

2020 Coal Combustion Residuals Annual Inspection

Hunter Power Plant

Hunter CCR Landfill



Prepared for
PacifiCorp
North Temple Office
1407 West North Temple
Salt Lake City, Utah 84116

FINAL December 15, 2020

AECOM

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1 Findings

This annual inspection and report were completed for the purpose of providing due diligence by PacifiCorp and reasonable assurance, to the extent obtained by the due diligence, of continued safe operation of its coal combustion residual (CCR) facilities. The inspection was performed, and report was prepared, in accordance with to the requirements for annual inspections under Section 257.84 (for CCR landfills) of 40 CFR Parts 257 and 261, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities, Final Rule, dated April 17, 2015 [1].

AECOM did not observe signs, such as slumps, tension cracks, or other movements, that would indicate imminent failure of the embankment for the Hunter Power Plant CCR Landfill. Figure 1-1 on the following page is an aerial photograph of the landfill.

The CCR requirement for signage is not applicable to landfills. The Hunter CCR Landfill does not accept hazardous wastes.

There were no maintenance items from the 2020 inspection.

Observations from the 2020 inspection include:

1. Regrading and removal of brush has been performed near the toe of the slope along the perimeter ditch since the 2019 annual inspection [2].
2. Gullies on south end outside perimeter berm continue to develop. Desiccation cracks are visible, and there appear to be possible tension cracks near the downstream toe of the berm at the top of the gully's sidewall and where continued erosion may be occurring. The function and integrity of the perimeter berm does not appear to be compromised at present, but AECOM recommends monitoring of this region. Refer to Photos 8 and 9, Appendix A.
3. Observation of mild erosion and rills on bare soil cover of some slopes of CCR landfill (hay and vegetation obstructed view of possible erosion and rills beneath). Refer to Photo 10, Appendix A.
4. Additional segments of the exterior slopes have partially been covered with straw. Vegetation continues to improve on straw-covered slopes observed in previous inspections. Refer to Photos 3, 7, 11, 12, and 13, Appendix A.
5. Energy dissipation structure at downstream end of retention pond conduit still has evidence of wetness despite dry conditions. Plant personnel reported that water did not reach the slide gate at the upstream end of conduit. Refer to Photos 21 and 22, Appendix A.
6. The downstream end, particularly the middle to downstream of the culvert near the north access road, appears to be partially obstructed (30 percent or less). It appears that efforts had been made to remove sediment near the ends of the culvert. AECOM assumes that sediment within the culvert could scour out during a significant storm event because both ends of the culvert had been cleared of sediment. Refer to Photos 24 and 25, Appendix A.

All of the photos in the Photograph Log (Appendix A) show landfill conditions as basis for comparison when performing future inspections.



Figure 1-1. Hunter Power Plant CCR Landfill (2019)

2 Description and History of CCR Landfill

2.1 General Overview

The Hunter Power Plant is operated and majority-owned by PacifiCorp. The Hunter CCR Landfill is situated about one mile southeast of the plant.

Flue-gas desulfurization (FGD) scrubber waste, fly ash, and bottom ash produced by the plant are disposed of in the CCR Landfill [3]. These waste materials are delivered to the landfill by truck by way of a haul road entering the CCR Landfill from the west. In addition, a small area at the north end of the CCR Landfill has been designated and permitted as a Class IIIb industrial waste landfill [4], [5].

2.2 Location

The Hunter Power Plant is located in Emery County, Utah, approximately 2.5 miles south of Castle Dale, Utah. Access to the plant is provided by Utah Highway 10 (UT-10). See the vicinity map on Figure 1-1 for the site location.

2.3 Hunter Landfill Description

This inspection specifically addresses the CCR waste storage facility identified as the Hunter CCR Landfill (also known as Ash Landfill), which includes the Industrial Waste Landfill. An aerial map showing the location of the CCR Landfill and the location of the Industrial Waste Landfill within the perimeter of the CCR Landfill is shown in Figure 1-1.

Runoff from the Hunter CCR Landfill is directed to an unlined, zero-discharge retention basin located east of the landfill (see Figure 1-1). Water is held in the retention basin and evaporated. Although there are outlets to release water from the basin, they are not used. There is no evidence of water discharging from the basin.

A summary of pertinent data for the Hunter CCR Landfill at the Hunter Power Plant is provided in Table 2-1.

