CA 945
707-425-4506

Sunnyside Coal Company

Operations • Highway 123 • P.O. Box 99 • Sunnyside, Utah 84539

March 5, 1992

Ms. Pamela Grubaugh-Littig
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Dear Pamela:

Re: Chapter III Corrections and Temporary Coarse Refuse Storage Amendment Insertion

Per your letter dated February 17, 1992, and our subsequent phone conversation on March 5, 1992, Chapter III corrections were made on Pages 24 and 34 of the November 12, 1991, submittal of Chapter III. The changes are as follows:

Chapter III, Page 24, 1st and 2nd Paragraphs:

> Corrections were made showing the name change from the Department of Health to the Division of Water Pollution Control.

Chapter III, Page 34, 1st Paragraph:

> A sentence was inserted stating, "The diversions will be maintained to prevent blockage."

Per your letter dated December 18, 1991, Sunnyside Coal Company has inserted the Temporary Coarse Refuse Storage Amendment as follows:

Chapter III, Page 34, 6th Paragraph:

> "For temporary storage of coarse refuse, see Appendix III-II."

Corporate Offices
The Registry
1113 Spruce Street
Boulder, CO 80302
303-938-1506
FAX: 303-938-5050

Sales Office
1350 17th Street
Suite 350
Denver, CO 80202
303-534-3348
FAX 303-825-8626

West Coast Division
1345 Astoria Drive
Fairfield, CA 94533
707-425-4506

Operations
Highway 123
P.O. Box 99
Sunnyside, UT 84539
801-888-4421
FAX. 801-888-2581

Enclosed are five (5) copies of Pages 24 and 34, a cover sheet for Appendix III-II, and the approved Temporary Coarse Refuse Storage Amendment.

If I can be of further help, please contact me.

Sincerely,

Karl R. Houskeeper

Karl R. Houskeeper
Environmental Coordinator

KRH:jh

cc: Joe Fielder
Gary Gray

3.4.3.3 Monitoring Procedures to Measure and Control Impacts

Quality of water discharged from the mine is monitored on a monthly basis as prescribed in the UPDES discharge permit. Water samples are analyzed for surface operational parameters. Sampling parameters are located in Table III-23. Discharge Monitoring Reports are sent monthly to EPA, Division of Water Pollution Control and DOGM. All water information is submitted quarterly to DOGM.

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Perennial stream monitoring stations (GT-1, GT-2, GT-3, GT-4, ICE-1, and CRB) are monitored monthly for flow and field measurement parameters, and quarterly for water quality. Ephemeral stream monitoring station parameters are monitored monthly for flow, field, and quality measurements for WC-1, BC-1, POC-1, PAC-1, and N2C-1. Field and quality operational parameters are shown in Table III-23. Locations of the monitoring stations are found on Plates III-1 and VII-3.

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Water inflows into the mine in quantities greater than three gallons per minute will be sampled for quantity and quality provided the source of inflow can be reached without exposing the sampler to unsafe conditions. On an annual basis, the results of the monitoring program including a map of all observed inflow points with an indication of the geologic source will be provided to the Division. When new points or areas of measurable flow are encountered, flow data and field water quality parameter will be measured quarterly. The groundwater operational monitoring schedule will be used. Details of the mine water sampling program are located in Section 7.1.6.

The sampling program will result in a determination of the effect of mining on surface and subsurface waters. If a measurable prolonged decrease in surface flows, reduction of quality or increased flows occur underground the operator will notify the Division concerning mitigation and will reassess the current mining program.

APPENDIX III-11

TEMPORARY COARSE REFUSE STORAGE ADMENDMENT

All surface drainage above ESC, WSC, and the coarse refuse embankment is diverted away from embankments by stabilized diversion channels designed to pass a 100-year, 24-hour precipitation event (Plate III-27). The diversions will be maintained to prevent blockage. Calculations are found in Appendix III-1.

Visual inspections are conducted weekly by a certified impoundment inspector, qualified registered professional engineer or someone under his supervision to assess the stability of the impoundments and determine the amount of seepage if present. Piezometers installed in the East Slurry Cell embankment will be monitored weekly when water is present in the structure to assess the amount of embankment saturation. Records of the inspection findings and recommendations will be maintained at the mine site. If the inspection discloses that potential hazards exist, the Division will be informed promptly of the findings, the emergency procedures formulated for public protection, and remedial action measures that will be implemented.

Maintenance of the embankments will consist of filling and grading any erosion or other failure features discovered by weekly inspections.

Subsidence, mudflows, and landslides are not a problem because of the location of the embankments. Possibility of failure below the embankments is limited to thin layers of colluvial material on bedrock that would not threaten the embankments.

Reclamation of the slurry cells should pose little problem because the slurry material can be driven over after the material has dried for a short period of time.

(b) Coarse refuse

Coarse refuse or reject from the preparation plant is disposed of in a coarse refuse waste embankment. For temporary storage of coarse refuse see Appendix III-11. The refuse is hauled by truck from the refuse loadout at the preparation plant to the coarse refuse pile (Plate III-1) where it is end dumped in piles. When sufficient material has been hauled to the dump, the refuse is spread out in a 36-inch horizontal layer by a dozer. Loaded haul trucks transporting the next layer of refuse randomly compact the previous surface to prevent fires and increase the stability of the structure. The outer slope of the refuse pile is maintained at a 27 degree slope (see Plate III-5). At 50 feet vertical increments, a 20-foot wide terrace is constructed for water runoff and erosion control. A geotechnical study was completed on the coarse refuse embankment and results compiled in Appendix III-1.

