C/007/035 Incoming

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APR 26 2018
DIV. OF OIL, GAS & MINING

Sunnyside Cogeneration Associates

P.O. Box 10, East Carbon, Utah 84520 • (801) 888-4476 • Fax (801) 888-2538

April 23, 2018

Daron Haddock
Utah Division of Oil, Gas & Mining
1594 W. North Temple, Suite 1210
Salt Lake City, Utah 84116

RE: 1st Quarter 2018 Inspection Report
Sunnyside Refuse Pile C/007/035

Dear Daron:

Please find enclosed a copy of the First Quarter 2018 Inspection Report for Sunnyside Cogeneration Associates' impoundments, refuse pile and excess spoil areas.

Should you have any questions, please contact Rusty Netz or myself at (435)888-4476.

Thank You,

Gerald Hascall
Agent For
Sunnyside Cogeneration Associates

c.c. Rusty Netz
Plant File

QUARTERLY INSPECTION FORM – IMPOUNDMENT

Permit Number: C/007/035
Mine Name: Sunnyside Refuse and Slurry
Mine Operator (Permittee): Sunnyside Cogeneration Associates
MSHA ID Number: N/A
Impoundment Name: **RailCut Sediment Pond #007**
UPDES Permit Number: UT024759

Inspection Date: March 29, 2018
First Quarter 2018
Inspector: Rusty Netz
Signature: Rusty Netz

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BY:

IMPOUNDMENT INSPECTION

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

None

a. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and estimated average elevation of existing sediment.

Total Pond Volume = 4.8 Acre-feet
Pond bottom elevation = 6206.0
100% Sediment Storage Volume = 0.34 acre-feet at Elevation 6209
60% Sediment Storage Volume = 0.2 acre feet at Elevation = 6207.7
Existing Sediment Elevation = 6207.6 +/-

b. Principle and emergency spillway elevations.

Primary Dewatering Pipe = 6209.07
Emergency Spillway Elevation = 6212.34

2. Field Information

Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/ instrumentation information, inlet/ outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/ repairs, monitoring information, vegetation on outslopes of embankments, etc.

Pond had no water. No samples were taken Pond did not require decanting
Sediment levels were acceptable
Embankment conditions were good. Vegetation on outslopes was adequate.
Inlet / Outlet conditions were good. No structural or hazardous conditions were observed.

3. Field Evaluation.

Describe any changes in the geometry of the impounding structure, average and maximum depths and elevation of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period

No recent changes in the geometry of the structure have been observed
No water was impounded
No other aspects of the impounding structure were observed that could affect its stability or functionality.

QUARTERLY INSPECTION FORM – IMPOUNDMENT

Rail Cut Sediment Pond

CERTIFIED REPORT
IMPOUNDMENT EVALUATION

If you answer NO to these questions, please explain under comments

1. Is impoundment designed and constructed in accordance with the approved plan? YES
2. Is impoundment free of instability, structural weakness, or any other hazardous conditions? YES
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection? YES

COMMENTS/ OTHER INFORMATION

CERTIFICATION STATEMENT:

I hereby certify that: I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

By: S. Scott Carlson, PE, Twin Peaks, P.C.
P.E. Number & State: 187727 UTAH

Affix Signature, Stamp and Date

QUARTERLY INSPECTION FORM – IMPOUNDMENT

Permit Number:	C/007/035	Inspection Date:	March 29, 2018
Mine Name:	Sunnyside Refuse and Slurry		First Quarter 2018
Mine Operator (Permittee):	Sunnyside Cogeneration Associates	Inspector:	Rusty Netz
MSHA ID Number:	N/A	Signature:	Rusty netz
Impoundment Name:	**Old Coarse Refuse Road Sediment Pond #008**		
UPDES Permit Number:	UT024759		

IMPOUNDMENT INSPECTION

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

None

a. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and estimated average elevation of existing sediment.

Total Pond Volume = 0.9 Acre-feet
Pond bottom elevation = 6394.0
100% Sediment Storage Volume = 0.08 acre-feet at Elevation 6395.1
60% Sediment Storage Volume = 0.05 acre feet at Elevation = 6394.75
Existing Sediment Elevation = 6394.6 +/-

b. Principle and emergency spillway elevations.

