STATE OF HAWAI'I
DEPARTMENT OF LAND AND NATURAL RESOURCES
OFFICE OF CONSERVATION AND COASTAL LANDS
Honolulu, Hawai'i

October 23, 2015

Extension Request HA-16-01

Board of Land and
Natural Resources
State of Hawaii
Honolulu, Hawai'i

REGARDING:	Time Extension Request for Conservation District Use Permit **(CDUP) HA-3495** Regarding Initiation and Completion of Construction of the Hawaii Oceanic Technology, Inc. Open Ocean Fish Farm
PERMITTEE:	Bill Spencer, Hawaii Oceanic Technology, Inc.
LOCATION:	3 mi. west of Malae Point, North Kohala, Island of Hawaii
TMK:	(3) 5-0-000:000 (submerged lands)
AREA OF USE:	247 acres (leased area)
SUBZONE:	Submerged Lands / Resource

BACKGROUND:

On October 23, 2009, the Board of Land and Natural Resources (Board) approved Conservation District Use Permit (CDUP) HA-3495 for the construction of the Hawai'i Oceanic Technology, Inc. (HOT) mariculture facility. The permit allowed for the placement of twelve 54-meter diameter "oceanspheres" to cultivate 'ahi, or Hawaiian tuna (yellowfin, *Thunnus albacores*, and bigeye, *T. obesus*). The capacity of one sphere was estimated to be 1000 tons of 'ahi per year. The oceanspheres would be capable of submerging to a set depth and maintaining their position using either an Ocean Thermal Energy Conversion (OTEC) or biofuel engine[1].

The original proposed deployment schedule for the facility was:

2010: deploy first oceansphere
2011: deploy two oceanspheres (total of three)
2012: deploy four oceanspheres (total of seven)
2013: deploy final five oceanspheres (total of twelve)

[1] OCCL understands that the permittee now intends to use biofuel engines and not an OTEC system.

The permit is attached as **Exhibit 1: CDUP HA-3795**. OCCL staff would like to call the Board's attention to conditions 5, 6, and 22, which deal respectively with approving construction plans, permit deadlines, and reporting requirements. Condition six reads:

> Any work or construction to be done shall be initiated within two years of the approval of such use, in accordance with construction plans that have been signed by the chairperson, and, unless otherwise authorized, shall be completed within five years of the approval of such use. The applicant shall notify the department in writing when construction activity is initiated and when it is completed.

Per this condition, Hawai'i Oceanic Technology, Inc. was required to initiate construction by October 23, 2011 and complete construction by October 23, 2014.

FIRST TIME EXTENSION REQUEST

On January 3, 2012 the permittee submitted a time extension request in order to complete the federal permitting process.

There was opposition from Food and Water Watch to the permittee's request for an extension. The primary argument was that his US Army Corps of Engineers Section 10 application differs from the plans approved with CDUP HA-3495.

OCCL noted that, pursuant to condition 5, our office will need to approve the construction plans prior to any deployment. At that time we will be able to determine if the plans are consistent with CDUP HA-3495. If not, the permittee is aware that it might be necessary to apply for a modification to the CDUP.

OCCL supported the request, noting that it would provide the applicant additional time to fulfill the federal permitting requirements.

On March 09, 2012 the Board approved the time extension, amending the permit to provide that the Hawaii Oceanic Technology, Inc. must initiate construction by October 23, 2013 and complete construction by October 23, 2016.

The Federal Consistency Review was finished on May 12, 2011, and the NPDES permit for the facility became effective on April 30, 2012.

SECOND TIME EXTENSION REQUEST

On April 1, 2013 the permittee submitted a second extension request to the Board. He wrote that all of the necessary permits had been secured with the exception of the Army Corps of Engineers Section 10 permit.

The permittee had applied for a Section 10 permit for twelve oceanspheres in December 2009. In August 2010, the Army Corp suggested that the permittee amend their

application to describe the process for constructing and deploying one Oceansphere, and the permittee submitted an amended application to the Army Corp in September 2010.