Application for Permit Amendment for Designation of Temporary Coarse Refuse Storage Area within Currently Disturbed Areas

Sunnyside Coal Company
Permit ACT/007/007

Sunnyside Coal Company has need for temporary coarse refuse material storage areas in addition to the permanent coarse refuse disposal area presented in the current permit document. These temporary storage areas are located within designated disturbed areas and comply with current regulations.

One temporary storage area is located immediately adjacent to the coarse refuse truck loadout facility and is used daily for storage of spilled material. This area actually consists of up to three separate piles. The second temporary storage area, locally known as Sacco Flats, is west of the haul road and south of the SSSF sedimentation pond. This area is used when equipment or weather related problems prevent the haulage of material to the permanent refuse disposal area.

General Summary

The inclusion of the temporary storage areas within the operational practices of Sunnyside Mine causes no additional environmental impact. Following is a summary of the environmental impacts.

Soils:

The designated temporary storage areas are wholly located within previously disturbed areas. Topsoil, if any, was previously removed and stored in accordance with the approved permit document.

Biology:

The temporary storage areas do not contribute any additional acreage to the permit area. Vegetation and fish and wildlife baseline data cover the storage areas. No additional impacts to vegetation or wildlife are anticipated.

Land Use:

No changes to the current land use, post mining land use, or cultural or historical resources are necessary.

Air Quality:

No additional impacts to air quality are anticipated.

Ground Water Hydrology:

No impacts to ground water hydrology are anticipated. There are no known recharge areas within the areas designated for temporary storage.

Surface Water Hydrology:

The temporary storage areas are within existing disturbed areas. Surface water runoff from the area is caught, diverted to existing sedimentation control facilities and discharged in accordance with the approved permit document. There is a possibility of acid-forming or toxic-forming material to be placed in the pile.

Bonding:

No additional disturbance is created and no additional acreage is added to the permit. All the material is destined for the permanent Coarse Refuse Disposal Area. No additional final reclamation costs are associated with this amendment.

Operating Plan

Sunnyside Mine requires two areas of temporary storage of coarse refuse material. The area near the coarse refuse truck loadout is required during routine operations and the area by Sacco Flats is required for continuing operations in other than normal conditions.

Coarse Refuse Truck Loadout Storage Area

The coarse refuse truck loadout storage area (Plate III-5a) consists of three areas totaling 0.7 acres, all adjacent to each other. The area immediately south of the truck loadout is 0.1 acres in size. The area immediately west of the 1st area is 0.2 acres and the area adjacent to the coal stockpile storage area is 0.4 acres. Total material stored may approach 10,000 tons (approximately 5 operating days of material).

All three areas are used to store spilled material from the loading operations. Spills may occur from truck overloads, conveyor spillage, discharging material without a truck under the chute, and other similar occurrences. These may occur at anytime the preparation plant is running, consequently movement of spilled material to these temporary storage areas is a routine operation.

Material stored at the truck loadout area is dumped in piles with a front end loader. The material is maintained in piles until reloaded and transported to the permanent coarse refuse disposal area.

All surface water runoff associated with the temporary storage areas near the coarse refuse truck loadout are collected and diverted to the SSSF pond (Plate D4-0159). No additional area is disturbed and no additional watershed is created. The material in the pile is +3/16-inch contributing little additional sediments or fines to the SSSF pond. All runoff is finally discharged through NPDES point 014. No flooding events are anticipated that would affect the storage pile and no stream flow alterations are attributed to or caused by the storage pile.

Sacco Flats Coarse Refuse Storage Area

The Sacco Flats area is 1.9 acres in size and is located immediately west of the haul road, just south of the SSSF pond (Plate III-5a). Total material stored may approach 25,000 tons.

This area stores material during an operational or weather related breakdown. On occasion the 100-ton rear dump haul trucks are replaced by 8-ton highway dump trucks. At full production the smaller trucks are unable to keep pace with the coarse refuse

output and long haul cycle times to the permanent storage area, thus requiring the temporary storage areas with a short haul. Also, if haul road maintenance or weather problems prevent use of the haulroad to the permanent disposal area, the temporary storage area is used to keep the preparation plant on-line.

Material stored at the Sacco Flats storage area is end-dumped by trucks in piles. The material is maintained in piles until reloaded and transported to the permanent Coarse Refuse disposal area.

The west side of the Sacco Flats temp
to control and direct surface wat
material. The runoff is diverted as
eventually channeled to one of three s
No. 1, Slurry Cell No. 2, or the Ea
slurry ditch. No additional area is
watershed is created. The material
contributing insignificant fines or s
and subsequent slurry cells. All runc
through NPDES point 004. No flooding
would affect the storage pile and no
attributed to or caused by the storag

The diversion plan depicted on Plate III-5a is not being followed on the ground.

Sampling & Testing

Sunnyside recognizes the potential for refuse material to exhibit unacceptable levels of acidity or toxicity. Material in temporary storage longer than 30-days will be sampled and analyzed for acid-forming or toxic-forming materials. Within 36 hours of the final truck cycle the extent of the stored material will be marked with wire flags which will have the date marked to differentiate subsequently stored material. This also will provide the means to determine the appropriate time to sample the material if storage exceeds 30 days.

Upon 31st day of storage, a grab sample of every 10th pile will be collected and thoroughly mixed together for a representative sample of pounds to be sent to a laboratory for analysis. The analytical tests to be performed are:

> pH, electrical conductivity, soluble Ca, Mg, & Na, sodium adsorption ratio, selenium, nitrate, boron, maximum acid potential, and neutralization potential.