Primary Dewatering Pipe = 6395.75
Emergency Spillway Elevation = 6399.4

2. Field Information

Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/ instrumentation information, inlet/ outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/ repairs, monitoring information, vegetation on outslopes of embankments, etc.

Pond had no water. No samples were taken Pond did not require decanting.
Sediment level was acceptable.
Embankment conditions were good. Vegetation on outslopes was adequate.
Inlet / Outlet conditions were good. No structural or hazardous conditions were observed.

3. Field Evaluation.

Describe any changes in the geometry of the impounding structure, average and maximum depths and elevation of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period

No recent changes in the geometry of the structure have been observed
No water was impounded. Sediment level was good.
No other aspects of the impounding structure were observed that could affect its stability or functionality.

QUARTERLY INSPECTION FORM – IMPOUNDMENT

Old Coarse Refuse Road Sediment Pond

CERTIFIED REPORT
IMPOUNDMENT EVALUATION

If you answer NO to these questions, please explain under comments

1. Is impoundment designed and constructed in accordance with the approved plan? YES
2. Is impoundment free of instability, structural weakness, or any other hazardous conditions? YES
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection? YES

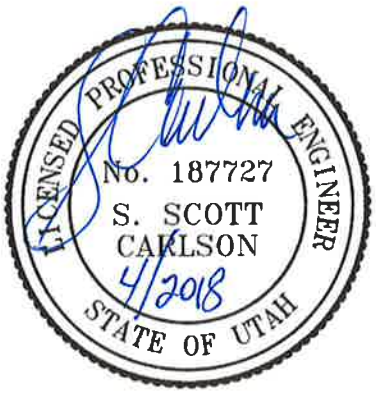
COMMENTS/ OTHER INFORMATION

CERTIFICATION STATEMENT:

I hereby certify that: I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

By: S. Scott Carlson, PE, Twin Peaks, P.C.
P.E. Number & State: 187727 UTAH

Affix Signature, Stamp and Date



QUARTERLY INSPECTION FORM – IMPOUNDMENT

Permit Number:	C/007/035	Inspection Date:	March 29, 2018
Mine Name:	Sunnyside Refuse and Slurry		First Quarter 2018
Mine Operator (Permittee):	Sunnyside Cogeneration Associates	Inspector:	Rusty Netz
MSHA ID Number:	N/A	Signature:	Rusty Netz
Impoundment Name:	**Pasture Sediment Pond #009**		
UPDES Permit Number:	UT024759		

IMPOUNDMENT INSPECTION

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

None

a. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and estimated average elevation of existing sediment.

Total Pond Volume = 3.2 Acre-feet
Pond bottom elevation = 6484.5
100% Sediment Storage Volume = 0.42 acre-feet at Elevation 6486.2
60% Sediment Storage Volume = 0.25 acre feet at Elevation = 6485.5
Existing Sediment Elevation = 6484.9 +/-

b. Principle and emergency spillway elevations.

Primary Dewatering Pipe = 6486.6
Emergency Spillway Elevation = 6490.6

2. Field Information

Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/ instrumentation information, inlet/ outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/ repairs, monitoring information, vegetation on outslopes of embankments, etc.

Pond had no water. No samples were taken Pond did not require decanting.
Sediment level was good
Embankment conditions were good. Vegetation on outslopes was adequate.
Inlet / Outlet conditions were good. No structural or hazardous conditions were observed.

3. Field Evaluation.

Describe any changes in the geometry of the impounding structure, average and maximum depths and elevation of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period

No recent changes in the geometry of the structure have been observed
No water was impounded. Sediment level was good.
No other aspects of the impounding structure were observed that could affect its stability or functionality.

QUARTERLY INSPECTION FORM – IMPOUNDMENT

Pasture Sediment Pond

CERTIFIED REPORT
IMPOUNDMENT EVALUATION

If you answer NO to these questions, please explain under comments

1. Is impoundment designed and constructed in accordance with the approved plan? YES
2. Is impoundment free of instability, structural weakness, or any other hazardous conditions? YES
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection? YES