Table 2-1. Hunter Power Plant Landfill Pertinent Data

Parameter Description	Facility
	CCR Landfill
Approximate Current Area (acres)	290 ¹
Length (feet)	4,800 [6]
Width (feet)	3,600 [6]
Maximum Elevation at Completion (feet amsl)	5,810 [7]
Slopes (H:V)	4:1 [4]
Status	Active

Notes: H = Horizontal; V = Vertical

1. Estimated by AECOM from 2018 aerial photographs. The footprint is unchanged from 2018.

2.4 Performance History

The current 290-acre landfill is used as the sole depository of CCR material from the Hunter Power Plant. There have been no recorded incidences of embankment failure or other discharges of CCR from the Hunter Landfill.

2.5 Construction History

Bottom ash, fly ash, and FGD waste is hauled by truck to the landfill. CCR in the form of fly ash and bottom ash is spread and compacted to approximately 87 pounds per cubic foot (pcf) [8] with only vehicular traffic. FGD waste is dumped throughout the landfill but tends to be concentrated at the interior of the landfill.

2.6 Review of Operating Record Files

The list of operating records to be reviewed during the annual inspection as contained in 40 CFR §257, Disposal of Coal Combustion Residuals for Electric Utilities is “CCR unit design and construction information required by §§257.73(c)(1) and 257.74(c)(1), previous periodic structural stability assessments required under §§257.73(d) and 257.74(d), the results of inspections by a qualified person, and results of previous annual inspections” [1]. The following subsections describe the review of operating record files.

2.6.1 Design and Construction Information

AECOM reviewed the documents listed in Section 5. However, there are no design or construction drawings in the record files for the current geometry of the landfill. Construction of a vertical expansion of the CCR Landfill had not begun at the time of this report; however, design drawings [7] were produced and are kept on file at the plant.

2.6.2 Previous Periodic Structural Analyses

The Cornforth Phase 1 geotechnical study [6] was completed in 2009 and did not recommend a formal risk assessment of the landfill structure.

In 2015, URS completed a geotechnical study to evaluate the feasibility of expanding the landfill vertically [7]. The study includes geotechnical analyses assessing the stability of the landfill under the additional loading. This study concluded that it is feasible and that the landfill is stable for this expansion, provided that monitoring of internal pore pressures is performed. It also included a recommendation to relieve pore pressure in the landfill using horizontal drains.

2.6.3 Results of Inspection by a Qualified Person

The Hunter CCR Landfill is subject to periodic inspections by the Hunter Power Plant staff. AECOM reviewed inspection reports, including reports from the last calendar year, and did not find anything that would affect the safety of the landfill. These inspections are documented and retained by PacifiCorp. In the opinion of this report’s author, the interim inspections by the plant staff are adequate and appropriate, as required by the CCR rules and industry standards, for this CCR unit.

2.6.4 Results of Previous Annual Inspections

The first annual inspection under CCR rules [1] for the Hunter CCR Landfill was conducted in September 2015 [9]. PacifiCorp has completed other independent inspections by third parties [10], [6]. Annual periodic inspections under the CCR rules were completed in 2016 [11], 2017 [12], 2018 [13], and 2019 [2], the 2019 inspection being the most recent annual periodic inspection under the CCR rules, which did not identify any deficiencies. None of the observations from this or previous inspections indicated imminent safety concerns.

This report and other pertinent reports and data are accessible at the following website:

<http://www.berkshirehathawayenergyco.com/ccr/ppw.html>

Section 5 of this report is a list of references for the Hunter Landfill.

3 Field Inspection of Hunter Landfill

A field inspection was conducted on September 2, 2020, by AECOM staff, Bryan Franke, P.E., and Benjamin Barrett. Mr. Franke participated previously in the CCR impoundment inspections in 2014 for Hunter CCR Landfill [10], and subsequent periodic annual inspections [12], [13], and [2] under the CCR rule.

A photo log documenting features and their condition at the time of the inspection is presented in Appendix A. These photos are referenced in this report.

The completed Annual Inspection Report Form is presented in Appendix B. This checklist should be considered an integral part of this report and remain attached whenever the report is forwarded or otherwise reproduced.

3.1 General

The field inspection was performed by the AECOM inspectors by driving the perimeter road and the crest, stopping at approximately ¼-mile intervals or when observations warranted stopping. Intermittently, photos of the outer face of the embankment provide a baseline for future inspections (Appendix A).

