NEW YORK STATE DEPARTMENT OF STATE
COASTAL MANAGEMENT PROGRAM

Federal Consistency Assessment Form

An applicant, seeking a permit, license, waiver, certification or similar type of approval from a federal agency which is subject to the New York State Coastal Management Program (CMP), shall complete this assessment form for any proposed activity that will occur within and/or directly affect the State's Coastal Area. This form is intended to assist an applicant in certifying that the proposed activity is consistent with New York State's CMP as required by U.S. Department of Commerce regulations (15 CFR 930.57). It should be completed at the time when the federal application is prepared. The Department of State will use the completed form and accompanying information in its review of the applicant's certification of consistency.

A. APPLICANT (please print)

1. Name: Clinton Yacht Haven, Inc.

2. Address: 70 Riverside Drive, Clinton, CT 06413

3. Telephone: Area Code (860) 819-7470

B. PROPOSED ACTIVITY

1. Brief description of activity:

Maintenance dredge by clamshell bucket a total of approximately 24,950 cubic yards of material from an approximately 239,300 square foot authorized navigation channel comprised of four sections of the following authorized dimensions and dredge depths: a 50' x 1,000' channel side basin section authorized to a depth of -6.0' MLW (+1' overdredge), a 60' x 2,280' channel section in the creek authorized to a depth of -6.0' MLW (+1' overdredge), a 150' x 550' section in the Hammonasset River and a 50' x 400' section extending south into the river, both authorized to a depth -9.0' MLW (+1' overdredge), and dispose of the material at the Central Long Island Sound

2. Purpose of activity:

To allow for the continued navigation to and from the applicant's authorized basin.

3. Location of activity:

Middlesex	Clinton	70 Riverside Drive
County	City, Town, or Village	Street or Site Description

4. Type of federal permit/license required: Programmatic General Permit

5. Federal application number, if known: To Be Determined

6. If a state permit/license was issued or is required for the proposed activity, identify the state agency and provide the application or permit number, if known:

Certificate of Permission from the CT Department of Energy & Environmental Protection

C. COASTAL ASSESSMENT Check either "YES" or "NO" for each of these questions. The numbers following each question refer to the policies described in the CMP document (see footnote on page 2) which may be affected by the proposed activity.

1. Will the proposed activity result in any of the following:	YES	NO
a. Large physical change to a site within the coastal area which will require the preparation of an environmental impact statement? (11, 22, 25, 32, 37, 38, 41, 43)	☐	☒
b. Physical alteration of more than two acres of land along the shoreline, land under water or coastal waters? (2, 11, 12, 20, 28, 35, 44)	☐	☒
c. Revitalization/redevelopment of a deteriorated or underutilized waterfront site? (1)	☐	☒
d. Reduction of existing or potential public access to or along coastal waters? (19, 20)	☐	☒
e. Adverse effect upon the commercial or recreational use of coastal fish resources? (9,10)	☐	☒
f. Siting of a facility essential to the exploration, development and production of energy resources in coastal waters or on the Outer Continental Shelf? (29)	☐	☒
g. Siting of a facility essential to the generation or transmission of energy? (27)	☐	☒
h. Mining, excavation, or dredging activities, or the placement of dredged or fill material in coastal waters? (15, 35)	☐	☒
i. Discharge of toxics, hazardous substances or other pollutants into coastal waters? (8, 15, 35)	☐	☒
j. Draining of stormwater runoff or sewer overflows into coastal waters? (33)	☐	☒
k. Transport, storage, treatment, or disposal of solid wastes or hazardous materials? (36, 39)	☐	☒
l. Adverse effect upon land or water uses within the State's small harbors? (4)	☐	☒

2. Will the proposed activity affect or be located in, on, or adjacent to any of the following:	YES	NO
a. State designated freshwater or tidal wetland? (44)	☐	☒
b. Federally designated flood and/or state designated erosion hazard area? (11, 12, 17,)	☐	☒
c. State designated significant fish and/or wildlife habitat? (7)	☐	☒
d. State designated significant scenic resource or area? (24)	☐	☒
e. State designated important agricultural lands? (26)	☐	☒
f. Beach, dune or barrier island? (12)	☐	☒
g. Major ports of Albany, Buffalo, Ogdensburg, Oswego or New York? (3)	☐	☒
h. State, county, or local park? (19, 20)	☐	☒
i. Historic resource listed on the National or State Register of Historic Places? (23)	☐	☒