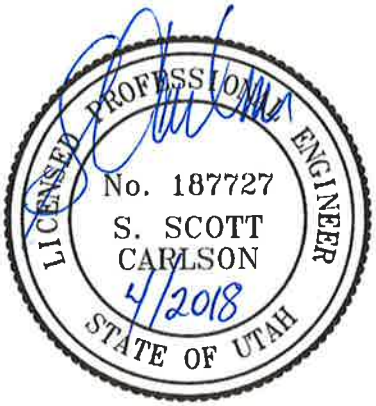
COMMENTS/ OTHER INFORMATION

CERTIFICATION STATEMENT:

I hereby certify that: I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

By: S. Scott Carlson, PE, Twin Peaks, P.C.
P.E. Number & State: 187727 UTAH

Affix Signature, Stamp and Date



QUARTERLY INSPECTION FORM – IMPOUNDMENT

Permit Number:	C/007/035	Inspection Date:	March 29, 2018
Mine Name:	Sunnyside Refuse and Slurry		First Quarter 2018
Mine Operator (Permittee):	Sunnyside Cogeneration Associates	Inspector:	Rusty Netz
MSHA ID Number:	N/A	Signature:	Rusty Netz
Impoundment Name:	**Coarse Refuse Toe Sediment Pond #012**		
UPDES Permit Number:	UT024759		

IMPOUNDMENT INSPECTION

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

None

a. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and estimated average elevation of existing sediment.

Total Pond Volume = 1.6 Acre-feet
Pond bottom elevation = 6176.0
100% Sediment Storage Volume = 0.07 acre-feet at Elevation 6177.8
60% sediment Storage Volume = 0.03 acre feet at Elevation = 6177.0
Existing Sediment Elevation = 6176.8 +/-

b. Principle and emergency spillway elevations.

Primary Dewatering Pipe = 6178.2
Emergency Spillway Elevation = 6183.63

2. Field Information

Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/ instrumentation information, inlet/ outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/ repairs, monitoring information, vegetation on outslopes of embankments, etc.

Pond had no water. No samples were taken Pond did not require decanting
Sediment level was acceptable
Embankment conditions were good. Vegetation on outslopes was adequate.
Inlet / Outlet conditions were good. No structural or hazardous conditions were observed.

3. Field Evaluation.

Describe any changes in the geometry of the impounding structure, average and maximum depths and elevation of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period

No recent changes in the geometry of the structure have been observed
No water was impounded. Sediment level was good.
No other aspects of the impounding structure were observed that could affect its stability or functionality.

QUARTERLY INSPECTION FORM – IMPOUNDMENT

Coarse Refuse Toe Sediment Pond

CERTIFIED REPORT
IMPOUNDMENT EVALUATION

If you answer NO to these questions, please explain under comments

1. Is impoundment designed and constructed in accordance with the approved plan? YES
2. Is impoundment free of instability, structural weakness, or any other hazardous conditions? YES
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection? YES

COMMENTS/ OTHER INFORMATION

None

CERTIFICATION STATEMENT:

I hereby certify that: I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

By: S. Scott Carlson, PE, Twin Peaks, P.C.
P.E. Number & State: 187727 UTAH

Affix Signature, Stamp and Date

QUARTERLY INSPECTION FORM – IMPOUNDMENT

Permit Number:	C/007/035	Inspection Date:	March 29, 2018
Mine Name:	Sunnyside Refuse and Slurry		First Quarter 2018
Mine Operator (Permittee):	Sunnyside Cogeneration Associates	Inspector:	Rusty Netz
MSHA ID Number:	N/A	Signature:	Rusty Netz
Impoundment Name:	**Coal Pile Sediment Pond #014**		
UPDES Permit Number:	UT024759		

IMPOUNDMENT INSPECTION

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

None

a. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and estimated average elevation of existing sediment.

Total Pond Volume = 1.65 Acre-feet
Pond bottom elevation = 6471.5
100% Sediment Storage Volume = 0.65 acre-feet at Elevation 6476.0
60% Sediment Storage Volume = 0.45 acre feet at Elevation = 6474.7
Existing Sediment Elevation = 6472.0 +/-

b. Principle and emergency spillway elevations.

Primary Dewatering Pipe = 6476.0
Secondary Dewatering Orifice = 6477.2
Primary Spillway Elevation = 6477.9
Emergency Spillway Elevation = 6479.0

2. Field Information

Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/ instrumentation information, inlet/ outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/ repairs, monitoring information, vegetation on outslopes of embankments, etc.