The Corps reported that the Section 10 permit application was under "final legal review," but did not provide a timeline for a decision.

OCCL supported the extension request, noting that the delays the permit holder experienced securing the NPDES and Section 10 permits are common for larger facilities, and that the permittee had secured the other necessary permits.

OCCL also noted that the permittee's management plan has been approved and all steps in the Army Corps' process have been completed, including consultations with NOAA Endangered Species, NOAA Critical Habitat, and Office of Hawaiian Affairs.

Residents of North Kohala testified orally and in writing against the extension request, arguing that 98% of the residents were opposed to open ocean mariculture in general and HOTI specifically, that the delay was self-inflicted, and that the community was disappointed by the issuance of the original permit.

On April 26, 2013 the Board approved the time extension, amending the permit to provide that the Hawaii Oceanic Technology, Inc. must initiate construction by October 23, 2015 and complete construction by October 23, 2018.

The U.S. Department of the Army issued Permit No. POH-2009-00263 on August 2, 2013. The permit allows for the deployment of one oceansphere through one complete harvest cycle.

THIRD (CURRENT) TIME EXTENSION REQUEST

On September 1, 2015 the permittee submitted a request for an additional two-year extension, stating that they have secured all the necessary permits for the deployment of one oceansphere, and that they are close to securing the financing arrangements needed for the completion of Phase I of the project.

This request is attached as **Exhibit 2: Request for Time Extension**. We have also included an information sheet that the applicant asked to be distributed along with this report, attached as **Exhibit 3: Background on Hawai'i Oceanic Technology**.

AUTHORITY FOR GRANTING TIME EXTENSIONS:

The authority for the granting of time extensions is provided in §13-5-43, Hawaii Administrative Rules (HAR), which allows for a permittee to request time extensions for the purpose of extending the period of time to comply with the conditions of a permit.

Additionally, pursuant to HAR §13-5-43 (c): *Time extensions may be granted by the board upon the second or subsequent request for a time extension on a board permit, based upon supportive documentation from the applicant*

DISCUSSION

A time extension may be sought when a permittee is unable to initiate or complete a project within the stipulated time frame. The Board grants time extensions when a permittee demonstrates some sort of hardship or delay in initiating work on a particular project. The permittee should be able to demonstrate that the hardship or delay was not self-imposed and that a good faith effort had been made to undertake the project.

OCCL notes that major projects often experience delays in securing other federal and state permits after a CDUP has been issued, and has been supportive of extension requests when the permittee can show that they have been diligent in pursuing the necessary permits.

OCCL recommended approval of previous extension requests based upon the permittees diligent pursuit of the required federal permits. The last federal permit for Phase I of the project (the deployment of one oceansphere for one complete harvest cycle) was secured on August 2, 2013. The current time extension is needed to give the applicant time to secure funding for the project.

RECOMMENDATION

OCCL has no objections to the Board of Land and Natural Resources approving Hawaiian Oceanic Technology Inc.'s request for an extension of the deadlines of CDUP HA-3495 for a mariculture facility offshore of Malae Point, North Kohala, Hawai'i, TMK: (3) 5-0-000:000, subject to the following conditions:

1. That condition 6 of CDUP HA-3495 is amended to provide that the Hawaii Oceanic Technology, Inc. will have until October 23, 2017 to initiate construction and must complete construction by October 23, 2020;

2. That all other conditions imposed by the Board under CDUP HA-3495, as amended, shall remain in effect.

Respectfully submitted,

Michael Cain
Office of Conservation and Coastal Lands

Approved for submittal:

Suzanne D. Case., Chairperson
Board of Land and Natural Resources

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Office of Conservation and Coastal Lands
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

2009 DEC -2 A 7:54

Bill Spencer
CEO/President
Hawaii Oceanic Technology, Inc.
425 South St., Suite 2902
Honolulu, HI 96813

OCT 27 2009

Dear Mr. Spencer:

Subject: Approval of Conservation District use Application HA-3495 for an Open Ocean Fish Farm (12 Oceanspheres, covering a 247 acre area of sea) located 2.6 Nautical Miles/3 Miles Due West of Malae Point, North Kohala, Island of Hawaii (coordinates at 20°05'40.00" N 155°55'40.00" W), by Hawaii Oceanic Technology, Inc.