3. Will the proposed activity require any of the following:	YES	NO
a. Waterfront site? (2, 21, 22)	☐	☒
b. Provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (5)	☐	☒
c. Construction or reconstruction of a flood or erosion control structure? (13, 14, 16)	☐	☒
d. State water quality permit or certification? (30, 38, 40)	☐	☒
e. State air quality permit or certification? (41, 43)	☐	☒

4. Will the proposed activity occur within and/or affect an area covered by a State approved local waterfront revitalization program? (see policies in local program document)	☐	☒

D. ADDITIONAL STEPS

1. If all of the questions in Section C are answered "NO", then the applicant or agency shall complete Section E and submit the documentation required by Section F.

2. If any of the questions in Section C are answered "YES", then the applicant or agent is advised to consult the CMP, or where appropriate, the local waterfront revitalization program document*. The proposed activity must be analyzed in more detail with respect to the applicable state or local coastal policies. On a separate page(s), the applicant or agent shall: (a) identify, by their policy numbers, which coastal policies are affected by the activity, (b) briefly assess the effects of the activity upon the policy; and, (c) state how the activity is consistent with each policy. Following the completion of this written assessment, the applicant or agency shall complete Section E and submit the documentation required by Section F.

E. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with the State's CMP or the approved local waterfront revitalization program, as appropriate. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State's approved Coastal Management Program, or with the applicable approved local waterfront revitalization program, and will be conducted in a manner consistent with such program."

Applicant/Agent's Name: Coastline Consulting & Development, LLC

Address: 57-B East Industrial Road, Branford, CT

Telephone: Area Code (203) 433-4486

~~Applicant~~/Agent's Signature: _____ Date: 6-17-16

F. SUBMISSION REQUIREMENTS

1. The applicant or agent shall submit the following documents to the **New York State Department of State, Office of Coastal, Local Government and Community Sustainability, Attn: Consistency Review Unit, 1 Commerce Plaza, 99 Washington Avenue - Suite 1010, Albany, New York 12231.**

a. Copy of original signed form.
b. Copy of the completed federal agency application.
c. Other available information which would support the certification of consistency.

2. The applicant or agent shall also submit a copy of this completed form along with his/her application to the federal agency.

3. If there are any questions regarding the submission of this form, contact the Department of State at (518) 474-6000.

*These state and local documents are available for inspection at the offices of many federal agencies, Department of environmental Conservation and Department of State regional offices, and the appropriate regional and county planning agencies. Local program documents are also available for inspection at the offices of the appropriate local government.

Clinton Yacht Haven
Channel Maintenance Dredging Project
Spoil Disposal Alternatives Analysis

The Federal Marine Protection, Research and Sanctuaries Act of 1972 specifies that proposed dumping of dredged material must be evaluated using criteria published in the EPA Regulations at 40 CFR 220-228. Part of the evaluation includes an analysis of disposal alternatives. Subpart C of Part 227, Criteria for the Evaluation of Permit Applications, lists the factors to be considered in an alternatives analysis, including the consideration of beneficial disposal alternatives such as landfill capping and re-use of material.

The following disposal alternatives analysis has been prepared in accordance with the EPA criteria. It presents and describes a full-range of disposal options for the dredged material and identifies those options determined to be the most practicable, feasible, and cost-effective.

The options considered in the dredged material disposal analysis fall into one of three general categories: 1) Beneficial use, 2) Upland disposal, or 3) Ocean disposal. In each case, the feasibility of the alternative was analyzed relative to the quality of the dredged material, the volume of the dredged material, and the availability of a suitable disposal site.

Beneficial Use
Coastline Consulting & Development, LLC reviewed the possible beneficial use options considered for the Clinton Yacht Haven project including re-use on-site, beach nourishment, and landfill capping.

- ***Re-use On-Site*** - The area surrounding the Clinton Yacht Haven property consists of the parking/winter storage areas and facilities buildings. There is no need or opportunity for re-use of the dredged material on-site.

- ***Beach Nourishment*** - Coastline Consulting & Development, LLC also looked at the potential of beach re-nourishment as a potential disposal alternative for the dredge material. However, the material in the channel footprints contains primarily fine silt, which is not suitable for beach nourishment. As a result, beach nourishment was dismissed as a viable disposal option for the material.

- ***Landfill Capping*** - The last beneficial use alternative looked at was using the material as landfill cap. However, landfill capping typically requires fine clays. Because the dredged material from this project is predominately fine marine silt and sand, it would not be suitable for landfill capping.

Upland Disposal

Coastline Consulting & Development, LLC looked into the potential for upland disposal of the project dredge material. The two upland disposal options considered for this project were disposal at an upland onsite location and disposal at a municipal landfill.

- ***Upland Onsite Disposal*** - Our evaluation indicates that an upland on-site location is not a feasible option for disposal of dredged sediments from the Clinton Yacht Haven dredging project. As stated above, the upland of the site contains the parking/winter storage areas and facilities buildings. As such, the site has neither the capacity to store nor the need to utilize the dredge material. As a result, upland onsite disposal is not being considered a feasible alternative.

- ***Municipal Landfill Disposal*** - In order to evaluate the potential for upland disposal at a municipal landfill, the Solid Waste Unit of DEEP was contacted to obtain a listing of Regional Solid Waste Leachate Disposal Facilities which are permitted to accept dredged sediments for disposal. The disposal facility is located in or operated by the Town of Manchester.

  Our discussion with this facility indicates that they all require the dredge sediments be de-watered prior to disposal at a landfill. Sediments dredged from the proposed dredge footprints would have to be removed from barges and dried at an upland location. Upon drying, sediments would then be loaded and trucked to the landfill site. The costs associated with landfill disposal stem from tipping fees ($85/ton) and trucking costs ($100/hr). Transportation of sediments from the Clinton Yacht Haven property to an upland solid waste disposal facility would cause traffic impacts in the Town of Clinton. Given a typical truck capacity of approximately 15 cubic yards, the transportation of 24,950 cubic yards of sediment would involve approximately 1,663 truck trips to and from the site.

  Upon a detailed review, the landfill disposal option was determined to not be feasible for the Clinton Yacht Haven project due to the following reasons:

  1. Costs associated with de-watering.
  2. Lack of upland de-watering area.
  3. Trucking, tipping fees, and the quantity of material to be dredged.
  4. Negative environmental/air quality impacts from diesel exhaust.
  5. Traffic impacts in Clinton and the disposal town location.
  6. Additional permitting time.
  7. Additional analytical testing costs.

Ocean Disposal

The last disposal option considered for this project was in-water disposal, consisting of either near-shore disposal or disposal at the Central Long Island Sound Disposal Site.

- ***Near Shore Disposal*** – The typical purpose of near shore disposal is to replenish sand and beach systems through dispersal of deposited sand by tides and currents. However, the dredged material is composed primarily of fine marine silts and, therefore, would be undesirable for such a purpose.

- ***Ocean Disposal*** - Ocean disposal of the material at the Central Long Island Sound Disposal Site is an additional option for the disposal of dredged sediments from this project. Previous authorizations for dredging at this site have allowed for disposal at this open water site.

Recommended Spoil Disposal Method

Based on the disposal alternatives analysis presented above, the most feasible, practicable and environmentally acceptable option for disposal of the dredging materials from the Clinton Yacht Haven project is ocean disposal of the material the Central Long Island Sound Disposal Site. The other considered alternatives were determined not to be feasible either due to the physical characteristics of the dredged material, the quantity of the dredged material, cost, travel distance, or the lack of a suitable disposal site.

CENAE–R-P-MAS 22 July 2016

Memorandum Thru:

Ruth M. Ladd, Chief, Policy Analysis and Technical Support Branch

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For: Diane M. Ray, Project Manager, CENAE-R-B

Subject: Suitability Determination for Clinton Yacht Haven Marina, Hammonasett River, Clinton, Connecticut, File Number NAE-2008-2993.

1. **Summary:**

Based on an evaluation of the data that characterize the material proposed to be dredged, this memorandum addresses the suitability of that material for disposal as proposed in accordance with applicable regulations. The Marine Analysis Section (MAS) finds that the data provide sufficient information to satisfy the evaluation and testing requirements of the appropriate regulations. These sediments are suitable for unconfined open water disposal at the Central Long Island Sound Disposal Site (CLDS) as proposed.

2. **Project Description:**

The applicant is proposing to dredge an area of approximately 239,900 sq. ft. in Clinton, CT to depths of -6 and -9 ft. MLW, respectively. Approximately 24,900 cu. yds. of material will be removed. Clinton Yacht Haven Marina proposes to mechanically dredge and dispose of this material at the CLDS. This area was last dredged three years ago.

3. **Sampling and Testing:**

MAS prepared a sampling plan for this project on 25 April 2016. The plan called for seven cores (CYH-1 through CYH-7) to be taken from the project area. Bulk sediment chemistry analyses were conducted on each individual core sample.

Comparison to CLDS Reference Values

Metals: In all of the project sediment samples, the metal concentrations were below or near the means plus twice the standard deviations of the contaminant concentrations found at the CLDS reference site. See the attached spreadsheets for details.

PAHs: In all of the project sediment samples, the PAH concentrations were below or near the means plus twice the standard deviations of the contaminant concentrations found at the CLDS reference site. See the attached spreadsheets for details.

4. **Regulations governing the determination of the suitability of dredged material for open-water disposal:**

The disposal seaward of the high tide line in Long Island Sound of less than 25,000 cubic yards of dredged material from private projects is regulated under Section 404 of the Clean Water Act (CWA).

Subpart G of the Section 404(b)(1) guidelines (40 CFR Section 230.60 and 230.61) describes the procedures for determining the suitability of this material for open-water disposal, including any relevant testing that may be required.

40 CFR 230.60 General Evaluation of Dredged or Fill Material

(a) This subsection states that further testing may not be necessary if it could be determined with the evaluation under paragraph (b) that the sediment is not a carrier of contaminants. Dredged or fill material is most likely to be free from pollutants when it is composed primarily of sand, gravel or other naturally occurring inert material. Based upon our Tier 1 review, the proposed dredge sediment is **not** primarily sand, gravel or other inert material so this subsection does **not** apply.

(b) This subsection states that the site should be evaluated to determine whether it is sufficiently removed from sources of pollution. These factors include records of spills or potential routes of contamination, like outfall pipes. The applicant reports that there are no outfalls located on the site nor have any known spills occurred within the vicinity of the project site.

(c) This subsection states that further testing may not be necessary if certain conditions and circumstances make it unlikely that the dredged material would degrade the disposal site. For the project to meet this exclusion, the material to be dredged and the material at the disposal site must be adjacent to each other **and** composed of the same materials **and** subject to the same sources of contaminants. As the project site is not adjacent to the disposal site, this exclusion does not apply to this project.

(d) This subsection states that further testing may not be necessary if the material to be dredged is constrained, both to reduce contamination within the disposal site and to prevent transport of contaminants beyond the boundaries of the disposal site. As such constraints in handling are not proposed, this subsection does not apply.

40 CFR 230.61 Chemical, Biological and Physical Evaluation and Testing

(a) This subsection describes the purpose of Part 230.61 and does not give any criteria for the evaluation of sediments.

(b) This subsection states that dredged material may be excluded from testing for water column effects and benthic bioassays if it is determined, by evaluation under 40 CFR Part 230.60, that the likelihood of contamination levels that could exert ecological impacts (as defined in Part 230.61) is acceptably low. Such testing is not needed, as it was determined, based on evaluation under Part 230.61(c), that the likelihood of contamination is low.

(c) This subsection states that an inventory of the concentrations of the contaminants of concern would aid in an environmental assessment of the impact of their disposal on the designated disposal site. Such an inventory was performed at the dredge site. See Section 3 above and the attached spreadsheets for details. The dredged materials should have minimal at the disposal site.

CENAE and the federal agencies did not think an analysis of biological community structure was needed for this project.

(d) This subsection states the importance of the disposal of dredged materials on the characteristics of the physical substrate. MAS determined that the likelihood of physical effects from the disposal of the dredged material at the disposal site should be minimal. Although some benthic marine organisms will be buried by the disposal of the project materials, the disposal site should be rapidly re-colonized.

5. Copies of this determination were sent to the USEPA and the CTDEEP. Neither the USEPA nor the CTDEEP responded within the 10 business day review period and their concurrence is assumed.

6. If you have any questions, please contact me at (978) 318-8495 or christopher.l.veinotte@usace.army.mil.

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CHRISTOPHER L. VEINOTTE
Project Manager
Marine Analysis Section

Pollutant concentrations comparisons
NAE-2008-2993
Clinton Yacht Haven Marina

Sample Site	CLDS	CYH-1				CYH-2				CYH-3				CYH-4				CYH-5				CYH-6				CYH-7			
Metals (ppm)	**mean + 2sd**	**Raw Data**	**Qualifier**		**Compare**	**Raw Data**	**Qualifier**		**Compare**	**Raw Data**	**Qualifier**		**Compare**	**Raw Data**	**Qualifier**		**Compare**	**Raw Data**	**Qualifier**		**Compare**	**Raw Data**	**Qualifier**		**Compare**	**Raw Data**	**Qualifier**		**Compare**
Arsenic	6.3	10.7		*	1.6984127	10.4		*	1.6507937	8.4		*	1.3333333	10.2		*	1.6190476	9.7		*	1.5396825	11.9		*	1.8888889	8.8		*	1.3968254
Cadmium	0.28	0.14		OK	0.5	0.14		OK	0.5	0.14		OK	0.5	0.14		OK	0.5	0.14		OK	0.5	0.14		OK	0.5	0.14		OK	0.5
Chromium	45.1	30		OK	0.6651885	28.2		OK	0.6252772	19.3		OK	0.4279379	25.4		OK	0.5631929	21.6		OK	0.4789357	32.6		OK	0.7228381	19.4		OK	0.4301552
Copper	42.1	77.6		*	1.8432304	44.1		*	1.0475059	20.2		OK	0.47981	40.2		OK	0.9548694	32.8		OK	0.7790974	63.1		*	1.4988124	13.8		OK	0.327791
Mercury	0.165	0.11		OK	0.6666667	0.1		OK	0.6060606	0.1		OK	0.6060606	0.12		OK	0.7272727	0.08		OK	0.4848485	0.12		OK	0.7272727	0.02		OK	0.1212121
Nickel	41	30.7		OK	0.7487805	20.7		OK	0.504878	15.6		OK	0.3804878	16.8		OK	0.4097561	16.8		OK	0.4097561	23.4		OK	0.5707317	17.9		OK	0.4365854
Lead	82.2	22.5		OK	0.2737226	20.8		OK	0.2530414	14.7		OK	0.1788321	21.9		OK	0.2664234	16		OK	0.1946472	24.4		OK	0.296837	9.7		OK	0.1180049
Zinc	181	152		OK	0.839779	95.3		OK	0.5265193	49.2		OK	0.2718232	109		OK	0.6022099	70		OK	0.3867403	116		OK	0.640884	39.6		OK	0.2187845
% fines		96.5				99.6				88.5				87.4				92.8				98.2				81.6			
PAHs (ppb)																													
Fluorene	20	10	2.2727273	OK	0.1136364	7	1.4583333	OK	0.0729167	10	3.0864198	OK	0.154321	91	23.096447	*	1.1548223	4	1.44144	OK	0.0720721	6	1.5564202	OK	0.077821	10	2.8050491	OK	0.1402525
Phenanthrene	183	39	8.8636364	OK	0.0484352	89	18.541667	OK	0.1013206	17	5.2469136	OK	0.0286717	91	23.096447	OK	0.1262101	34	12.2523	OK	0.0669522	71	18.417639	OK	0.1006428	41	11.500701	OK	0.0628454