Pond had no water. No samples were taken Pond did not require decanting.
Sediment level was good.
Embankment conditions were good. Vegetation on outslopes was adequate.
Inlet / Outlet conditions were good. No structural or hazardous conditions were observed.

3. Field Evaluation.

Describe any changes in the geometry of the impounding structure, average and maximum depths and elevation of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period

No recent changes in the geometry of the structure have been observed
No water was impounded. Sediment level was good.
No other aspects of the impounding structure were observed that could affect its stability or functionality.

QUARTERLY INSPECTION FORM – IMPOUNDMENT

Coal Pile Sediment Pond

CERTIFIED REPORT
IMPOUNDMENT EVALUATION

If you answer NO to these questions, please explain under comments

1. Is impoundment designed and constructed in accordance with the approved plan? YES
2. Is impoundment free of instability, structural weakness, or any other hazardous conditions? YES
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection? YES

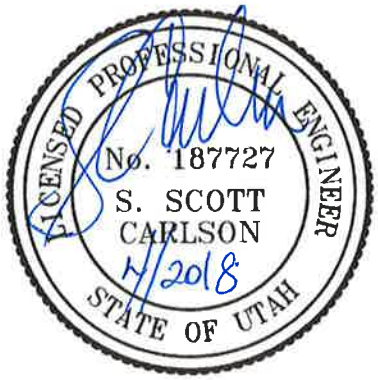
COMMENTS/ OTHER INFORMATION

CERTIFICATION STATEMENT:

I hereby certify that: I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

By: S. Scott Carlson, PE, Twin Peaks, P.C.
P.E. Number & State: 187727 UTAH

Affix Signature, Stamp and Date



QUARTERLY INSPECTION FORM – IMPOUNDMENT

Permit Number: C/007/035
Mine Name: Sunnyside Refuse and Slurry
Mine Operator (Permittee): Sunnyside Cogeneration Associates
MSHA ID Number: N/A
Impoundment Name: **Borrow Area Sediment Pond #016**
UPDES Permit Number: UT024759

Inspection Date: March 29, 2018
First Quarter 2018
Inspector: Rusty Netz
Signature: Rusty Netz

IMPOUNDMENT INSPECTION

1. Describe any appearance of any instability, structural weakness, or any other hazardous condition.

None

a. Sediment storage capacity, including elevation of 60% and 100% sediment storage volumes, and estimated average elevation of existing sediment.

Total Pond Volume = 8.3 Acre-feet
Pond bottom elevation = 6510.0
100% Sediment Storage Volume = 2.3 acre-feet at Elevation 6514.3
60% Sediment Storage Volume = 1.4 acre feet at Elevation = 6513.3
Existing Sediment Elevation = 6510 +/-

b. Principle and emergency spillway elevations.

Primary Dewatering Pipe = 6514.3
Emergency Spillway Elevation = 6517.03

2. Field Information

Provide current water elevation, whether pond is discharging, type and number of samples taken, monitoring/ instrumentation information, inlet/ outlet conditions, or other related activities associated with the pond including but not limited to sediment cleanout, pond decanting, embankment erosion/ repairs, monitoring information, vegetation on outslopes of embankments, etc.

Pond had no water. No samples were taken
Sediment level was good. Pond did not require decanting.
Embankment conditions were good. Vegetation on outslopes was adequate.
Inlet / Outlet conditions were good. No structural or hazardous conditions were observed.

3. Field Evaluation.

Describe any changes in the geometry of the impounding structure, average and maximum depths and elevation of impounded water, estimated sediment or slurry volume and remaining storage capacity, estimated volume of water impounded, and any other aspect of the impounding structure affecting its stability or function which has occurred during the reporting period

No recent changes in the geometry of the structure have been observed
No water was impounded. Sediment level was good.
No other aspects of the impounding structure were observed that could affect its stability or functionality.

QUARTERLY INSPECTION FORM – IMPOUNDMENT

Borrow Area Sediment Pond

CERTIFIED REPORT
IMPOUNDMENT EVALUATION

If you answer NO to these questions, please explain under comments

1. Is impoundment designed and constructed in accordance with the approved plan? YES
2. Is impoundment free of instability, structural weakness, or any other hazardous conditions? YES
3. Has the impoundment met all applicable performance standards and effluent limitations from the previous date of inspection? YES

COMMENTS/ OTHER INFORMATION

None

CERTIFICATION STATEMENT:

I hereby certify that: I am experienced in the construction of impoundments; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of impoundments in accordance with the certified and approved designs for this structure; that the impoundment has been maintained in accordance with approved designs and meets or exceeds the minimum design requirements under all applicable federal, state and local regulations; and that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability in accordance with the Utah R645 Coal Mining Rules.

