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: Indian Neck Yacht Club, Inc.

2. Address: 87 Harding Avenue, Branford, CT 06405

3. Telephone: Area Code (203) 488-9278

B. PROPOSED ACTIVITY

1. Brief description of activity:

Maintenance dredge by clamshell method approximately 5,488 cubic yards of material from the existing authorized main basin and inner basin dredge footprints, comprising aggregate dimensions of approximately 150' x 600', to their authorized depth of -6.0' MLW (+1' overdredge), and dispose the material at the Central Long Island Sound Disposal Site.

2. Purpose of activity:

To maintain adequate berthing depths in the applicant's authorized basin.

3. Location of activity:

New Haven	Brandford	87 Harding Avenue
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

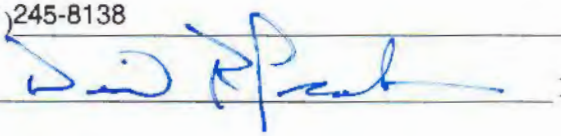
The applicant or agent must certify that the proposed activity is consistent with the State's CMP or the approved local waterfront revitalization program, as appropriate. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this 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: 5-B Old Post Road, Madison, CT 06443

Telephone: Area Code (203) 245-8138

Applicant/Agent's Signature:  Date: 8-10-16

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.

Indian Neck Yacht Club
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 Indian Neck Yacht Club project including re-use on-site, beach nourishment, and landfill capping.

- ***Re-use On-Site*** - The area surrounding the Indian Neck Yacht Club 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 basin 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 Indian Neck Yacht Club 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 only such 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 Indian Neck Yacht Club property to an upland solid waste disposal facility would cause traffic impacts in the Town of Branford. Given a typical truck capacity of approximately 15 cubic yards, the transportation of 5,488 cubic yards of sediment would involve approximately 365 truck trips to and from the site.

  Upon a detailed review, the landfill disposal option was determined to not be feasible for the Indian Neck Yacht Club 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 Branford 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. The ACOE sediment suitability determination for this project determined that such disposal is an acceptable alternative.

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 Indian Neck Yacht Club 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.

ATTACHMENT G

OTHER INFORMATION
Orthometric Conversion Chart

Indian Neck Yacht Club, Inc. COP Application - Orthometric Conversion Table

Tide Lines	*Elevation in NAVD88 Datum*	*Elevation in MLW Datum*
CJL	4.3'	7.5'
MHW	2.7'	5.9'
MLW	-3.2'	0.0'
LPT	-4.3'	-1.4'

CENAE–R-P-MAS 21 June 2016

Memorandum Thru:

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

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

Subject: Suitability Determination for Indian Neck Yacht Club, Inc., Branford River, Branford, Connecticut, NAE-2016-612.

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 not** suitable for unconfined open water disposal at the Central Long Island Sound Disposal Site (CLDS) as proposed.

There are alternatives available to the applicant. These include upland disposal, confined aquatic disposal, capping of the contaminated material with suitable material, or biological testing of the materials to determine if they are suitable for unconfined open-water disposal.

If the capping option is considered, please determine an estimated volume for the most contaminated area, then contact MAS so we can determine the optimum amount of cap material needed.

2. **Project Description:**

The applicant is proposing to dredge an area of approximately 75,900 sq. ft. in Branford, Connecticut to depths of -6 ft. MLW. Approximately 4,772 cu. yds. of material will be removed. The Indian Neck Yacht Club proposes to mechanically dredge and dispose of this material at the CLDS. This area was last permitted to be dredged 14 years ago.

3. **Sampling and Testing:**

MAS prepared a sampling plan for this project on 19 April 2016. The plan called for four cores (IN-1 through IN-4) to be taken from the project area. Bulk sediment chemistry analyses were conducted on each individual core sample.

Comparison to CLDS Reference Values

Metals: Most of the metal concentrations in the sediments represented by samples IN-1 through IN-4 were below or near the means plus twice the standard deviations of the contaminant concentrations found at the CLDS reference site. The exception(s) were arsenic, chromium, and copper in the samples, respectively, which were more than two times 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. Also, our Tier 1 review evaluation under paragraph (b) below indicates the proposed dredge sediment is a carrier of contaminants 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 no known spills have occurred and that no outfalls are located on the 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 impact 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 CTDEEP and the USEPA. The CTDEEP concurred with the determination as proposed. The USEPA did not respond within the 10 business day comment 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-2016-612
Indian Neck Yacht Club

Sample Site	CLDS	IN-1				IN-2				IN-3				IN-4			
Metals (ppm)	**mean + 2sd**	**Raw Data**	**Qualifier**		**Compare**	**Raw Data**	**Qualifier**		**Compare**	**Raw Data**	**Qualifier**		**Compare**	**Raw Data**	**Qualifier**		**Compare**
Arsenic	6.3	14.2		*	2.2539683	13.6		*	2.1587302	12		*	1.9047619	11.9		*	1.8888889
Cadmium	0.28	0.14		OK	0.5	0.14		OK	0.5	0.14		OK	0.5	0.14		OK	0.5
Chromium	45.1	106		*	2.3503326	73		*	1.6186253	69		*	1.5299335	44		OK	0.9756098
Copper	42.1	213		*	5.0593824	119		*	2.8266033	160		*	3.8004751	109		*	2.5890736
Mercury	0.165	0.18		*	1.0909091	0.14		OK	0.8484848	0.16		OK	0.969697	0.1		OK	0.6060606
Nickel	41	28.4		OK	0.6926829	26		OK	0.6341463	23.2		OK	0.5658537	21.7		OK	0.5292683
Lead	82.2	74.5		OK	0.906326	36.6		OK	0.4452555	44.2		OK	0.5377129	35		OK	0.4257908
Zinc	181	361		*	1.9944751	160		OK	0.8839779	184		*	1.0165746	84.8		OK	0.4685083
% fines		0				0				0				0			
PAHs (ppb)																	
Fluorene	20	13	2.688728	OK	0.1344364	14	3.3980583	OK	0.1699029	17	3.926097	OK	0.1963048	12	3.5450517	OK	0.1772526
Phenanthrene	183	129	26.680455	OK	0.1457948	117	28.398058	OK	0.1551806	150	34.642032	OK	0.1893007	134	39.586411	OK	0.2163192
Anthracene	56	30	6.204757	OK	0.1107992	33	8.0097087	OK	0.1430305	42	9.6997691	OK	0.1732102	27	7.9763663	OK	0.1424351
Naphthalene	94	17	3.516029	OK	0.0374046	19	4.6116505	OK	0.0490601	28	6.4665127	OK	0.0687927	14	4.1358936	OK	0.0439989
Acenaphthylene	39	29	5.9979317	OK	0.1537931	23	5.5825243	OK	0.1431416	29	6.6974596	OK	0.1717297	21	6.2038405	OK	0.1590728
Acenaphthene	12	6	1.2409514	OK	0.1034126	8	1.9417476	OK	0.1618123	11	2.5404157	OK	0.2117013	7	2.0679468	OK	0.1723289
Fluoranthene	320	406	83.971044	*	0.2624095	339	82.281553	*	0.2571299	573	132.33256	*	0.4135393	407	120.23634	*	0.3757386
Pyrene	459	369	76.318511	OK	0.1662713	337	81.796117	OK	0.178205	614	141.80139	*	0.3089355	340	100.44313	OK	0.2188304
Benzo(a)anthracene	194	126	26.059979	OK	0.1343298	120	29.126214	OK	0.1501351	178	41.108545	OK	0.2118997	114	33.677991	OK	0.1735979
Chrysene	217	216	44.67425	OK	0.2058721	210	50.970874	OK	0.2348888	327	75.51963	*	0.3480167	219	64.697194	*	0.2981437
Total Benzofluoranthenes	446	406	83.971044	OK	0.1882759	376	91.262136	OK	0.2046236	500	115.47344	*	0.2589091	364	107.53323	OK	0.2411059
Benzo(a)pyrene	217	192	39.710445	OK	0.1829974	164	39.805825	OK	0.183437	225	51.963048	*	0.2394611	161	47.562777	OK	0.2191833
Dibenzo(a,h)anthracene	12	42	8.6866598	*	0.7238883	34	8.2524272	*	0.6877023	55	12.702079	*	1.0585065	37	10.930576	*	0.9108813
Benzo(g,h,i)perylene	216	208	43.019648	OK	0.199165	147	35.679612	OK	0.1651834	207	47.806005	OK	0.2213241	159	46.971935	OK	0.2174627
Ideno(123-cd)pyrene	92	173	35.780765	*	0.3889214	117	28.398058	*	0.3086745	181	41.801386	*	0.4543629	127	37.518464	*	0.4078094
TOC (%)		4.835				4.12				4.33				3.385			
Sum of PAH's		2362				2058				3137				2143			

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