Anthracene	56	8	1.8181818	OK	0.0324675	18	3.75	OK	0.0669643	8	2.4691358	OK	0.0440917	18	4.5685279	OK	0.0815809	8	2.88288	OK	0.0514801	13	3.3722438	OK	0.0602186	7	1.9635344	OK	0.0350631
Naphthalene	94	47	10.681818	OK	0.1136364	12	2.5	OK	0.0265957	47	14.506173	OK	0.154321	9	2.284264	OK	0.0243007	6	2.16216	OK	0.0230017	10	2.5940337	OK	0.0275961	47	13.183731	OK	0.1402525
Acenaphthylene	39	12	2.7272727	OK	0.0699301	15	3.125	OK	0.0801282	9	2.7777778	OK	0.0712251	13	3.2994924	OK	0.0846024	14	5.04505	OK	0.1293601	136	35.278859	*	0.9045861	19.5	5.4698457	OK	0.1402525
Acenaphthene	12	6	1.3636364	OK	0.1136364	6	1.25	OK	0.1041667	6	1.8518519	OK	0.154321	6	1.5228426	OK	0.1269036	6	2.16216	OK	0.1801802	6	1.5564202	OK	0.1297017	6	1.6830295	OK	0.1402525
Fluoranthene	320	122	27.727273	OK	0.0866477	191	39.791667	OK	0.124349	53	16.358025	OK	0.0511188	161	40.862944	OK	0.1276967	97	34.955	OK	0.1092342	151	39.169909	OK	0.122406	54	15.147265	OK	0.0473352
Pyrene	459	103	23.409091	OK	0.0510002	185	38.541667	OK	0.0839688	53	16.358025	OK	0.0356384	134	34.010152	OK	0.0740962	85	30.6306	OK	0.0667334	146	37.872892	OK	0.0825117	53	14.86676	OK	0.0323895
Benzo(a)anthracene	194	38	8.6363636	OK	0.0445173	60	12.5	OK	0.064433	23	7.0987654	OK	0.0365916	47	11.928934	OK	0.0614894	39	14.0541	OK	0.0724436	51	13.229572	OK	0.0681937	29	8.1346424	OK	0.0419311
Chrysene	217	67	15.227273	OK	0.0701718	103	21.458333	OK	0.0988863	35	10.802469	OK	0.049781	74	18.781726	OK	0.0865517	67	24.1441	OK	0.1112633	92	23.86511	OK	0.1099775	35	9.8176718	OK	0.0452427
Total Benzofluoranthenes	446	81	18.409091	OK	0.041276	163	33.958333	OK	0.0761398	62	19.135802	OK	0.0429054	117	29.695431	OK	0.0665817	118	42.5225	OK	0.095342	127	32.944228	OK	0.073866	53	14.86676	OK	0.0333335
Benzo(a)pyrene	217	42	9.5454545	OK	0.0439883	76	15.833333	OK	0.0729647	37	11.419753	OK	0.0526256	65	16.497462	OK	0.0760252	52	18.7387	OK	0.0863536	65	16.861219	OK	0.0777015	35	9.8176718	OK	0.0452427
Dibenzo(a,h)anthracene	12	6	1.3636364	OK	0.1136364	6	1.25	OK	0.1041667	6	1.8518519	OK	0.154321	6	1.5228426	OK	0.1269036	6	2.16216	OK	0.1801802	6	1.5564202	OK	0.1297017	6	1.6830295	OK	0.1402525
Benzo(g,h,i)perylene	216	8	1.8181818	OK	0.0084175	31	6.4583333	OK	0.0298997	16	4.9382716	OK	0.0228624	48	12.182741	OK	0.0564016	24	8.64865	OK	0.04004	18	4.6692607	OK	0.0216169	108	30.29453	OK	0.1402525
Ideno(123-cd)pyrene	92	46	10.454545	OK	0.1136364	39	8.125	OK	0.0883152	46	14.197531	OK	0.154321	37	9.3908629	OK	0.1020746	46	16.5766	OK	0.1801802	27	7.0038911	OK	0.0761293	46	12.903226	OK	0.1402525
TOC (%)		4.4				4.8				3.24				3.94				2.775				3.855				3.565			
Sum of PAH's		635				1001				428				917				606				925				549.5			

* = > MEAN + 2SD
ok = < MEAN + 2SD