By: S. Scott Carlson, PE, Twin Peaks, P.C.
P.E. Number & State: 187727 UTAH

Affix Signature, Stamp and Date

QUARTERLY INSPECTION FORM – REFUSE PILE

Permit Number: C/007/035
Mine Name: Sunnyside Refuse and Slurry
Mine Operator (Permittee): Sunnyside Cogeneration Associates
MSHA ID Number: 1211-UT-09-02093-01
Facility Name: **Coarse Refuse Pile**

Inspection Date: March 29, 2018
First Quarter 2018
Inspector: Rusty Netz
Signature: Rusty Netz

1. Describe any changes in the geometry of the structure (as well as instrumentation, if any, used to monitor changes): **Refuse material is actively being excavated and removed from various locations across the top of the pile**
2. Lift Height / Thickness Avg **15** Maximum **25** Elevation of Active Benches: **approximately 6400, 6425, 6450**
3. Vertical angle of outslope(s) / Location(s) where measured **max 2:1 NW face**
4. Current estimated volume: **approx 2.6–3.1 Million Tons** Volume removed during year: **2018 ytd: apx. 27,327tons**
5. Describe foundation preparation, (including the removal of vegetation, stumps, topsoil, and all organic material): **NA**
6. Describe Placement and compaction of fill materials (including an explanation of how compaction is confirmed): **N/A - Activities occurring at this time are associated with removal of refuse material**
7. Is there any evidence of fires or burning on the structure? (if Yes, specify extent, location , and abatement / extinguishment of such fires): **No evidence of fires observed**
8. Describe placement of underdrains and protective filter systems, and final surface drainage systems (report any seepage, including location, color, flow): **No underdrains exist. Current surface drainage is in place. No seepage is visible**
9. Describe any appearances of instability, structural weakness, and other hazardous conditions **No aspects of the Fill structure were observed that could affect its stability or functionality or which indicated hazardous conditions**
10. Please provide any other information pertaining to the stability of the structure (attach any photos taken during the inspection)
    a. Are there any cracks or scarps in crest? **NO** **none observed**
    b. Is there any detectable sloughing or bulging? **NO** **none observed**
    c. Do slope erosion problems exist? **NO** **none observed**
    d. Cracks or scarps in slope? **NO** **none observed**
    e. Surface movements? (valley bottom, hillsides) **NO** **none observed**
    f. Erosion of Toe? **NO** **none observed**
    g. Water impounded by structure? **NO** **none observed**
    h. Are diversion ditches stable? **YES** **appear reasonable**
    i. Is drainage positive? **YES** **surface runoff flows to collection ditches**
    j. Could failure of structure create an impoundment (provide description)? **No surface water flows exist in the vicinity**
    k. Are design standards established within the mining and reclamation plan for the disposal facility being met? **Yes**
    l. Proctor Determination: **none required**

I hereby certify that: I am experienced in the construction of earth and rock fills; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of earth and rock fills in accordance with the certified and approved designs for this structure; that the fill structure has been maintained in accordance with the approved design and meets or exceeds the minimum design requirements under all applicable federal, state, and local regulations; and, that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

By: S. Scott Carlson, PE, Twin Peaks, P.C.
P.E. Number & State: 187727 UTAH

QUARTERLY INSPECTION FORM – EXCESS SPOIL DISPOSAL AREA

Permit Number: C/007/035
Mine Name: Sunnyside Refuse and Slurry
Mine Operator (Permittee): Sunnyside Cogeneration Associates
MSHA ID Number: 1211-UT-09-02093-04
Facility Name: **Excess Spoil Disposal Area #1**

Inspection Date: March 29, 2018
First Quarter 2018
Inspector: Rusty Netz
Signature: Rusty Netz