This is to inform you that on October 23, 2009 the Board of Land and Natural Resources APPROVED your Conservation District Use Application and Management Plan for an open ocean fish farm located within the given coordinates offshore off Malae Point, Hawaii, subject to the following terms and conditions:

1. The applicant shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments, and applicable parts of Chapter 13-5, Hawaii Administrative Rules;

2. The applicant, its successors and assigns, shall indemnify and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, and death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors, and agents under this permit or relating to or connected with the granting of this permit;

3. The applicant shall obtain appropriate authorization from the Department for the use of state lands;

4. The applicant shall comply with all applicable Department of Health administrative rules;

5. Before proceeding with any work authorized by the Department or the Board, the applicant shall submit four copies of the construction plans and specifications to the chairperson or his authorized representative for approval for consistency with the conditions of the permit and the declarations set forth in the permit application. Three of the copies will be returned to the applicant. Plan approval by the chairperson does not constitute approval required from other agencies;

6. Any work or construction to be done shall be initiated within two years of the approval of such use, in accordance with construction plans that have been signed by the chairperson, and, unless otherwise authorized, shall be completed within five years of the approval of such use. The applicant shall notify the department in writing when construction activity is initiated and when it is completed;

7. All representations relative to mitigation set forth in the accepted environmental impact statement for the proposed use are incorporated as conditions of the permit;

8. The applicant understands and agrees that the permit does not convey any vested rights or exclusive privilege;

9. In issuing the permit, the Department and Board have relied on the information and data, which the applicant has provided in connection with the permit application. If, subsequent to the issuance of the permit such information and data prove to be false, incomplete, or inaccurate, this permit may be modified, suspended, or revoked, in whole or in part, and the department may, in addition, institute appropriate legal proceedings;

10. Where any interference, nuisance, or harm may be caused, or hazard established by the use, the applicant shall be required to take measures to minimize or eliminate the interference, nuisance, harm, or hazard;

11. The offshore fish farm shall operate submerged at least 60 feet (20 meters) below the ocean surface, but may be raised for repair, transport or other maintenance, unless otherwise approved by the Department;

12. The use of feeds containing supplemental hormones or antibodies shall not be allowed. Proposed feeds shall be provided to the Department with the pre-approval of the Department of Agriculture, for Departmental review and approval;

13. Yellowfin tuna and bigeye tuna are the only species approved;

14. Signs or other markings of the site shall be regulated by site plan approval;

15. Buoys, signs or other markings shall be provided on the ocean surface to clearly mark the location of the oceanspheres;

16. The applicant shall forward details of all monitoring efforts to the Office of Conservation and Coastal Lands (OCCL), to the Division of Aquatic Resources, Kona Branch, and

shall forward water quality results to the Department of Health, two weeks after receipt of the results;

17. The OCCL shall be immediately notified of the failure of the oceansphere system, major fish escapes, disease outbreak, theft or vandalism, or other unusual events;

18. The applicant shall periodically sample ocean-farmed fish, and when necessary, fish in the area of the farm, and examine the sampled fish for parasites or other disease. Unless the Chairperson specifies other methods of sampling and analysis, sampling shall occur not less than once per year. Sampling shall be conducted by a qualified third party entity at the expense of the applicant the result shall be provided to the appropriate agency for review and analysis;

19. The applicant shall submit all research, data, results or other publications, papers or reports concerning the fish farm and its surrounding environment to the OCCL, and to the Kona Branch of the Division of Aquatic Resources, and shall use objective, third party experts to collect water quality samples and marine mammal data. The applicant shall place copies of all Federal or State-mandated environmental quality reports at local repositories, such as the DLNR, Division of Aquatic Resources Kona Office, so that local residents may review the data. The applicant shall provide reasonable access to Federal, State and County officials for monitoring and oversight purposes;