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Reclamation Plan:

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3.4.3.3 Monitoring Procedures to Measure and Control Impacts

Quality of water discharged from the mine is monitored on a monthly basis as prescribed in the UPDES discharge permit. Water samples are analyzed for surface operational parameters. Sampling parameters are located in Table III-23. Discharge Monitoring Reports are sent monthly to EPA, Division of Water Pollution Control and DOGM. All water information is submitted quarterly to DOGM.

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APPENDIX III-11

TEMPORARY COARSE REFUSE STORAGE ADMENDMENT

Application for Permit Amendment for Designation of Temporary Coarse Refuse Storage Area within Currently Disturbed Areas

Sunnyside Coal Company
Permit ACT/007/007

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General Summary

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No changes to the current land use, post mining land use, or cultural or historical resources are necessary.

Air Quality:

No additional impacts to air quality are anticipated.

Ground Water Hydrology:

No impacts to ground water hydrology are anticipated. There are no known recharge areas within the areas designated for temporary storage.

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Bonding:

No additional disturbance is created and no additional acreage is added to the permit. All the material is destined for the permanent Coarse Refuse Disposal Area. No additional final reclamation costs are associated with this amendment.

Operating Plan

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Coarse Refuse Truck Loadout Storage Area

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The west side of the Sacco Flats temporary storage area is bermed to control and direct surface water runoff from the refuse material. The runoff is diverted as shown on Plate III-5a and eventually channeled to one of three slurry cell ponds (Slurry Cell No. 1, Slurry Cell No. 2, or the East Slurry Cell) through the slurry ditch. No additional area is disturbed and no additional watershed is created. The material in the pile is +3/16-inch contributing insignificant fines or sediments to the slurry ditch and subsequent slurry cells. All runoff is eventually discharged through NPDES point 004. No flooding events are anticipated that would affect the storage pile and no stream flow alterations are attributed to or caused by the storage pile.

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Reclamation Plan:

Reclamation of the temporary storage areas will be conducted in accordance with the approved reclamation practices already outlined for these areas. The storage area adjacent to the truck loadout is included in Area 1 of Table III-24 of the permit (Main Complex, including offices, warehouse, parking lot, shop, prep. plant, No.3 Mine fan, unit train loadout, water tanks, mine portals, and substations). The Sacco Flats storage area is included in Area 7 of Table III-24 (Refuse disposal areas including coarse refuse, industrial waste, borrow areas, slurry ponds, etc.). Following removal of all stored material to the Coarse Refuse Disposal pile and prior to soil ripping for final reclamation, the storage area soil will be sampled in accordance with the soil testing provisions of the permit.

3.4.3.3 Monitoring Procedures to Measure and Control Impacts

Quality of water discharged from the mine is monitored on a monthly basis as prescribed in the UPDES discharge permit. Water samples are analyzed for surface operational parameters. Sampling parameters are located in Table III-23. Discharge Monitoring Reports are sent monthly to EPA, Division of Water Pollution Control and DOGM. All water information is submitted quarterly to DOGM.

Water discharged from the sediment ponds are sampled for surface operational parameters while the ponds are being decanted. Any sample exceeding standards on discharge are reported to the Division of Water Pollution Control and DOGM.

Perennial stream monitoring stations (GT-1, GT-2, GT-3, GT-4, ICE-1, and CRB) are monitored monthly for flow and field measurement parameters, and quarterly for water quality. Ephemeral stream monitoring station parameters are monitored monthly for flow, field, and quality measurements for WC-1, BC-1, POC-1, PAC-1, and N2C-1. Field and quality operational parameters are shown in Table III-23. Locations of the monitoring stations are found on Plates III-1 and VII-3.

Springs WR-1, WR-2 and PC-1 will be sampled four times a year. The first sample will be taken as soon as the site is accessible in the spring and the last sample will be obtained between August and October. Winter sampling is not possible because of the access problems. The samples will be analyzed for ground water operational parameters (see Table III-23). A report on the spring activity will be submitted to the Division.

Water inflows into the mine in quantities greater than three gallons per minute will be sampled for quantity and quality provided the source of inflow can be reached without exposing the sampler to unsafe conditions. On an annual basis, the results of the monitoring program including a map of all observed inflow points with an indication of the geologic source will be provided to the Division. When new points or areas of measurable flow are encountered, flow data and field water quality parameter will be measured quarterly. The groundwater operational monitoring schedule will be used. Details of the mine water sampling program are located in Section 7.1.6.

The sampling program will result in a determination of the effect of mining on surface and subsurface waters. If a measurable prolonged decrease in surface flows, reduction of quality or increased flows occur underground the operator will notify the Division concerning mitigation and will reassess the current mining program.

All surface drainage above ESC, WSC, and the coarse refuse embankment is diverted away from embankments by stabilized diversion channels designed to pass a 100-year, 24-hour precipitation event (Plate III-27). The diversions will be maintained to prevent blockage. Calculations are found in Appendix III-1.

Visual inspections are conducted weekly by a certified impoundment inspector, qualified registered professional engineer or someone under his supervision to assess the stability of the impoundments and determine the amount of seepage if present. Piezometers installed in the East Slurry Cell embankment will be monitored weekly when water is present in the structure to assess the amount of embankment saturation. Records of the inspection findings and recommendations will be maintained at the mine site. If the inspection discloses that potential hazards exist, the Division will be informed promptly of the findings, the emergency procedures formulated for public protection, and remedial action measures that will be implemented.

Maintenance of the embankments will consist of filling and grading any erosion or other failure features discovered by weekly inspections.

Subsidence, mudflows, and landslides are not a problem because of the location of the embankments. Possibility of failure below the embankments is limited to thin layers of colluvial material on bedrock that would not threaten the embankments.

Reclamation of the slurry cells should pose little problem because the slurry material can be driven over after the material has dried for a short period of time.

