NCDENR
North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

John E. Skvarla, III
Secretary

September 30, 2014

NOTICE OF INSPECTION

Duke Energy Carolinas
Ms. Kimberlee Hutchinson, PE
PO Box 1006
Charlotte, North Carolina 28201

RE: Asheville 1982 Ash Pond (State ID No. – BUNCO-089)
Dam Hazard Potential: High; Buncombe County

Dear Ms. Hutchinson:

The Dam Safety Law of 1967 provides for the certification and inspection of dams in the public interest. Our records indicate you are the owner of the referenced dam, which was inspected by personnel of this office on August 27, 2014.

The inspection revealed the following conditions, which must be addressed and/or monitored:

- There was wetness noted on the right abutment at the toe and near the toe drains. It was noted that weirs were in place to monitor the flow from the dam through the toe drains. Excessive wetness/seepage can cause failure of the dam due to internal erosion and/or embankment sliding. You should continue to monitor and inspect these areas periodically and notify this office if wetness/seepage rate changes.
- Lime and fertilize sparse areas on the downstream slope as discussed during inspection.

In addition, we are still waiting for information requested in our August 6, 2014 Notice of Deficiency. These repair plans are due no later than October 13, 2014.

Please be advised that though we make every reasonable effort to determine the safety of your dam, our resources limit us to surficial inspection. There is no certainty regarding the internal stability of the dam. Dams, and especially their spillways and conduits, deteriorate with age.

Therefore, you are advised to keep a close watch on your dam and to notify this office if you detect any changes, especially cracks, ground movements, or changes in seepage rate or color.

During this inspection we also investigated the potential for property damage and loss of life in the event that the subject dam fails. This investigation determined that failure of the dam could result in damage to Interstate 26 and potential loss of life. Therefore, we continue to list this dam in the "High Hazard Potential" category. Please be advised that hazard classifications are subject to revision due to changes in downstream conditions and/or plant operating procedures.

Although the inspections by our staff are relatively infrequent and offer no absolute safety guarantees, we hope that you will use the information provided in this letter as you fulfill your obligation to safely maintain and operate your dam. In order to keep records up-to-date and serve you better, please notify this office concerning any changes in address or ownership. Your cooperation is appreciated.

As a dam owner, you may incur liability should your dam have a problem or fail, if such results in loss of life or property damage downstream. It is requested that you update the EAP on file dated September 2014, if any changes occur to the dam or downstream. Please update all downstream hazards and verify all contact information. North Carolina has recently completed and adopted an EAP template for owners of high hazard dams. The template and associated guidance can be obtained by visiting the Dam Safety Programs website (http://portal.ncdenr.org/web/lr/dams) or by calling Dam Safety Program staff at (919) 707-9220. All updated EAPs shall be in this required format. Two copies of the EAP should be submitted to the Division of Energy, Mineral, and Land Resources, Attn: Dam Safety Program, 1612 Mail Service Center, Raleigh, North Carolina 27699-1612.

If you have an emergency situation during non-office hours, you should notify the Division of Emergency Management's State Warning Point at 1-800-858-0368. They will notify the appropriate personnel in this office of the situation.

Should you have any questions concerning this inspection, please contact Fred Walker or me at (828) 296-4500.

Sincerely,

Laura C. Herbert, PE
Regional Engineer
Land Quality Section

[D] I SAFETY INSPECTION REP[O]RT

NAME	COUNTY	NO.	INSPECTED BY	DATE
1982 Ash Pond Dam	BUNCO	089	FLW, KH, MR	8/27/14
OWNER	**ADDRESS**			**PHONE**
Duke Energy Progress				

TYPE DAM: ☐ Concrete gravity ☒ Concrete arch ☐ Other; ☒ Embankment ☐ Concrete buttress ☐ Stone masonary

TYPE INSPECTION: ☐ Initial ☐ Followup ☒ Periodic ☐ Other

SITE CONDITIONS: ☐ Wet ☒ Dry ☐ Snowcover ☐ Other

HAZARD DESCRIPTION

HAZARD CLASS: ☐ Low (A) ☐ Intermediate (B) ☒ High (C)

REMARKS

Excavating ash from pond during inspection

ACTION: ☒ None ☐ Maintenance ☒ Monitoring ☐ Minor repair ☐ Engineering

RECOMMENDATIONS: ☒ Inspection letter ☐ Deficiency letter ☐ RE notice ☐ Engineering study ☐ Inspection by RE ☐ Inspection by DSE ☐ Dam safety order ☐ Enforcement ☐ Periodic reinspection ☐ Other reinspection

AREA	PROBLEMS	COMMENTS
UPSTREAM SLOPE / FACE	☒ 1.None ☐ 2.Trees ☐ 3.High bushes ☐ 4.Burrows ☐ 5.Wave erosion ☐ 6.Livestock damage ☐ 7.Slides ☐ 8.Depressions ☐ 9.Bulges ☐ 10.Sparse rip rap ☐ 11.Displaced rip rap ☐ 12.Cracks ☐ 13.Undermining ☐ 14.Holes ☐ 15.Spalling ☐ 16.Displaced joints ☐ 17.Deteriorated joints ☐ 18.Exposed reinforcement ☐ 19.Other	COVER: ☒ Vegetation ☒ Rip rap ☐ Concrete ☐ Asphalt ☐ Other
TOP OF DAM	☒ 1.None ☐ 2.Trees ☐ 3.High bushes ☐ 4.Burrows ☐ 5.Ruts ☐ 6.Livestock damage ☐ 7.Depressions ☐ 8.Unlevel ☐ 9.Misalignment ☐ 10.Has overtopped ☐ 11.Cracks ☐ 12.Spalling ☐ 13.Deteriorated joints ☐ 14.Displaced joints ☐ 15.Exposed reinforcement ☐ 16.Other	COVER: ☐ Vegetation ☒ Gravel ☐ Concrete ☐ Asphalt ☐ Other
DOWNSTREAM SLOPE / FACE	☐ 1.None ☐ 2.Trees ☐ 3.High bushes ☐ 4.Burrows ☐ 5.Erosion ☐ 6.Livestock damage ☐ 7.Slides ☐ 8.Depressions ☐ 9.Bulges ☐ 10.Wetness ☐ 11.Seepage ☐ 12.Boils ☐ 13.Cracks ☐ 14.Holes ☐ 15.Spalling ☐ 16.Displaced joints ☐ 17.Deteriorated joints ☐ 18.Exposed reinforcement ☒ 19.Other	COVER: ☒ Vegetation ☐ Rip rap ☐ Concrete ☐ Other Lime/fertilize areas on d/s slope, where vegetation is sparse.
TOE CONTACT	☐ 1.None ☐ 2.Trees ☐ 3.High bushes ☐ 4.Burrows ☐ 5.Erosion ☐ 6.Livestock damage ☐ 7.Slides ☐ 8.Depressions ☐ 9.Bulges ☒ 10.Wetness ☒ 11.Seepage ☐ 12.Boils ☐ 13.Cracks ☐ 14.Holes ☐ 15.Spalling ☐ 16.Displaced joints ☐ 17.Deteriorated joints ☐ 18.Exposed reinforcement ☐ 19.Undermining ☐ 20.Other	COVER: ☐ Vegetation ☐ Rip rap ☐ Concrete ☐ Other Wetness/seepage as noted in previous years inspections at toe near weir box.

AREA	PROBLEMS		COMMENTS
ABUTMENT CONTACTS	☒ 1.None	☐ 11.Seepage	COVER: ☒ Vegetation ☐ Rip rap ☐ Concrete ☐ Other
	☐ 2.Trees	☐ 12.Boils	
	☐ 3.High bushes	☐ 13.Cracks	
	☐ 4.Burrows	☐ 14.Holes	
	☐ 5.Erosion	☐ 15.Spalling	
	☐ 6.Livestock damage	☐ 16.Displaced joints	
	☐ 7.Slides	☐ 17.Deteriorated joints	
	☐ 8.Depressions	☐ 18.Exposed reinforcement	
	☐ 9.Bulges	☐ 19.Undermining	
	☐ 10.Wetness	☐ 20.Other	
PRINCIPAL SPILLWAY	☒ 1.None	☐ 11.Joint displacement	TYPE/SIZE: 30" concrete riser
	☐ 2.No trashguard	☐ 12.Undermined	
	☐ 3.Obstructed	☐ 13.Voids	
	☐ 4.Plugged	☐ 14.Erosion	
	☐ 5.Rusted	☐ 15.Holes	
	☐ 6.Damaged	☐ 16.Conduit collasped	
	☐ 7.Gates leaking	☐ 17.Spalling	
	☐ 8.Joints leaking	☐ 18.Outlet undercutting	
	☐ 9.Cracks	☐ 19.Misalignment	
	☐ 10.Joint deterioration	☐ 20.Other	
EMERGENCY SPILLWAY	☐ 1.None	☐ 11.Joint displacement	TYPE/SIZE:
	☐ 2.No ES	☐ 12.Undermining	
	☒ 3.Same as PS	☐ 13.Voids	
	☐ 4.Obstructed	☐ 14.Holes	
	☐ 5.Erosion	☐ 15.Exposed reinforcement	
	☐ 6.Displaced rip rap	☐ 16.Spalling	
	☐ 7.Sparse rip rap	☐ 17.Outlet erosion	
	☐ 8.Joints leaking	☐ 18.Misalignment	
	☐ 9.Cracks	☐ 19.Inadequate capacity	
	☐ 10.Joint deterioration	☐ 20.Other	
DRAINS / OTHER OUTLETS	☒ 1.None		TYPE: (2) 6" PVC to toe drains w/inverbox
	☐ 2.No bottom drain		R gauge = 0.17
	☐ 3.Bottom drain inoperable		L gauge = 0.07
	☐ 4.Subsurface drain dry		
	☐ 5.Subsurface drain muddy flow		
	☐ 6.Subsurface drain obstructed		
	☐ 7.No animal guard		
	☐ 8.Other		

SKETCHES/COMMENTS

Not a full inspection. Training for FLW.