20. The applicant need not submit information related to farm operations which is not necessary to evaluate the quality of the environment at the submerged fish farm and surrounding areas;

21. When submitting information to the Department, copies of all information shall be supplied to both the Office of Conservation and Coastal Lands and Division of Aquatic Resources, Kona Branch Office;

22. After the deployment of the first three oceanspheres, the applicant shall brief the Board of Land and Natural Resources on the performance of the project. The applicant shall obtain the approval of the Board before deploying additional cages;

23. The applicant shall monitor the condition of the submerged fish farm on a daily basis;

24. The applicant shall implement mitigative measures approved by the Chairperson to alleviate environmental or use concerns, when the need is apparent or when required by the Chairperson. Such mitigative measures may include the partial or complete removal of the fish farm facility;

25. The oceanspheres and accessory structures shall be removed at the conclusion of the use;

26. Any nets or other debris that foul on the cages or other part of the farm facility shall be disposed of as required by federal, state and city and county regulations and shall not be set free in the marine environment;

27. The applicant shall work with NOAA and DAR to develop and implement a marine mammal plan in coordination with, and subject to the approval of the Division of Aquatic Resources. The program will ensure to the maximum practicable extent that all close approaches and direct physical interactions of marine protected species with the project's structure(s) are recorded, described and reported to state and federal marine protected species agencies in an effective and timely manner. Direct physical interactions will include, but not be limited to collision, entanglement, grazing, or any other direct physical contact between any part of the structure (cages, mooring lines, buoys, etc.) and any marine protected species (all species of cetaceans and sea turtles.). The protocol will describe conditions and criteria related to adverse impacts on marine protected species that would trigger associated mandatory modification of project activity. The criteria and conditions will include, but not be limited to direct physical contact between marine protected species and any part of the structure. Associated mandatory project activity modifications will range from increased monitoring to immediate project shut-down and removal of the entire structure, depending on the severity of the impact(s);

28. The Board of Land and Natural Resources may revoke the permit if the Department determines that the there is an adverse impact to marine mammals and/or the marine environment;

29. Dead fish shall not be disposed of in the surrounding waters but shall be removed from the site and disposed of at a County approved site;

30. The applicant shall work with the Department to revise the Management Plan to be consistent with any conditions imposed by the Board of Land and Natural Resources herein, and shall further develop a emergency response contingency plan to be part of the Management Plan in anticipation of any oceansphere system failures and/or unanticipated oceansphere movements. The Board of Land and Natural Resources herein delegates to the Chairperson the responsibility to approve amendments to the Management Plan which shall be fully developed and approved by the Chairperson prior to the deployment of the first oceansphere;

31. Regarding the OTEC system engine the following shall apply:

    a. The activity/use shall not adversely affect a Federally listed threatened or endangered species or a species proposed for such designation, or destroy or adversely modify its designated critical habitat;
    b. The activity/use shall not substantially disrupt the movement of those species of aquatic life indigenous to the area, including those species, which normally migrate through the area;
    c. When the Chairperson is notified by the applicant(s) or the public that an individual activity deviates from the scope of the activity/uses, or activities are adversely affecting fish or wildlife resources or their harvest, the Chairperson will direct the applicant(s) to undertake corrective measures to address the condition affecting these resources. The applicant(s) must suspend or modify the activity to the extent necessary to mitigate or eliminate the adverse effect; and

d. When the Chairperson is notified by the U.S. Fish and Wildlife Service, the National Marine Fisheries Service or the State Department of Land and Natural Resources that an individual activity/use or activities conducted under the CDUA is adversely affecting fish or wildlife resources or the their harvest, the Chairperson will direct the applicant(s) to undertake corrective measures to address the condition affecting these resources. The applicant(s) must suspend or modify the activity to the extent necessary to mitigate or eliminate the adverse effect.

32. Failure to comply with any of these conditions shall render the permit void; and

33. Other terms and conditions as prescribed by the Chairperson.

Please acknowledge receipt of this approval with the above noted conditions, in the space provided below. Please sign two copies. Retain one and return the other within thirty (30) days.

