

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Region 3 Sub-office

100 Hillside Avenue, Suite 1W, White Plains, NY 10603
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www.dec.ny.gov

March 11, 2022

Hudson National Golf Club
Attention: Theron Harvey, General Manager
40 Arrowcrest Dr
Croton on Hudson NY 10520

Re: Hudson National Golf Course Irrigation Pond Dam, DEC Dam ID#:214-5259
Class A – Low Hazard Dam
Croton-on-Hudson (V), Westchester County

Re: Hudson National Golf Course Detention Pond Dam, DEC Dam ID#:214-5260
Class A – Low Hazard Dam
Croton-on-Hudson (V), Westchester County

Re: Hudson National Golf Course Pond Dam #2, DEC Dam ID#:214-0644
Class A – Low Hazard Dam
Croton-on-Hudson (V), Westchester County

Dear Mr. Harvey:

I conducted routine visual inspections at the above referenced dams, all of them Low Hazard Dams, on January 3 and January 6, 2022 in response to a citizen's concern. I am writing to you as it is my understanding that you are, or represent, the owner of these structures, which are associated with Tax Parcel 67.15-1-4 in the Village of Croton-on-Hudson. Copies of my Visual Observations are enclosed for your information.

Inspection

The left/right nomenclature used in this letter and the enclosed Visual Observation Reports is based on looking downstream.

The Hudson National Golf Course (HNGC) Detention Pond and HNGC Pond Dam #2 are too overgrown with undesirable vegetation to properly inspect. The embankment should be always free of undesirable vegetation to allow for a proper inspection.

Concrete cracking was observed in the HNGC Irrigation and Detention Pond Dams with the weir and left spillway chute wall of the HNGC Detention Pond Dam separating. Also, the chute walls of the HNGC Detention Pond Dam were observed as tilting into the channel.



Department of
Environmental
Conservation

A wet area was observed at the spillway chute toe of the HNGC Irrigation and Detention Pond Dams. These wet areas should be monitored to observe if conditions change over time (e.g. flow rate, turbid water).

I recommend that you retain the services of a professional engineer licensed in New York State to assess the dams and plan for repairs. A permit may be needed to rehabilitate the dams.

Regulations

These dams are currently considered to be "Class A - Low Hazard" dams, which means that failure is unlikely to result in damage to anything more than isolated or unoccupied buildings, undeveloped lands, minor roads such as town or county roads; is unlikely to result in the interruption of important utilities, including water supply, sewage treatment, fuel, power, cable or telephone infrastructure; and/or is otherwise unlikely to pose the threat of personal injury, substantial economic loss or substantial environmental damage.

The revised Dam Safety regulations became effective on August 19, 2009, and the owners of Class A-Low Hazard dams are required to:

1. Operate and maintain the dam and all appurtenant structures in a safe condition at all times.
2. Maintain in good order all available records regarding the dam, and provide those records to any new owner.
3. Develop and implement an Inspection and Maintenance (I&M) Plan for each structure within 12 months of the effective date of these Regulations provided the dam meets the criteria set forth in 6 NYCRR Part 613.6 (a).

Please keep in mind that any repair or breaching activities related to the dam may require other permits from Department. Well before beginning work on the dams, please check to see if any permits are required by contacting the Regional Permit Administrator at the Department's Region 3 – New Paltz office at (845) 256-3059.

If you have any questions regarding the above or the Dam Safety program in general, please contact me at (914) 803-8143 or John Smith at (518) 408-0338.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Berhanu Gonfa', with a stylized flourish at the end.

Berhanu Gonfa, P.E.
Professional Engineer 1
Dam Safety Section

ec w/ encl: John Smith, P.E., Albany, Dam Safety Section
Katherine Coffin, New Paltz, Environmental Permits
Brian Pugh, Village of Croton-on-Hudson,
Mayorbpugh@crotononhudson-ny.gov
Guy Pardee, Hudson National Golf Course, Guypardee20@gmail.com

Hudson National Golf Club
Attention: Theron Harvey, General Manager
40 Arrowcrest Dr
Croton on Hudson NY 10520-1548
tharvey19@comcast.net

**New York State Department of Environmental Conservation
Bureau of Flood Protection and Dam Safety**



Visual Observations

DAM NAME Hudson National Golf Course Irrigation Pond Dam
STATE ID 214-5259 *SECTION* A *HAZARD CODE* A
COUNTY Westchester *INSPECTION DATE* 1/3/2022
NEAREST DS CITY/TOWN Croton-on-Hudson *INSPECTOR(S)* BXG
OWNER'S NAME HUDSON NATIONAL GOLF CLUB
DOWNSTREAM HAZARD Low *TOWNSHIP* Town of Cortlandt

WATER LEVEL BEHIND DAM ~1/2" below spillway crest

DRAIN OPERATION Not observed

DEFICIENCIES

<input checked="" type="checkbox"/> 1) Seepage	<input checked="" type="checkbox"/> 4) Maintenance	<input checked="" type="checkbox"/> 7) Cracking
<input type="checkbox"/> 2) Slope Stability	<input type="checkbox"/> 5) Surficial Deterioration	<input type="checkbox"/> 8) Movement/Misalignment
<input type="checkbox"/> 3) Undesirable Growth	<input type="checkbox"/> 6) Voids	<input type="checkbox"/> 9) Data

General:

Accompanied by staff from the Golf Course.

Crest:

Well mowed with grass cover

Spillway:

Vertical cracks along the spillway walls.

Depression behind left spillway wall.