1. Describe any changes in the geometry of the structure (as well as instrumentation, if any, used to monitor changes): **No material was placed in this disposal area during the year**
2. Lift Height / Thickness Avg **2-4 ft** Maximum **4 ft** Elevation of Active Benches: **approx 6500-6520**
3. Vertical angle of outslope(s) / Location(s) where measured **max 2.5:1 North face**
4. Total storage capacity: **400K-500K cuyd** Remaining storage capacity **estimated 50K-100K cuyd** Volume placed during year: **2018 ytd: none**
5. Describe foundation preparation, (including the removal of vegetation, stumps, topsoil, and all organic material): **Organic material was removed. No topsoil existed since this was a previously disturbed location**
6. Describe Placement and compaction of fill materials (including an explanation of how compaction is confirmed): **Material is generally granular by nature so it is placed, spread by dozer and compacted by wheel rolling**
7. Is there any evidence of fires or burning on the structure? (if Yes, specify extent, location , and abatement / extinguishment of such fires): **No evidence of fires observed**
8. Describe placement of underdrains and protective filter systems, and final surface drainage systems (report any seepage, including location, color, flow): **No underdrains exist. Surface drainage is collected on terrace ditches and diverted off of pile. No seepage is visible**
9. Describe any appearances of instability, structural weakness, and other hazardous conditions **No aspects of the Fill structure were observed that could affect its stability or functionality or which indicated hazardous conditions**
10. Please provide any other information pertaining to the stability of the structure (attach any photos taken during the inspection)
    a. Are there any cracks or scarps in crest? **NO** **none observed**
    b. Is there any detectable sloughing or bulging? **NO** **none observed**
    c. Do slope erosion problems exist? **NO** **erosion conditions are minimal**
    d. Cracks or scarps in slope? **NO** **none observed**
    e. Surface movements? (valley bottom, hillsides) **NO** **none observed**
    f. Erosion of Toe? **NO** **none observed**
    g. Water impounded by structure? **NO** **none observed**
    h. Are diversion ditches stable? **YES** **appear reasonable**
    i. Is drainage positive? **YES** **surface runoff flows to collection ditches**
    j. Could failure of structure create an impoundment (provide description)? **No surface water flows exist in the vicinity**
    k. Are design standards established within the mining and reclamation plan for the disposal facility being met? **Yes**
    l. Proctor Determination: **none required**
11. Provide copies of sample analysis for material placed in the fill. **Sample analysis was provided in December 2012 for most recent material placed in fill.**

I hereby certify that: I am experienced in the construction of earth and rock fills; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of earth and rock fills in accordance with the certified and approved designs for this structure; that the fill structure has been maintained in accordance with the approved design and meets or exceeds the minimum design requirements under all applicable federal, state, and local regulations; and, that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

By: S. Scott Carlson, PE, Twin Peaks, P.C.
P.E. Number & State: 187727 UTAH

Affix Signature, Stamp and Date

REGISTERED PROFESSIONAL ENGINEER
187727
S. SCOTT CARLSON
4/2018
STATE OF UTAH

QUARTERLY INSPECTION FORM – EXCESS SPOIL DISPOSAL AREA

Permit Number: C/007/035
Mine Name: Sunnyside Refuse and Slurry
Mine Operator (Permittee): Sunnyside Cogeneration Associates
MSHA ID Number: 1211-UT-09-02093-05
Facility Name: **Excess Spoil Disposal Area #2**

Inspection Date: March 29, 2018
First Quarter 2018
Inspector: Rusty Netz
Signature: Rusty Netz