(b) Coarse refuse

Coarse refuse or reject from the preparation plant is disposed of in a coarse refuse waste embankment. For temporary storage of coarse refuse see Appendix III-11. The refuse is hauled by truck from the refuse loadout at the preparation plant to the coarse refuse pile (Plate III-1) where it is end dumped in piles. When sufficient material has been hauled to the dump, the refuse is spread out in a 36-inch horizontal layer by a dozer. Loaded haul trucks transporting the next layer of refuse randomly compact the previous surface to prevent fires and increase the stability of the structure. The outer slope of the refuse pile is maintained at a 27 degree slope (see Plate III-5). At 50 feet vertical increments, a 20-foot wide terrace is constructed for water runoff and erosion control. A geotechnical study was completed on the coarse refuse embankment and results compiled in Appendix III-1.

APPENDIX III-11

TEMPORARY COARSE REFUSE STORAGE ADMENDMENT

Application for Permit Amendment for Designation of Temporary Coarse Refuse Storage Area within Currently Disturbed Areas

Sunnyside Coal Company
Permit ACT/007/007

Sunnyside Coal Company has need for temporary coarse refuse material storage areas in addition to the permanent coarse refuse disposal area presented in the current permit document. These temporary storage areas are located within designated disturbed areas and comply with current regulations.

One temporary storage area is located immediately adjacent to the coarse refuse truck loadout facility and is used daily for storage of spilled material. This area actually consists of up to three separate piles. The second temporary storage area, locally known as Sacco Flats, is west of the haul road and south of the SSSF sedimentation pond. This area is used when equipment or weather related problems prevent the haulage of material to the permanent refuse disposal area.

General Summary

The inclusion of the temporary storage areas within the operational practices of Sunnyside Mine causes no additional environmental impact. Following is a summary of the environmental impacts.

Soils:

The designated temporary storage areas are wholly located within previously disturbed areas. Topsoil, if any, was previously removed and stored in accordance with the approved permit document.

Biology:

The temporary storage areas do not contribute any additional acreage to the permit area. Vegetation and fish and wildlife baseline data cover the storage areas. No additional impacts to vegetation or wildlife are anticipated.

Land Use:

No changes to the current land use, post mining land use, or cultural or historical resources are necessary.

Air Quality:

No additional impacts to air quality are anticipated.

Ground Water Hydrology:

No impacts to ground water hydrology are anticipated. There are no known recharge areas within the areas designated for temporary storage.

Surface Water Hydrology:

The temporary storage areas are within existing disturbed areas. Surface water runoff from the area is caught, diverted to existing sedimentation control facilities and discharged in accordance with the approved permit document. There is a possibility of acid-forming or toxic-forming material to be placed in the pile.

Bonding:

No additional disturbance is created and no additional acreage is added to the permit. All the material is destined for the permanent Coarse Refuse Disposal Area. No additional final reclamation costs are associated with this amendment.

Operating Plan

Sunnyside Mine requires two areas of temporary storage of coarse refuse material. The area near the coarse refuse truck loadout is required during routine operations and the area by Sacco Flats is required for continuing operations in other than normal conditions.

Coarse Refuse Truck Loadout Storage Area

The coarse refuse truck loadout storage area (Plate III-5a) consists of three areas totaling 0.7 acres, all adjacent to each other. The area immediately south of the truck loadout is 0.1 acres in size. The area immediately west of the 1st area is 0.2 acres and the area adjacent to the coal stockpile storage area is 0.4 acres. Total material stored may approach 10,000 tons (approximately 5 operating days of material).

All three areas are used to store spilled material from the loading operations. Spills may occur from truck overloads, conveyor spillage, discharging material without a truck under the chute, and other similar occurrences. These may occur at anytime the preparation plant is running, consequently movement of spilled material to these temporary storage areas is a routine operation.

Material stored at the truck loadout area is dumped in piles with a front end loader. The material is maintained in piles until reloaded and transported to the permanent coarse refuse disposal area.

All surface water runoff associated with the temporary storage areas near the coarse refuse truck loadout are collected and diverted to the SSSF pond (Plate D4-0159). No additional area is disturbed and no additional watershed is created. The material in the pile is +3/16-inch contributing little additional sediments or fines to the SSSF pond. All runoff is finally discharged through NPDES point 014. No flooding events are anticipated that would affect the storage pile and no stream flow alterations are attributed to or caused by the storage pile.

Sacco Flats Coarse Refuse Storage Area

The Sacco Flats area is 1.9 acres in size and is located immediately west of the haul road, just south of the SSSF pond (Plate III-5a). Total material stored may approach 25,000 tons.

This area stores material during an operational or weather related breakdown. On occasion the 100-ton rear dump haul trucks are replaced by 8-ton highway dump trucks. At full production the smaller trucks are unable to keep pace with the coarse refuse

output and long haul cycle times to the permanent storage area, thus requiring the temporary storage areas with a short haul. Also, if haul road maintenance or weather problems prevent use of the haulroad to the permanent disposal area, the temporary storage area is used to keep the preparation plant on-line.

Material stored at the Sacco Flats storage area is end-dumped by trucks in piles. The material is maintained in piles until reloaded and transported to the permanent Coarse Refuse disposal area.

The west side of the Sacco Flats temporary storage area is bermed to control and direct surface water runoff from the refuse material. The runoff is diverted as shown on Plate III-5a and eventually channeled to one of three slurry cell ponds (Slurry Cell No. 1, Slurry Cell No. 2, or the East Slurry Cell) through the slurry ditch. No additional area is disturbed and no additional watershed is created. The material in the pile is +3/16-inch contributing insignificant fines or sediments to the slurry ditch and subsequent slurry cells. All runoff is eventually discharged through NPDES point 004. No flooding events are anticipated that would affect the storage pile and no stream flow alterations are attributed to or caused by the storage pile.

Sampling & Testing

Sunnyside recognizes the potential for refuse material to exhibit unacceptable levels of acidity or toxicity. Material in temporary storage longer than 30-days will be sampled and analyzed for acid-forming or toxic-forming materials. Within 36 hours of the final truck cycle the extent of the stored material will be marked with wire flags which will have the date marked to differentiate subsequently stored material. This also will provide the means to determine the appropriate time to sample the material if storage exceeds 30 days.

Upon 31st day of storage, a grab sample of every 10th pile will be collected and thoroughly mixed together for a representative sample of pounds to be sent to a laboratory for analysis. The analytical tests to be performed are:

> pH, electrical conductivity, soluble Ca, Mg, & Na, sodium adsorption ratio, selenium, nitrate, boron, maximum acid potential, and neutralization potential.

Reclamation Plan:

Reclamation of the temporary storage areas will be conducted in accordance with the approved reclamation practices already outlined for these areas. The storage area adjacent to the truck loadout is included in Area 1 of Table III-24 of the permit (Main Complex, including offices, warehouse, parking lot, shop, prep. plant, No.3 Mine fan, unit train loadout, water tanks, mine portals, and substations). The Sacco Flats storage area is included in Area 7 of Table III-24 (Refuse disposal areas including coarse refuse, industrial waste, borrow areas, slurry ponds, etc.). Following removal of all stored material to the Coarse Refuse Disposal pile and prior to soil ripping for final reclamation, the storage area soil will be sampled in accordance with the soil testing provisions of the permit.

Norman H. Bangerter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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

November 27, 1991

TO: Pamela Grubaugh-Littig, Permit Supervisor

FROM: Jesse Kelley, Reclamation Engineer JK

RE: Permit Amendment for Temporary Coarse Refuse Storage Areas (Amendment 91C), Sunnyside Coal Company, Sunnyside Mine, ACT/007/007, Folder #2, Carbon County, Utah

Synopsis

On November 7, 1991, the Division received from the Permittee an application for Permit Amendment 91C. This amendment involves the creation of two temporary coarse refuse storage areas. This memorandum constitutes this writer's review and approval of this amendment.

Analysis

The permittee proposes to create two areas for the temporary storage of coarse refuse material. One area will be designated the "Truck Loadout" area and the other will be designated the "Sacco Flats" area. The Truck Loadout area will be located adjacent to the present truck loadout while the Sacco Flats area will be located approximately 2200 feet south of the truck loadout, adjacent to the permanent spoil pile. Both areas are shown on Plate III-5A, "Temporary Coarse Refuse Storage Areas."

The Truck Loadout area will consist of three piles which will cover a total of 0.7 acres. These piles will contain material spilled during the loading operation. Surface runoff from this area will be routed to the SSSF pond for treatment.

The Sacco Flats area will consist of one large pile and will cover approximately 1.9 acres. This area will contain material during operational or weather-related breakdowns or when the small dump trucks which occasionally replace the large haul trucks are unable to keep up with coarse refuse output. Surface runoff

from this area will go into the slurry ditch and be conveyed to one of the three slurry cells for treatment.

The permittee is aware of the acid- and toxic-forming potential of coarse refuse. Thus, material stored in any of these areas for more than 30 days will be sampled and analyzed.

These storage areas will be reclaimed along with the rest of the site. Since these areas are all within the present disturbed area and will require no additional surface facilities, neither storage of additional topsoil nor revision of the reclamation bond is required.

Recommendations

It is recommended that Amendment 91C be approved and that the attendant maps and text be included in the MRP.

jbe
AT007007.91C

PERMIT TRACKING FORM

Type of Proposal:

MRP AMENDMENT ✓
MRP REVISION _____
EXPLORATION _____

TDN #_____
NOV #N___ ___ ___ ___, # ___ of ___
CO #C___ ___ ___ ___, # ___ of ___

I. B. C. _____ (Incidental Boundary Change)

Title of Proposal: Temporary Storage & Refuse

Company Name: Sunnyside

File #: (INA / PRO / ACT / CEP) 007 / 007-91 C # New Acres:_____

LEAD Reviewers: Henry

		Tech Memo Drafted	
		Yes	No
HYDROLOGY		( )	( )
BIOLOGY		( )	( )
ENGINEER	Jose	( )	( )
SOILS	Henry 11/18/91	✓	( )
GEOLOGY		( )	( )

Please Check Appropriate Box!!

Dates:

(1) Initial Plan Received 11/7/91
Tech Review Due _____
Tech Review Complete _____
DOGM Response Sent _____
Operator Response Due _____

(2) Operator Response Rc'd _____
Tech Review Due _____
Tech Review Complete _____
DOGM Response Sent _____
Operator Response Due _____

(3) Operator Response Rc'd _____
Tech Review Due _____
Tech Review Complete _____
DOGM Response Sent _____
Operator Response Due _____

(4) Operator Resubmission _____
Tech Review Due _____
Tech Review Complete _____
DOGM Response Sent _____
Operator Response Due _____

(5) Operator Response Rcd _____
Tech Review Due _____
Tech Review Complete _____
DOGM Response Sent _____
Operator Response Due _____

Conditional Approval _____
Stipulations Due _____
Stipulations Received _____
DOGM Response Sent _____
Final Approval _____
Filed in MRP _____
Author _____
Transmitted _____

COMMENTS:

A:\FORM.JCH

ACT/007/007-91C

Sunnyside Coal Company

Operations • Highway 123 • P.O. Box 99 • Sunnyside, Utah 84539

November 5, 1991

Ms. Pamela Grubaugh-Littig
Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Dear Pamela:

Re: Temporary Coarse Refuse Storage

Enclosed is a Permit Amendment Application for temporary storage of coarse refuse material at Sunnyside Coal Company and location maps showing the designated areas.

Please review the material and location and let us know of any changes needed for approval.

If you have any questions, please feel free to contact me.

Sincerely,

Karl R. Houskeeper

Karl R. Houskeeper
Environmental Coordinator

KRH:th

Enclosures

cc: Joe Fielder
Gary Gray

Corporate Offices
The Registry
1113 Spruce Street
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FAX: 303-938-5050

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West Coast Division
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801-888-4421
FAX: 801-888-2581

Application for Permit Amendment for Designation of Temporary Coarse Refuse Storage Area within Currently Disturbed Areas

Sunnyside Coal Company
Permit ACT/007/007

Sunnyside Coal Company has need for temporary coarse refuse material storage areas in addition to the permanent coarse refuse disposal area presented in the current permit document. These temporary storage areas are located within designated disturbed areas and comply with current regulations.

One temporary storage area is located immediately adjacent to the coarse refuse truck loadout facility and is used daily for storage of spilled material. This area actually consists of up to three separate piles. The second temporary storage area, locally known as Sacco Flats, is west of the haul road and south of the SSSF sedimentation pond. This area is used when equipment or weather related problems prevent the haulage of material to the permanent refuse disposal area.

General Summary

The inclusion of the temporary storage areas within the operational practices of Sunnyside Mine causes no additional environmental impact. Following is a summary of the environmental impacts.

Soils:

The designated temporary storage areas are wholly located within previously disturbed areas. Topsoil, if any, was previously removed and stored in accordance with the approved permit document.

Biology:

The temporary storage areas do not contribute any additional acreage to the permit area. Vegetation and fish and wildlife baseline data cover the storage areas. No additional impacts to vegetation or wildlife are anticipated.

Land Use:

No changes to the current land use, post mining land use, or cultural or historical resources are necessary.

Air Quality:

No additional impacts to air quality are anticipated.

Ground Water Hydrology:

No impacts to ground water hydrology are anticipated. There are no known recharge areas within the areas designated for temporary storage.

Surface Water Hydrology:

The temporary storage areas are within existing disturbed areas. Surface water runoff from the area is caught, diverted to existing sedimentation control facilities and discharged in accordance with the approved permit document. There is a possibility of acid-forming or toxic-forming material to be placed in the pile.

Bonding:

No additional disturbance is created and no additional acreage is added to the permit. All the material is destined for the permanent Coarse Refuse Disposal Area. No additional final reclamation costs are associated with this amendment.

Operating Plan

Sunnyside Mine requires two areas of temporary storage of coarse refuse material. The area near the coarse refuse truck loadout is required during routine operations and the area by Sacco Flats is required for continuing operations in other than normal conditions.

Coarse refuse truck loadout storage area

The coarse refuse truck loadout storage area (Plate III-5a) consists of three areas totaling 0.7 acres, all adjacent to each other. The area immediately south of the truck loadout is 0.1 acres in size. The area immediately west of the 1st area is 0.2 acres and the area adjacent to the coal stockpile storage area is 0.4 acres. Total material stored may approach 10,000 tons (approximately 5 operating days of material).

All three areas are used to store spilled material from the loading operations. Spills may occur from truck overloads, conveyor spillage, discharging material without a truck under the chute, and other similar occurrences. These may occur at anytime the preparation plant is running, consequently movement of spilled material to these temporary storage areas is a routine operation.

Material stored at the truck loadout area is dumped in piles with a front end loader. The material is maintained in piles until reloaded and transported to the permanent coarse refuse disposal area.

All surface water runoff associated with the temporary storage areas near the coarse refuse truck loadout are collected and diverted to the SSSF pond (Plate D4-0159). No additional area is disturbed and no additional watershed is created. The material in the pile is +3/16-inch contributing little additional sediments or fines to the SSSF pond. All runoff is finally discharged through NPDES point 014. No flooding events are anticipated that would affect the storage pile and no stream flow alterations are attributed to or caused by the storage pile.

Sunnyside recognizes the potential for refuse material to exhibit unacceptable levels of acidity or toxicity. Material in temporary storage longer than 30-days will be sampled and analyzed for acid-forming or toxic-forming materials.

Sacco Flats coarse refuse storage area

The Sacco Flats area is 1.9 acres in size and is located immediately west of the haul road, just south of the SSSF pond (Plate III-5a). Total material stored may approach 25,000 tons.

This area stores material during an operational or weather related breakdown. On occasion the 100-ton rear dump haul trucks are

replaced by 8-ton highway dump trucks. At full production the smaller trucks are unable to keep pace with the coarse refuse output and long haul cycle times to the permanent storage area, thus requiring the temporary storage areas with a short haul. Also, if haul road maintenance or weather problems prevent use of the haulroad to the permanent disposal area, the temporary storage area is used to keep the preparation plant on-line.

Material stored at the Sacco Flats storage area is end-dumped by trucks in piles. The material is maintained in piles until reloaded and transported to the permanent Coarse Refuse disposal area.

The west side of the Sacco Flats temporary storage area is bermed to control and direct surface water runoff from the refuse material. The runoff is diverted as shown on Plate III-5a and eventually channeled to one of three slurry cell ponds (Slurry Cell No. 1, Slurry Cell No. 2, or the East Slurry Cell) through the slurry ditch. No additional area is disturbed and no additional watershed is created. The material in the pile is +3/16-inch contributing insignificant fines or sediments to the slurry ditch and subsequent slurry cells. All runoff is eventually discharged through NPDES point 004. No flooding events are anticipated that would affect the storage pile and no stream flow alterations are attributed to or caused by the storage pile.

Sunnyside recognizes the potential for refuse material to exhibit unacceptable levels of acidity or toxicity. Material in temporary storage longer than 30-days will be sampled and analyzed for acid-forming or toxic-forming materials.

Reclamation Plan:

Reclamation of the temporary storage areas will be conducted in accordance with the approved reclamation practices already outlined for these areas. The storage area adjacent to the truck loadout is included in Area 1 of Table III-24 of the permit (Main Complex, including offices, warehouse, parking lot, shop, prep. plant, No.3 Mine fan, unit train loadout, water tanks, mine portals, and substations). The Sacco Flats storage area is included in Area 7 of Table III-24 (Refuse disposal areas including coarse refuse, industrial waste, borrow areas, slurry ponds, etc.). Following removal of all stored material to the Coarse Refuse Disposal pile and prior to soil ripping for final reclamation, the storage area soil will be sampled in accordance with the soil testing provisions of the permit.

Norman H. Bangerter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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

November 19, 1991

TO: Pamela Grubaugh-Littig, Permit Supervisor

FROM: Henry Sauer, Senior Reclamation Soils Specialist

RE: Temporary Coarse Refuse Storage Area Amendment, Sunnyside Coal Company (SCC), Sunnyside Mine, ACT/007/007, Folder #2, Carbon County, Utah

Synopsis

The permittee has submitted (November 7, 1991) an amendment application for three separate temporary coarse refuse storage areas. Prior to approval, the permittee must adequately address the technical deficiencies enumerated below.

Analysis

R614-301-731.300 Acid- and Toxic-Forming Materials

The permittee must describe a mechanism by which a state inspector, SCC employee, etc. could ascertain whether refuse has been temporarily stored for more than 30 days and, therefore, require sampling and analysis.

The permittee must also describe refuse sampling techniques, the laboratory analyses conducted, and methodologies employed.

Recommendations

The issues enumerated above must be adequately addressed prior to amendment approval.

jbe
AT007007.TCR

Norman H. Bangerter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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

November 27, 1991

Mr. Joe Fielder
Sunnyside Coal Company
P.O. Box 99
Sunnyside, Utah 84539

Dear Mr. Fielder:

Re: Temporary Coarse Refuse Storage Amendment, Sunnyside Coal Company, Sunnyside Mine, ACT/007/007-91C, Folder #2, Carbon County, Utah

Enclosed please find memos that outline issues that must be addressed for three (3) temporary coarse refuse storage areas proposed for the Sunnyside Mine. Please submit complete and adequate information by December 20, 1991.

If you have any questions, please call me.

Sincerely,

Pamela Grubaugh-Littig
Permit Supervisor

PGL/jbe
Enclosure
AT 007007TS

Norman H. Bangerter
Governor
Dee C. Hansen
Executive Director
Dianne R. Nielson, Ph.D.
Division Director

State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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

December 18, 1991

TO: Pamela Grubaugh-Littig, Permit Supervisor

FROM: Henry Sauer, Senior Reclamation Soils Specialist

RE: Temporary Coarse Refuse Storage Area Amendment, Sunnyside Coal Company (SCC), Sunnyside Mine, ACT/007/007, Folder #2, Carbon County, Utah

Synopsis

The response by SCC to the technical issues outlined in my November 19, 1991 letter to Pamela Grubaugh-Littig, have been received (December 16, 1991) and reviewed for technical adequacy. The permittee has submitted necessary information to fulfill the requirements of the issues enumerated.

Recommendation

The permittee must format and number the amendment application text for insertion into the Permit Application Package.

Approve referenced amendment.

jbe
AT 007007.TCR

Sunnyside Coal Company

Operations • Highway 123 • P.O. Box 99 • Sunnyside, Utah 84539

December 12, 1991

Ms. Pamela Grubaugh-Littig
Permit Supervisor
Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Dear Pam:

Re: Temporary Coarse Refuse Amendment
Sunnyside Coal Company, Sunnyside Mine
ACT/007/007-91C, Folder #2
Carbon County, Utah

Per your letter dated November 27, 1991, Sunnyside Coal Company has made the following changes to our requested permit amendment:

1. Designated a method to determine the storage time of material by placement of dated flags.

2. Described refuse sampling techniques and laboratory analyses to be conducted.

A revised copy of the permit amendment application is enclosed for your review.

If I can be of further help, please contact me.

Sincerely,

Karl R. Houskeeper

Karl R. Houskeeper
Environmental Coordinator

cc: Joe Fielder
Gary Gray

Corporate Offices
The Registry
1113 Spruce Street
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303-938-1506
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801-888-4421
FAX: 801-888-2581

Application for Permit Amendment for Designation of Temporary Coarse Refuse Storage Area within Currently Disturbed Areas

Sunnyside Coal Company
Permit ACT/007/007

Sunnyside Coal Company has need for temporary coarse refuse material storage areas in addition to the permanent coarse refuse disposal area presented in the current permit document. These temporary storage areas are located within designated disturbed areas and comply with current regulations.

One temporary storage area is located immediately adjacent to the coarse refuse truck loadout facility and is used daily for storage of spilled material. This area actually consists of up to three separate piles. The second temporary storage area, locally known as Sacco Flats, is west of the haul road and south of the SSSF sedimentation pond. This area is used when equipment or weather related problems prevent the haulage of material to the permanent refuse disposal area.

General Summary

The inclusion of the temporary storage areas within the operational practices of Sunnyside Mine causes no additional environmental impact. Following is a summary of the environmental impacts.

Soils:

The designated temporary storage areas are wholly located within previously disturbed areas. Topsoil, if any, was previously removed and stored in accordance with the approved permit document.

Biology:

The temporary storage areas do not contribute any additional acreage to the permit area. Vegetation and fish and wildlife baseline data cover the storage areas. No additional impacts to vegetation or wildlife are anticipated.

Land Use:

No changes to the current land use, post mining land use, or cultural or historical resources are necessary.

Air Quality:

No additional impacts to air quality are anticipated.

Ground Water Hydrology:

No impacts to ground water hydrology are anticipated. There are no known recharge areas within the areas designated for temporary storage.

Surface Water Hydrology:

The temporary storage areas are within existing disturbed areas. Surface water runoff from the area is caught, diverted to existing sedimentation control facilities and discharged in accordance with the approved permit document. There is a possibility of acid-forming or toxic-forming material to be placed in the pile.

Bonding:

No additional disturbance is created and no additional acreage is added to the permit. All the material is destined for the permanent Coarse Refuse Disposal Area. No additional final reclamation costs are associated with this amendment.

Operating Plan

Sunnyside Mine requires two areas of temporary storage of coarse refuse material. The area near the coarse refuse truck loadout is required during routine operations and the area by Sacco Flats is required for continuing operations in other than normal conditions.

Coarse Refuse Truck Loadout Storage Area

The coarse refuse truck loadout storage area (Plate III-5a) consists of three areas totaling 0.7 acres, all adjacent to each other. The area immediately south of the truck loadout is 0.1 acres in size. The area immediately west of the 1st area is 0.2 acres and the area adjacent to the coal stockpile storage area is 0.4 acres. Total material stored may approach 10,000 tons (approximately 5 operating days of material).

All three areas are used to store spilled material from the loading operations. Spills may occur from truck overloads, conveyor spillage, discharging material without a truck under the chute, and other similar occurrences. These may occur at anytime the preparation plant is running, consequently movement of spilled material to these temporary storage areas is a routine operation.

Material stored at the truck loadout area is dumped in piles with a front end loader. The material is maintained in piles until reloaded and transported to the permanent coarse refuse disposal area.

All surface water runoff associated with the temporary storage areas near the coarse refuse truck loadout are collected and diverted to the SSSF pond (Plate D4-0159). No additional area is disturbed and no additional watershed is created. The material in the pile is +3/16-inch contributing little additional sediments or fines to the SSSF pond. All runoff is finally discharged through NPDES point 014. No flooding events are anticipated that would affect the storage pile and no stream flow alterations are attributed to or caused by the storage pile.

Sacco Flats Coarse Refuse Storage Area

The Sacco Flats area is 1.9 acres in size and is located immediately west of the haul road, just south of the SSSF pond (Plate III-5a). Total material stored may approach 25,000 tons.

This area stores material during an operational or weather related breakdown. On occasion the 100-ton rear dump haul trucks are replaced by 8-ton highway dump trucks. At full production the smaller trucks are unable to keep pace with the coarse refuse

output and long haul cycle times to the permanent storage area, thus requiring the temporary storage areas with a short haul. Also, if haul road maintenance or weather problems prevent use of the haulroad to the permanent disposal area, the temporary storage area is used to keep the preparation plant on-line.

Material stored at the Sacco Flats storage area is end-dumped by trucks in piles. The material is maintained in piles until reloaded and transported to the permanent Coarse Refuse disposal area.

The west side of the Sacco Flats temporary storage area is bermed to control and direct surface water runoff from the refuse material. The runoff is diverted as shown on Plate III-5a and eventually channeled to one of three slurry cell ponds (Slurry Cell No. 1, Slurry Cell No. 2, or the East Slurry Cell) through the slurry ditch. No additional area is disturbed and no additional watershed is created. The material in the pile is +3/16-inch contributing insignificant fines or sediments to the slurry ditch and subsequent slurry cells. All runoff is eventually discharged through NPDES point 004. No flooding events are anticipated that would affect the storage pile and no stream flow alterations are attributed to or caused by the storage pile.

Sampling & Testing

Sunnyside recognizes the potential for refuse material to exhibit unacceptable levels of acidity or toxicity. Material in temporary storage longer than 30-days will be sampled and analyzed for acid-forming or toxic-forming materials. Within 36 hours of the final truck cycle the extent of the stored material will be marked with wire flags which will have the date marked to differentiate subsequently stored material. This also will provide the means to determine the appropriate time to sample the material if storage exceeds 30 days.

Upon 31st day of storage, a grab sample of every 10th pile will be collected and thoroughly mixed together for a representative sample of pounds to be sent to a laboratory for analysis. The analytical tests to be performed are:

> pH, electrical conductivity, soluble Ca, Mg, & Na, sodium adsorption ratio, selenium, nitrate, boron, maximum acid potential, and neutralization potential.

Reclamation Plan:

Reclamation of the temporary storage areas will be conducted in accordance with the approved reclamation practices already outlined for these areas. The storage area adjacent to the truck loadout is included in Area 1 of Table III-24 of the permit (Main Complex, including offices, warehouse, parking lot, shop, prep. plant, No.3 Mine fan, unit train loadout, water tanks, mine portals, and substations). The Sacco Flats storage area is included in Area 7 of Table III-24 (Refuse disposal areas including coarse refuse, industrial waste, borrow areas, slurry ponds, etc.). Following removal of all stored material to the Coarse Refuse Disposal pile and prior to soil ripping for final reclamation, the storage area soil will be sampled in accordance with the soil testing provisions of the permit.