Downstream:

Wet area at the toe of the spillway with orange floc



Photo 1 Dam ID# 214-5259 Hudson National Golf Course Irrigation Pond
Dam 01/03/2022
 Spillway Channel.



Photo 2 Dam ID# 214-5259 Hudson National Golf Course Irrigation Pond
Dam 01/03/2022
 Dam Crest



Photo 3 Dam ID# 214-5259 Hudson National Golf Course Irrigation Pond
Dam 01/03/2022
 Spillway looking upstream



Photo 4 Dam ID# 214-5259 Hudson National Golf Course Irrigation Pond
Dam 01/03/2022
 Upstream face



Photo 5 Dam ID# 214-5259 Hudson National Golf Course Irrigation Pond
Dam 01/03/2022
 Dam crest



Photo 5 Dam ID# 214-5259 Hudson National Golf Course Irrigation Pond
Dam 01/03/2022
 Downstream slope as observed from the right abutment



Photo 6 Dam ID# 214-5259 Hudson National Golf Course Irrigation Pond
Dam 01/03/2022
Service pillway channel looking upstream

**New York State Department of Environmental Conservation
Bureau of Flood Protection and Dam Safety**



Visual Observations

DAM NAME Hudson National Golf Course Detention Pond Dam
STATE ID 214-5260 *SECTION* A *HAZARD CODE* A
COUNTY Westchester *INSPECTION DATE* 1/6/2022
NEAREST DS CITY/TOWN Croton-on-Hudson *INSPECTOR(S)* BXG
OWNER'S NAME HUDSON NATIONAL GOLF CLUB
DOWNSTREAM HAZARD Low *TOWNSHIP*
WATER LEVEL BEHIND DAM Empty
DRAIN OPERATION Unknown

DEFICIENCIES

<input type="checkbox"/>	1) Seepage	<input checked="" type="checkbox"/>	4) Maintenance	<input checked="" type="checkbox"/>	7) Cracking
<input type="checkbox"/>	2) Slope Stability	<input type="checkbox"/>	5) Surficial Deterioration	<input checked="" type="checkbox"/>	8) Movement/Misalignment
<input checked="" type="checkbox"/>	3) Undesirable Growth	<input type="checkbox"/>	6) Voids	<input type="checkbox"/>	9) Data

General:

Assisted by Brett Scales, Golf Course Superintendent.
Too overgrown with brush to properly inspect.

Spillway

Depression along the left spillway side wall.
Concrete cracking in several spots. Sections of both walls tilting into the channel.
The left spillway wall and weir are separating.

Low Level Valve

Could not be found
Flow apparently exiting low level outlet observed at the downstream toe of the dam.



Photo 1 Dam ID# 214-5260 Hudson National Golf Course Detention Pond
Dam 01/06/2022
Dam crest looking toward the left abutment



Photo 2 Dam ID# 214-5260 Hudson National Golf Course Detention Pond
Dam 01/06/2022
Service spillway looking downstream



**Photo 3 Dam ID# 214-5260 Hudson National Golf Course Detention Pond
Dam 01/06/2022**
Downstream view of the spillway chute



**Photo 4 Dam ID# 214-5260 Hudson National Golf Course Detention Pond
Dam 01/06/2022**
Spillway inlet looking upstream



Photo 5 Dam ID# 214-5260 Hudson National Golf Course Detention Pond
Dam 01/06/2022
Spillway chute

**New York State Department of Environmental Conservation
Bureau of Flood Protection and Dam Safety**



Visual Observations

DAM NAME Hudson National Golf Course Pond No 2 Dam
STATE ID 214-6044 *SECTION* A *HAZARD CODE* A
COUNTY Westchester *INSPECTION DATE* 1/3/2022
NEAREST DS CITY/TOWN Croton-on-Hudson *INSPECTOR(S)* BXG
OWNER'S NAME HUDSON NATIONAL GOLF CLUB
DOWNSTREAM HAZARD Low *TOWNSHIP* Town of Cortlandt

WATER LEVEL BEHIND DAM ~1/2" below spillway crest

DRAIN OPERATION Not observed

DEFICIENCIES

<input type="checkbox"/>	1) Seepage	<input checked="" type="checkbox"/>	4) Maintenance	<input type="checkbox"/>	7) Cracking
<input type="checkbox"/>	2) Slope Stability	<input type="checkbox"/>	5) Surficial Deterioration	<input type="checkbox"/>	8) Movement/Misalignment
<input checked="" type="checkbox"/>	3) Undesirable Growth	<input type="checkbox"/>	6) Voids	<input checked="" type="checkbox"/>	9) Data

General:

The dam appears to be below dam safety permit thresholds.

Spillway:

Wooden log on the crest.

Upstream:

Masonry concrete wall along upstream face of the dam.

Downstream:

Brush and trees.



Photo 1 Dam ID# 214-6044 Hudson National Golf Course Pond No 2 Dam
01/03/2022
 Dam crest and downstream slope



Photo 2 Dam ID# 214-6044 Hudson National Golf Course Pond No 2 Dam
01/03/2022
 Dam crest



Photo Dam ID# 214-6044 Hudson National Golf Course Pond No 2 Dam
01/03/2022
Upstream face of the dam



Photo 4 Dam ID# 214-6044 Hudson National Golf Course Pond No 2 Dam
01/03/2022
Downstream view of the spillway.



Photo 5 Dam ID# 214-6044 Hudson National Golf Course Pond No 2 Dam
01/03/2022
Downstream face



Photo 6 Dam ID# 214-6044 Hudson National Golf Course Pond No 2 Dam
01/03/2022
Downstream slope