1. Describe any changes in the geometry of the structure (as well as instrumentation, if any, used to monitor changes): **Approx 5,600 tons of material placed in the Phase II area during the quarter**
2. Lift Height / Thickness Avg **2-4 ft** Maximum **4 ft** Elevation of Active Benches: **approx 6550**
3. Vertical angle of outslope(s) / Location(s) where measured **approx. 5:1**
4. Total storage capacity Phase II Area: **300K-350K cuyd** Remaining storage capacity **estimated 85K-125K cuyd**
   Volume placed during year: **2018 ytd: 5,600 tons**
5. Describe foundation preparation, (including the removal of vegetation, stumps, topsoil, and all organic material): **Organic material was removed. Subsoil was removed for reclamation on Phase 1 area.**
6. Describe Placement and compaction of fill materials (including an explanation of how compaction is confirmed): **Material is generally granular by nature so it is placed, spread by dozer and compacted by wheel rolling**
7. Is there any evidence of fires or burning on the structure? (if Yes, specify extent, location , and abatement / extinguishment of such fires): **No evidence of fires observed**
8. Describe placement of underdrains and protective filter systems, and final surface drainage systems (report any seepage, including location, color, flow): **No underdrains exist. A permanent culvert routes surface water from the east side to west side of the Phase 1 area. Surface drainage is collected in perimeter ditches and diverted to sediment pond. No seepage is visible**
9. Describe any appearances of instability, structural weakness, and other hazardous conditions **No aspects of the Fill structure were observed that could affect its stability or functionality or which indicated hazardous conditions**
10. Please provide any other information pertaining to the stability of the structure (attach any photos taken during the inspection)
    a. Are there any cracks or scarps in crest? **NO** **none observed**
    b. Is there any detectable sloughing or bulging? **NO** **none observed**
    c. Do slope erosion problems exist? **NO** **erosion conditions are minimal**
    d. Cracks or scarps in slope? **NO** **none observed**
    e. Surface movements? (valley bottom, hillsides) **NO** **none observed**
    f. Erosion of Toe? **NO** **none observed**
    g. Water impounded by structure? **NO** **none observed**
    h. Are diversion ditches stable? **YES** **appear reasonable**
    i. Is drainage positive? **YES** **surface runoff flows to collection ditches**
    j. Could failure of structure create an impoundment (provide description)? **No surface water flows exist in the vicinity**
    k. Are design standards established within the mining and reclamation plan for the disposal facility being met? **Yes**
    l. Proctor Determination: **none required**
11. Provide copies of sample analysis for material placed in the fill. **Sample analyses for material placed during 2017 is provided as an attachment to this report**

I hereby certify that: I am experienced in the construction of earth and rock fills; I am qualified and authorized in the State of Utah to inspect and certify the condition and appearance of earth and rock fills in accordance with the certified and approved designs for this structure; that the fill structure has been maintained in accordance with the approved design and meets or exceeds the minimum design requirements under all applicable federal, state, and local regulations; and, that inspections and inspection reports are made by myself or under my direction and include any appearances of instability, structural weakness or other hazardous conditions of the structure affecting stability.

By: S. Scott Carlson, PE, Twin Peaks, P.C.
P.E. Number & State: 187727 UTAH
Affix Signature, Stamp and Date

REGISTERED PROFESSIONAL ENGINEER
187727
S. SCOTT CARLSON
4/2018
STATE OF UTAH

BRIGHAM YOUNG UNIVERSITY

Environmental Analytical Laboratory
1026 LSB
Provo, UT 84602
801-422-2147

Plant and Wildlife Sciences Department

SAMPLE TEST REPORT AND RECOMMENDATIONS

Name: Sunnyside Cogeneration
Street: One Power Plant Road
Sunnyside (City) Utah (State) 84539 (Zip)

Date: 28-Mar-17
Telephone: 435-888-4476
Work Order: 859

Sample Identification	Crop to be grown	pH	% Sand	% Silt	% Clay	Soil Texture	% Organic Matter	% Organic Carbon
12/2/16 Composite Sample Spoils Material	Turf	7.5	58.9	20.7	20.4	Sandy Clay Loam	7.3	4.2

Test	Results	Very Low	Low	Medium	High	Very High	Recommendations
Nitrate-Nitrogen ppm N	1.9	X					apply 2.8 lbs of N/1000 sq ft
Phosphorus ppm P	9.0		X				apply 1.4 lbs of P2O5/1000 sq ft
Potassium ppm K	134				X		no fertilizer needed
Salinity-ECe dS/m	3.9			X			potential salinity problem
Boron mg/kg B	3.4				X		
Selenium mg/kg Se	0.04	X					
SAR-Sodium Adsorption Ratio	0.2	X		X			no sodium hazard
Calcium-SAR ppm Ca	568						
Potassium SAR ppm K	29						
Magnesium SAR ppm Mg	36						
Sodium SAR ppm Na	22						
Sulfur % S	0.41		X				
Acid Potential tons CaCO3/1000 tons	12.8						
Ca Carbonate %CaCO3	8.7		X				
Neutralization Pot. tons CaCO3/1000 tons	87.0						
Acid Base Potential tons CaCO3/1000 tons	74.2	X					Good

Notes: