

March 8, 2021

Ref: 42569.00

Aaron Svedlow Gravel Pit Solar, LLC 1166 Avenue of the Americas, 9<sup>th</sup> Floor New York, NY 10036

Re: CTDEEP Dam Safety Determination Docket #492 – Gravel Pit Solar Apothecaries Hall Road & Plantation Road, CT

Dear Mr. Svedlow:

This letter is written in reference to Condition #2(i) of the Decision & Order (D&O) of the abovereferenced Application. Correspondence to CTDEEP Dam Safety Division began with an email from VHB on November 9, 2020 and, following back and forth emails, concluded with an email from CTDEEP Dam Safety Division on January 20, 2021. In this email from Ivonne Hall, Supervising Civil Engineer, it is stated that the department intends to follow Connecticut General Statute Section 22a-409(c) regarding solar development projects, which indicates that dams impounding less than three (3) acre-feet of water are a negligible hazard downstream and are exempt from dam inspection.

We have enclosed a copy of the email correspondence with CTDEEP Dam Safety Division with this letter for reference, and also have provided herewith a table of the proposed stormwater basins' criteria for the Gravel Pit Solar site plans revised through February 16, 2021. No proposed stormwater basin exceeds three (3) acre-feet of impounded water as indicated. We trust that this satisfactorily concludes the necessary correspondence with this department unless proposed conditions are altered to necessitate a new determination.

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<u>Basin #</u>	Lowest Existing Grade @ Berm	Proposed Grade of Spillway Crest	Maximum Height of Impoundment	<u>Volume of</u> Impounded Water
1	±160.0	163.0	±3.0 feet	±0.6 acre-feet
2	±161.0	161.0	±0 feet	±0 acre-feet
3	N/A	N/A	N/A	N/A
4	±162.0	162.0	±0 feet	±0 acre-feet
5	±165.0	165.0	±0 feet	±0 acre-feet
6	±163.0	163.0	±0 feet	±0 acre-feet
7	N/A	N/A	N/A	N/A
8	±163.0	163.0	±0 feet	±0 acre-feet
10	N/A	N/A	N/A	N/A
11	N/A	N/A	N/A	N/A
11A	N/A	N/A	N/A	N/A
12	N/A	N/A	N/A	N/A
13	N/A	N/A	N/A	N/A
15	N/A	N/A	N/A	N/A
16	N/A	N/A	N/A	N/A
17	±160.0	162.0	±2.0 feet	±0.6 acre-feet
19	±152.0	155.0	±3.0 feet	±1.8 acre-feet
20	±159.0	159.0	±0 feet	±0 acre-feet
21	±144.0	147.0	±3.0 feet	±1.0 acre-feet
22	±134.5	134.5	±0 feet	±0 acre-feet
24	±139.0	139.0	±0 feet	±0 acre-feet
25	±166.5	166.5	±0 feet	±0 acre-feet
27	±167.0	168.0	±1.0 feet	±0.1 acre-feet
28	N/A	N/A	N/A	N/A
29	N/A	N/A	N/A	N/A
30	N/A	N/A	N/A	N/A
31	N/A	N/A	N/A	N/A
33	±153.5	153.5	±0 feet	±0 acre-feet
34	N/A	N/A	N/A	N/A
35	N/A	N/A	N/A	N/A
36	±161.0	161.0	±0 feet	±0 acre-feet
37	±166.5	166.5	±0 feet	±0 acre-feet
38	±164.5	164.5	±0 feet	±0 acre-feet
39	±165.5	165.5	±0 feet	±0 acre-feet
40	±161.5	161.5	±0 feet	±0 acre-feet
41	±161.0	161.0	±0 feet	±0 acre-feet
42	±161.0	161.0	±0 feet	±0 acre-feet
43	±162.0	162.0	±0 feet	±0 acre-feet

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44	N/A	N/A	N/A	N/A
Basin #	Lowest Existing	Proposed Grade of	Maximum Height	<u>Volume of</u>
	Grade @ Berm	Spillway Crest	of Impoundment	Impounded Water
45	N/A	N/A	N/A	N/A
46	±149.0	149.0	±0 feet	±0 acre-feet
47	±117.5	121.5	±4.0 feet	±0.8 acre-feet
48	±121.5	125.5	±4.0 feet	±0.5 acre-feet
49	±127.0	131.5	±4.5 feet	±0.4 acre-feet
50	±133.0	137.5	±4.5 feet	±0.6 acre-feet
51	±140.0	145.0	±5.0 feet	±0.3 acre-feet
53	±113.0	117.5	±4.5 feet	±0.6 acre-feet
54	±108.0	111.5	±3.5 feet	±0.9 acre-feet
55	±143.0	143.0	±0 feet	±0 acre-feet
56	±144.0	144.0	±0 feet	±0 acre-feet
57	±133.0	137.0	±4.0 feet	±0.1 acre-feet
58	±121.5	125.5	±4.0 feet	±0.3 acre-feet
59	±129.5	133.5	±4.0 feet	±0.3 acre-feet
60	±137.0	141.5	±4.5 feet	±0.1 acre-feet
62	±139.5	143.5	±4.0 feet	±0.4 acre-feet
64	±159.0	159.0	±0 feet	±0 acre-feet
65	±159.0	159.0	±0 feet	±0 acre-feet
66	±157.0	157.0	±0 feet	±0 acre-feet
67	N/A	N/A	N/A	N/A
68	N/A	N/A	N/A	N/A
69	N/A	N/A	N/A	N/A
70	N/A	N/A	N/A	N/A
71	±179.3	179.3	±0 feet	±0 acre-feet
72	N/A	N/A	N/A	N/A
73	±154.0	154.0	±0 feet	±0 acre-feet
74	N/A	N/A	N/A	N/A
74A	±133.5	133.5	±0 feet	±0 acre-feet
75	N/A	N/A	N/A	N/A

Sincerely,

Steven D. Kochis

Steven J. Kochis, PE Senior Project Engineer

# **Kochis, Steve**

From:	Hall, lvonne <lvonne.hall@ct.gov></lvonne.hall@ct.gov>
Sent:	Wednesday, January 20, 2021 8:52 AM
То:	Kochis, Steve; Laskin, Anna
Cc:	jp La Marche; Parekh, Kartik; Lee, Charles; Perry, Jennifer; Fontanella, Camille; Hall,
	Ivonne
Subject:	RE: [External] RE: Request for Dam Safety Determination - Waterford Solar, Waterford,
	CT & Gravel Pit Solar, East Windsor, CT

Good Morning Steve—just to clarify, this is not a regulation change. We have made this determination after reviewing our existing statute, Connecticut General Statute Section 22a-409(c), which indicates that dams impounding less than 3 acre-feet are a negligible hazard downstream and are exempt from dam inspection.

### Jvonne

Ivonne Grajko Hall, P.E. Supervising Civil Engineer Dam Safety Program Water Planning & Management Division Bureau of Water Protection & Land Reuse Connecticut Department of Energy and Environmental Protection 79 Elm Street, Hartford, CT 06106-5127 P: 860.424.3754 | E: <u>Ivonne.hall@ct.gov</u> <u>https://portal.ct.gov/DEEP/Water/Dams/Dams-Safety</u> https://portal.ct.gov/DEEP/Water/Dams/State-Dams-and-Dam-Safety



Connecticut Department of

ENERGY & ENVIRONMENTAL P R O T E C T I O N

www.ct.gov/deep

From: Kochis, Steve <skochis@VHB.com>
Sent: Tuesday, January 19, 2021 9:43 PM
To: Laskin, Anna <Anna.Laskin@ct.gov>
Cc: Hall, Ivonne <Ivonne.Hall@ct.gov>; jp La Marche <jean-paul.lamarche@cleanfocus.us>; Parekh, Kartik
<Kartik.Parekh@ct.gov>; Lee, Charles <Charles.Lee@ct.gov>
Subject: RE: [External] RE: Request for Dam Safety Determination - Waterford Solar, Waterford, CT & Gravel Pit Solar, East Windsor, CT

EXTERNAL EMAIL: This email originated from outside of the organization. Do not click any links or open any attachments unless you trust the sender and know the content is safe.

Thank you Anna and Ivonne for all your assistance over the past few projects, and for letting us know about this regulation change. I am assuming that this email satisfactorily completes our correspondence with you as I am

fairly sure we aren't proposing any stormwater basins on either of these 2 projects which exceeds 3 acre-feet of inundated water.

I'd be pleased to put together and send a table of the maximum water impoundment levels of all proposed basins for each project if you would need or like this data as proof. Otherwise, I'll conduct my own personal analysis on behalf of VHB and ensure we are below these thresholds, or of course be back to you guys if we do have a basin of that magnitude.

Thanks again.

#### **Steve Kochis, PE** Senior Project Engineer

**P** 860.807.4375 www.vhb.com

From: Laskin, Anna <<u>Anna.Laskin@ct.gov</u>>
Sent: Friday, January 15, 2021 8:41 AM
To: Kochis, Steve <<u>skochis@VHB.com</u>>
Cc: Hall, Ivonne <<u>Ivonne.Hall@ct.gov</u>>; jp La Marche <<u>jean-paul.lamarche@cleanfocus.us</u>>; Parekh, Kartik
<<u>Kartik.Parekh@ct.gov</u>>; Lee, Charles <<u>Charles.Lee@ct.gov</u>>
Subject: [External] RE: Request for Dam Safety Determination - Waterford Solar, Waterford, CT & Gravel Pit
Solar, East Windsor, CT

Good morning, Steve.

We have received new guidance on when new solar power development proposals should be submitted to the DEEP Dam Safety program for permit need determination review. Solar sites' stormwater basins that are designed to impound less than 3 acre-feet of water at maximum storage elevation (assume water level at the crest of the dam) would not need a DEEP Dam Safety Permit to construct. Please check with the local inland wetlands agency for permit requirements.

Stormwater basins that are designed to store more than 3 acre-feet of water will require dam breach inundation mapping showing the extent of the inundation area in relation to the downstream infrastructure. This information must be submitted to the DEEP Dam Safety Program as part of the permit need determination request.

This determination applies to the stormwater basins associated with construction of both the Waterford Solar and Gravel Pit Solar projects as well as any future stormwater basins associated with development of new solar power sites. Once the dams are constructed you must contact the DEEP Dam Safety Program to receive dam registration forms and have the dams registered with the State.

Please feel free to contact me or my supervisor, Ivonne Hall at Ivonne.Hall@ct.gov if you have any questions.

Anna

Anna Laskin, Civil Engineer Connecticut Department of Energy and Environmental Protection Bureau of Water Protection and Land Re-Use Water Planning and Management Division 79 Elm Street, Hartford, CT 06106-5127

# **Kochis**, Steve

From:	Kochis, Steve
Sent:	Monday, November 9, 2020 11:27 AM
То:	Hall, Ivonne; Laskin, Anna
Cc:	Aaron Bertrand-Svedlow; Aileen Kenney; Jon Gravel (jon@northlightsolar.com); Moberg,
	Sue
Subject:	Dam Safety Determination Request - Gravel Pit Solar, East Windsor, CT

Hi Ivonne & Anna,

We are interested in seeking a determination on each of the permanent stormwater basins for our Gravel Pit Solar project in East Windsor, CT. Due to file size, I have uploaded all the pertinent available documents for your review to Box and provided a link below. Let me know if you have any issues downloading these reference files or need anything further.

For the benefit of your review, here is a description of each of the "Basin Types" we are proposing for the project (refer to file Basin Designations).

- Sediment Trap Typically a standard infiltration basin, with low fill berms proposed and primarily excavation.
- Farm Depression Existing depressions with the farm fields which we anticipate should not be classified as dams due to not having a fill berm.
- Kettle Hole Existing woodland depressions which we anticipate should not be classified as dams due to not filling up for a 100-year event, and not having a fill berm.
- Valley Berm Proposed low berms within existing glacial valleys.

#### https://app.box.com/s/n6utbvq2828sperap9otkb9si2vg9euz

Thank you as always for your assistance in the matter and feel free to reach out with any questions.

**Steve Kochis, PE** Senior Project Engineer



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