Features and conditions were documented on the Annual Inspection Report form (Appendix B) and were photographed. The approximate locations of the photos are detailed in the inspection photograph log overview map located at the beginning of the Photograph Log, Appendix A. In addition to documenting current features, the photo log of existing conditions is intended on aiding future inspections.

3.2 Hunter Landfill Geometry

Figure 3-1 shows a cross section of the embankment slope on the south face of the landfill. This section is found in the Industrial Landfill Renewal Application, June 27, 2006, Plan Sheet 3 [4] and is typical of the other landfill faces. The slopes are a maximum of 4 horizontal to 1 vertical.

The landfill has both a perimeter road and a perimeter drainage ditch at the toe of the landfill slope. On the south side of the landfill, there is a berm and ditch outside the perimeter road to divert off-site runoff around the landfill rather than into the perimeter drainage ditch.

The plant received a permit to dispose of and store industrial waste in two designated portions of the CCR Landfill [4], [5], [14]. The primary location was in the north-central portion of the embankment with an area of 6.2 acres [15]. The secondary location, where the industrial waste is disposed of at present, is located near the north boundary of the CCR embankment with an area of 9.8 acres.

3.3 Instrumentation

There is currently no permanent instrumentation within the landfill itself. Landfill instrumentation is not required by the CCR rule. However, groundwater quality in the vicinity of the CCR landfill is monitored [16].

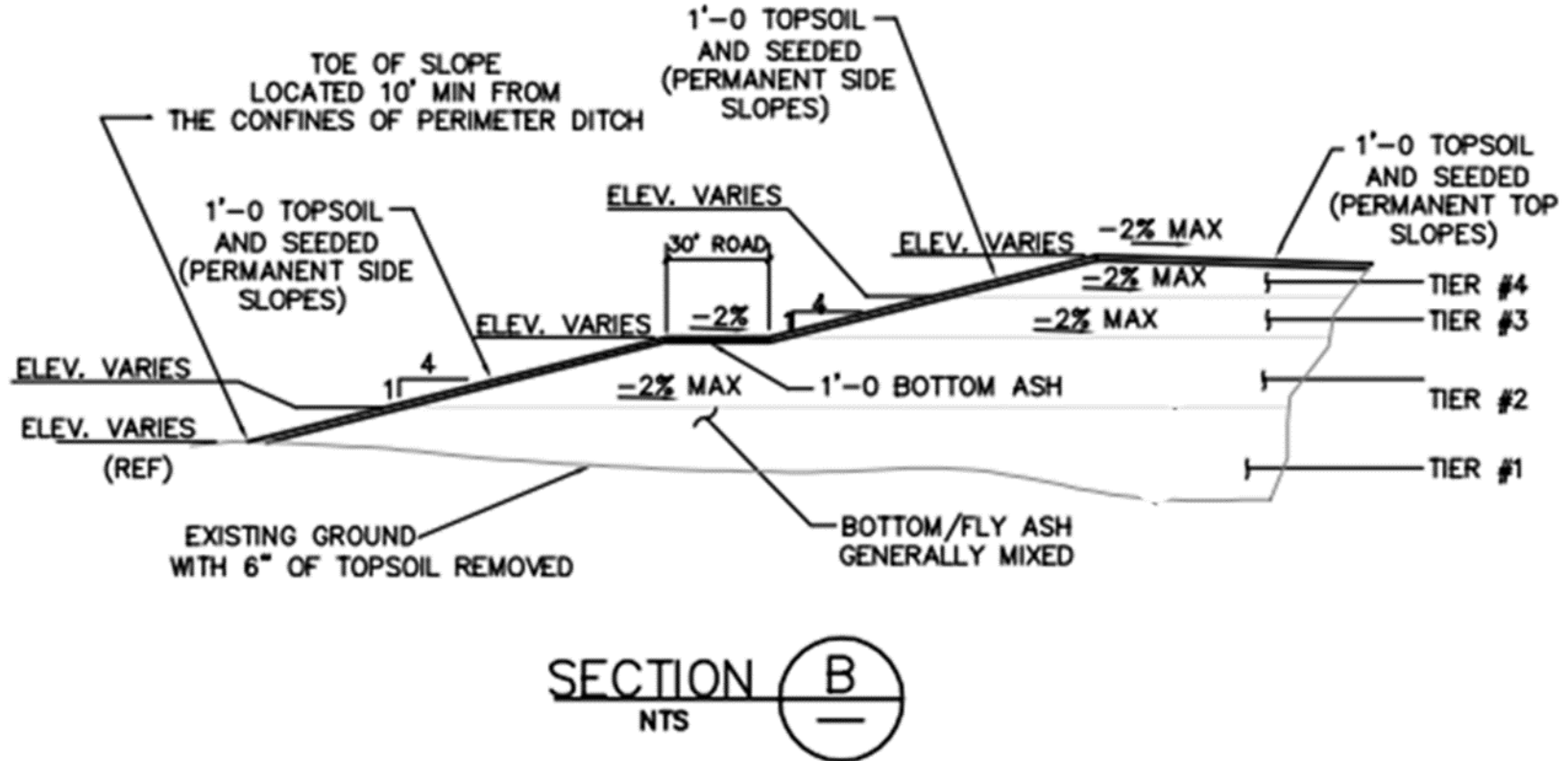


Figure 3-1. Section of South Face of Hunter Landfill [4]

3.4 Volume of CCR

AECOM estimated the current volume of CCR stored in the landfill in 2020 at approximately 16.8 million cubic yards. This was based on the estimate of 12.6 million cubic yards [7] in 2014 plus 1.2 million additional cubic yards reported as being added in 2015 and 2016¹, 0.8 million cubic yards added in 2016 and 2017, 0.9 million cubic yards added in 2017 and 2018, 0.3 million cubic yards added in 2019, and 1.0 million cubic yards added in 2020.

3.5 Observed or Potential Structural Weaknesses

There were no appearances of actual or potential structural weakness or existing conditions that are disrupting, or have the potential to disrupt the operation and safety of the CCR unit.

3.6 Observed Changes

There were no observable changes in the structure of the CCR Landfill's embankments. Locations were chosen along the embankments to document this year compared to 2019. These locations are marked on the overview map in Appendix A and should be monitored in any further inspection for change.

Following are 2020 observations:

1. Regrading and removal of brush has been performed near the toe of the slope along the perimeter ditch since the 2019 annual inspection [2].
2. Gullies on south end outside perimeter berm continue to develop. Desiccation cracks are visible, and there appear to be possible tension cracks near the downstream toe of the berm at the top of the gully's sidewall where continued erosion may be occurring. The function and integrity of the perimeter berm does not appear to be compromised at present, but AECOM recommends monitoring of this region. Refer to Photos 8 and 9, Appendix A.
3. Observation of mild erosion and rills on bare soil cover of some slopes of CCR landfill (hay and vegetation obstructed view of possible erosion and rills beneath). Refer to Photo 10, Appendix A.
4. Additional segments of the exterior slopes have partially been covered with straw. Vegetation continues to improve on straw-covered slopes observed in previous inspections. Refer to Photos 3, 7, 11, 12, and 13, Appendix A.
5. Energy dissipation structure at downstream end of retention pond conduit still has evidence of wetness despite dry conditions. Water did not reach the slide gate at the upstream end of conduit. Refer to Photos 21 and 22, Appendix A.
6. Mild sedimentation was observed within culvert near north access road. Efforts had been made to remove sediment near the ends of the culvert, and AECOM assumes that sediment within the

¹ Aerographics volume computation from difference in LIDAR between 2014 and 2015.

culvert could scour out during a significant storm event because both ends of the culvert appeared to be free of obstructions.

7. The downstream end, particularly the middle to downstream end of the culvert near the north access road, appears to be partially obstructed (30 percent or less). It appears that efforts had been made to remove sediment near the ends of the culvert. AECOM assumes that sediment within the culvert could scour out during a significant storm event because both ends of the culvert had been cleared of sediment. Refer to Photos 24 and 25, Appendix A.

4 Limitations and Consultant Qualifications

4.1 Limitations

This report presents observations, and conclusions drawn from a review of pertinent documents referenced in Section 5, and a field inspection of the Hunter CCR Landfill. The field inspection was limited to the interior of the perimeter road, the perimeter berm, and the run-on control ditch at the base of the perimeter berm. The purpose of the review and inspection has been to assess the safety or adequacy of the facilities according to industry standards against catastrophic failure of the major constructed elements during normal operations or unusual or extreme events based on visual inspection and available information. A secondary purpose is to identify any potential deficiencies related to the CCR rules [1].

The conclusions and professional opinions presented herein were developed by the independent consultant and are in accordance with generally accepted engineering principles and practices at the time and location the services were provided. AECOM makes no other warranty, either expressed or implied.

4.2 Professional Engineer Qualifications

The professional engineer for this inspection is Bryan Franke. He is licensed in the State of Utah (9819797) as a geotechnical engineer. He has over 7 years' experience in geotechnical, dams, and mining engineering and has performed inspections and safety evaluations on dams, slopes, embankments, and other waste depositories.

5 References

- [1] 40 CFR § 257 Disposal of Coal Combustion Residuals from Electric Utilities, April 17, 2015.
- [2] AECOM, “2019 Coal Combustion Residuals Annual Inspection: Hunter Power Plant, Hunter CCR Landfill,” December 18, 2019.
- [3] O’Brien & Gere, “Dam Safety Assessment of CCW Impoundments: Hunter Power Plant, Castle Dale, Utah,” Washington, D.C., 2013.
- [4] Water & Environmental Technologies PC, “Industrial Landfill Permit Renewal Application: Hunter Power Plant,” Salt Lake City, Utah, 2006.
- [5] Utah Division of Solid and Hazardous Waste, “Solid Waste Permit Renewal: Hunter Power Plant Class IIIb Landfill,” Salt Lake City, Utah, 2007.
- [6] Cornforth Consultants Inc., “Phase I Geotechnical Assessments: Scrubber Emergency Holding Pond and FGD Cell/Ash Landfill, Hunter Power Plant,” Castle Dale, Utah, 2009.
- [7] URS, “Memorandum – Hunter CCR Landfill Vertical Expansion Feasibility Evaluation”, February 17, 2015.
- [8] PacifiCorp Electric Operations, “Combustion Waste Embankment Expansion Project: Operations Manual,” Hunter Power Plant, Castle Dale, Utah, 1997.
- [9] URS, “2015 Coal Combustion Residuals Annual Inspection: Hunter Power Plant Landfill,” December 29, 2015.
- [10] URS, “2014 Coal Combustion Residuals Impoundment Inspection and Assessment – Hunter Power Plant Ash Landfill, ,” January 6, 2015.
- [11] URS, “2016 Coal Combustion Residuals Annual Inspection: Hunter Power Plant Landfill,” November 29, 2016.
- [12] URS, “2017 Coal Combustion Residuals Annual Inspection: Hunter Power Plant Landfill,” November 30, 2017.
- [13] AECOM, “2018 Coal Combustion Residuals Annual Inspection: Hunter Power Plant, Hunter CCR Landfill,” December 11, 2018.
- [14] Utah Division of Solid and Hazardous Waste, “Solid Waste Facility Fact Sheet: Hunter Power Plant Class IIIb Landfill,” 2014. [Online]. Available: <http://www.deq.utah.gov/businesses/P/PacificCorp/HunterPowerPlantClassIIIbLandfill.htm>. [Accessed: 12-Nov-2014].
- [15] PacifiCorp, “Thermal Generation Fact Sheets: Hunter Plant,” 2011. [Online]. Available: <http://www.pacificorp.com/es/thermal.html>. [Accessed: 14-Nov-2014].

- [16] Water & Environmental Technologies PC, "Corrective Measures Assessment – CCR Landfill – Hunter Power Plant," June 2019.

Appendix A

Photograph Log

Q:\Projects\PacifiCorp\2020 CCR Inspections\900 - CAD_GIS\920-929 (GIS-Graphics)\Hunter\Hunter_Photo_Locations2020.mxd



Aerial Photo Source: NAIP 2019

Legend

● Approximate Photo Location

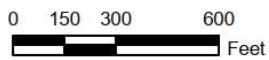


Photo Locations
PacifiCorp
Hunter Power Plant
Castle Dale, Utah
September, 2020

AECOM

Inspection Photographs

PacifiCorp
Hunter Power Plant
September 2, 2020
Page No. A-1

AECOM



Photograph No. 1 **View of downstream end of culvert under main haul road and rumble rack, looking southwest. Culvert unobstructed, but moderate erosion observed adjacent to culvert (left) from water introduced into the rumble rack from snowmelt or for dust suppression and cleanout.**



Photograph No. 2

View of upstream end of culvert under main haul road and rumble rack, looking northeast. Note: The upstream end of the culvert appears to be mostly unobstructed.



Photograph No. 3 **View of western slope of CCR Landfill, looking south. Note vegetation and hay cover.**



Photograph No. 4

Left: View of western face of CCR landfill showing recent regrading and removal of brush at the toe of the slope since the last annual inspection, looking southwest (photo from 2020 inspection).

Right: Photo from 2019 Inspection in approximately the same location prior to regrading and removal of brush at the toe of the slope.



Photograph No. 5 **View of western perimeter berm adjacent to access road, looking north.**



Photograph No. 6 **View of western perimeter berm adjacent to access road, looking south.**



Photograph No. 7 **View of western slope of CCR landfill and perimeter berm, looking north. Note the recent regrading and removal of brush at the toe of the slope.**



Photograph No. 8 **View of erosion gully at outer slope of southwest perimeter berm, looking southeast. Note minor sloughing, desiccation, and possible tension cracking (arrow). The function and integrity of the diversion berm does not appear to be compromised at present.**



Photograph No. 9

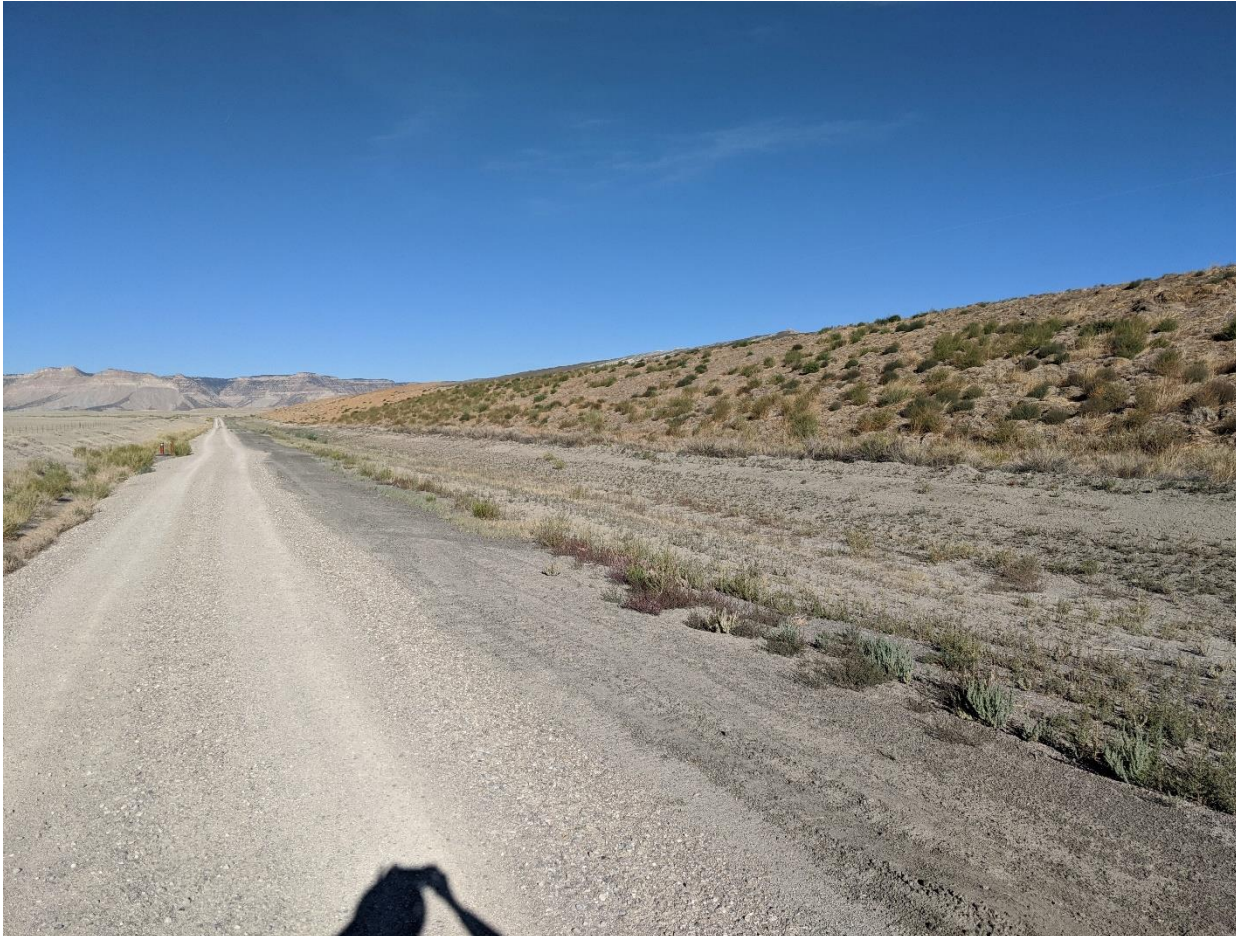
View of erosion gully at outer slope of southern perimeter berm, looking east.



Photograph No. 10 **View of slope at southwest corner of CCR landfill showing minor erosion and rills, looking northeast.**



Photograph No. 11 **View of southern slope of CCR landfill from southwest corner, looking east.**



Photograph No. 12 **View of southern slope of CCR landfill, looking west.**



Photograph No. 13 **View of southeastern slope of CCR landfill, looking northeast. Note the recent regrading and removal of brush at the toe of the slope.**



Photograph No. 14 **View of southeastern slope of CCR landfill and perimeter berm, looking southwest.**



Photograph No. 15 **View of upstream end of a culvert near the southern end of the retention basin, looking west. Note: The upstream end of the culvert appears to be mostly unobstructed.**



Photograph No. 16 View of downstream end of a culvert near the southern end of the retention basin, looking east. Note: The downstream end of the culvert appears to be mostly unobstructed.



Photograph No. 17 **View of upstream end of a culvert into the southern end of the retention basin, looking northwest. Note: The upstream end of the culvert appears to be mostly unobstructed.**



Photograph No. 18 **View of downstream end of a culvert into the southern end of the retention basin, looking southeast. Note: The downstream end of the culvert appears to be mostly unobstructed.**



Photograph No. 19 **View of dewatering collection system along east slope of CCR landfill, looking north.**



Photograph No. 20 View of retention basin and outlet slide gate, looking northwest. PacifiCorp personnel commented that slide gate is functional but is not used.



Photograph No. 21 **View of retention basin outlet slide gate and overflow conduit (arrow), looking east.**



Photograph No. 22 **View of retention basin stilling basin, looking east. Note salt cap and apparent moisture (arrow).**



Photograph No. 23 **View of retention basin and eastern embankment from the north, looking south.**



Photograph No. 24 View of downstream end of a culvert on the northern side of the CCR landfill, looking west. Note: The downstream end of the culvert appears to be partially obstructed.



Photograph No. 25 **View of upstream end of a culvert on the northern side of the CCR landfill, looking east. Note: The upstream end of the culvert appears to be mostly unobstructed.**



Photograph No. 26 **View of temporary working slopes along northern side of CCR landfill in vicinity of the Industrial Landfill, looking southwest.**



Photograph No. 27 **View of perimeter berm along northwestern side of CCR landfill, looking southwest.**



Photograph No. 28 **View of main haul road and rumble rack showing dust control moisture, looking west.**



Photograph No. 29 **View of placement and grading operations for ash and FGD, looking north.**



Photograph No. 30 **View of area within CCR landfill permitted as an industrial landfill, looking south.**



Photograph No. 31 **View of staging area of hay bales for future use as temporary cover on CCR landfill, looking northeast.**



Photograph No. 32 **View of top of CCR landfill, looking west.**



Photograph No. 33 **View of top of CCR landfill, looking northwest.**

Appendix B
Annual Inspection Report Form



Annual Landfill Inspection Report

Issue Date: 8-24-2015
Form XXXXX Revision A

Page 1 of 2

Feature Name:
Hunter CCR Landfill

Feature ID:

Date:
September 2, 2020

CCR Landfill Name Hunter CCR Landfill	Date 09-02-20	Inspected By Bryan Franke, P.E., & Benjamin Barrett
Inspection Frequency: <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Weather/Seismic Event <input type="checkbox"/> Other:		
Type of Landfill: <input checked="" type="checkbox"/> Active <input type="checkbox"/> Inactive	Weather Conditions: <input type="checkbox"/> Wet <input checked="" type="checkbox"/> Dry <input type="checkbox"/> Snow Cover <input type="checkbox"/> Windy <input type="checkbox"/> Other	

Operations	Checks and Observations				
	1. Placement procedures are being followed.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
	2. Dust control is effective.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
	3. Dust control logs are complete and available.				<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> NA
	4. Haul road maintained and dust controlled.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
Actions <input checked="" type="checkbox"/> None <input type="checkbox"/> Maintenance <input type="checkbox"/> Monitoring <input type="checkbox"/> Engineering Notification/Work Order#					
Cover (if applicable)	Problems				Cover
	<input type="checkbox"/> None <input type="checkbox"/> Animal burrows <input type="checkbox"/> Animal damage	<input type="checkbox"/> Slope Stability <input type="checkbox"/> Settlement <input type="checkbox"/> Cracks	<input checked="" type="checkbox"/> Erosion <input checked="" type="checkbox"/> Rills	<input type="checkbox"/> Seepage <input type="checkbox"/> Ponding <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Vegetation <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Soil <input checked="" type="checkbox"/> Other
	5. Exterior slopes in good condition, with no exposed CCR waste (non-beneficial).				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
	Observations: Cover included soil, annual vegetation, and hay; some erosion rills observed on bare soil cover (hay obstructed view of possible rills beneath). Slopes on north of landfill typically uncovered or temporary slopes. Small amount of industrial waste (likely from today) was visible, but other industrial waste not exposed, suggesting frequent cover.				
	Actions <input checked="" type="checkbox"/> None <input type="checkbox"/> Maintenance <input type="checkbox"/> Monitoring <input type="checkbox"/> Engineering Notification/Work Order#				
Slopes and Perimeter Berms	Problems				Cover
	<input type="checkbox"/> None <input type="checkbox"/> Animal burrows <input type="checkbox"/> Animal damage	<input type="checkbox"/> Slope Stability <input type="checkbox"/> Settlement <input checked="" type="checkbox"/> Cracks	<input checked="" type="checkbox"/> Erosion <input checked="" type="checkbox"/> Rills	<input type="checkbox"/> Seepage <input type="checkbox"/> Ponding <input type="checkbox"/> Other	<input checked="" type="checkbox"/> Vegetation <input type="checkbox"/> Gravel <input checked="" type="checkbox"/> Soil <input checked="" type="checkbox"/> Other
	Observations				
	6. Slopes and berms provide positive drainage.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
	Observations: Gullies on south end outside perimeter berm continue to develop. Desiccation cracks are visible, and there appear to be some tension cracks near the downstream toe of the berm above the top of the gully's sidewall where continued erosion is occurring. The function and integrity does not appear to be compromised at present.				
Actions <input type="checkbox"/> None <input type="checkbox"/> Maintenance <input checked="" type="checkbox"/> Monitoring <input type="checkbox"/> Engineering Notification/Work Order#					
Erosion Sediment Controls	Problems				
	<input type="checkbox"/> None	<input type="checkbox"/> Ditch Failure. <input type="checkbox"/> Ditch Washouts	<input type="checkbox"/> Debris <input checked="" type="checkbox"/> Sediment	<input type="checkbox"/> Berms <input type="checkbox"/> Bales/Waddles	<input type="checkbox"/> Other
	Observations				
	7. Erosion or sediment controls in good condition.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
	8. Drop inlet or other storm water controls structures in good repair.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA
9. Perimeter run-on and run-off diversion ditches present and in good repair.				<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NA	
Observations: A culvert on the north side of CCR Landfill had 6-8 inches of sediment (1/4 to 1/3 of culvert height) visible within a shovel length from the exit. Effort had been made to clean out the ends of the culvert, but AECOM recommends that additional maintenance be performed to better clear the culvert of sediment, particularly in the central portion of the culvert, between the upstream and downstream ends.					
Actions <input type="checkbox"/> None <input checked="" type="checkbox"/> Maintenance <input type="checkbox"/> Monitoring <input type="checkbox"/> Engineering Notification/Work Order#					



Annual Landfill Inspection Report

Issue Date: 8-24-2015
Form XXXXX Revision A

Page 2 of 2

Feature Name:
Hunter CCR Landfill

Feature ID:

Date:
September 2, 2020

Other	Observations	
	10. Temporary covers functioning as intended.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
	11. Storm water systems functioning as intended.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
	12. Any appearance of actual or potential structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the CCR landfill?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
	13. Other non-structural or non-emergency safety issues.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
Observations: Stagnant water/wetness observed in stilling basin, which may be coming from snowmelt and rainfall coming into diagonal cut in upstream inlet to spillway conduit. The water source is uncertain.		
Actions <input checked="" type="checkbox"/> None <input type="checkbox"/> Maintenance <input type="checkbox"/> Monitoring <input type="checkbox"/> Engineering Notification/Work Order#		

Inspector Signature *Bryan Frankel*

Date 09-02-2020