Should you have any questions on any of these conditions, please feel free to contact me at 587-0381.

Sincerely,

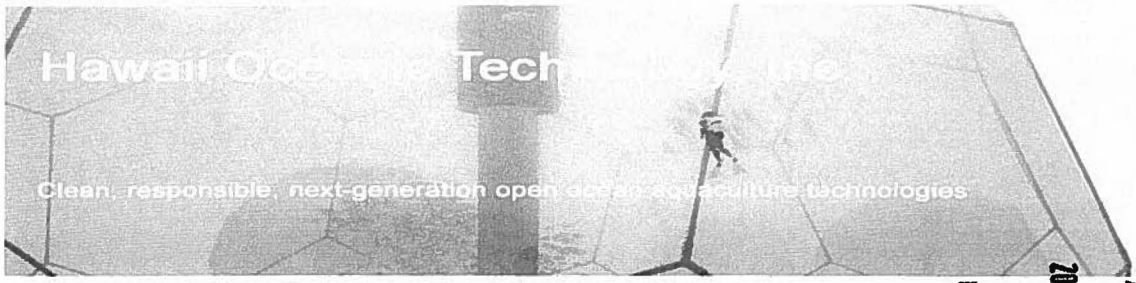
Sam Lemmo, Administrator
Office of Conservation and Coastal Lands

Receipt acknowledged:

Applicant's Signature

Date 11-24-2009

c: Board Members
Hawaii District Land Agent
DAR (Kona)
DOBOR (Kona)
DOH/OHA/DOT
DOA (Aquaculture Development Program)
NOAA
USACE



RECEIVED
OFFICE OF CONSERVATION
AND COASTAL LANDS

2015 SEP -3 A 9:34

DEPT. OF LAND &
NATURAL RESOURCES
STATE OF HAWAII

Ext. HA-16-01

September 1, 2015

Sam Lemmo, Administrator
Office of Conservation and Coastal Lands
Post Office Box 621
Honolulu, Hawaii 96809

RE: CDUP HA-3495

Dear Mr. Lemmo:

On October 15, 2013, the BLNR granted an extension to construction condition No. 6 of the CDUP to Hawaii Oceanic Technology, Inc. until October 15, 2015.

I am now requesting a further extension to Condition No. 6 until December 31, 2017. Previously, our extension was requested due to the fact that our Army Corp of Engineers Section 10 permit (applied for December 2009 and amended September 2010) had just been granted on August 2 of 2013. All other permits necessary to perform the project are in place, and our lease with the State remains in good standing.

As of this time, our company is concluding a financing arrangement that will supply sufficient funding to complete phase one of the project with construction anticipated to begin in 2017 with completion anticipated in 2018. The requested extension will allow us to prepare comprehensive construction plans in compliance with CDUP HA-3495 for your offices review and approval.

Therefore, I respectfully request that the Chair kindly authorize an extension to condition No. 6 until December 31, 2017.

Thank you very much for your kind attention to this request.

Sincerely,

William Spencer
CEO
Hawaii Oceanic Technology, Inc.
425 South ST., #3102
Honolulu, HI 96813
808-225-3579

Exhibit 2: Request for Time Extension

Backgrounder on Hawaii Oceanic Technology, Inc. and Answers to Common Questions

History

Hawaii Oceanic Technology, Inc. (HOT) was formed in 2006 as a result of collaboration between Bill Spencer, who was President of the Hawaii Venture Capital Association from 1999 to 2014, and oceanographer Paul Troy. Our goal was to demonstrate an environmentally responsible and economically sustainable way to farm seafood in the open ocean in Hawaii, one of the few place in the world that allows a company to lease an ocean column to farm seafood.

The first order of business was to patent our concept for an "automated positioning submersible open ocean fish farming or mariculture platform" (US 8,028,660 B2), called the Oceansphere. The company then set about getting all of the permits required to deploy and demonstrate the Oceansphere in Hawaii territorial waters. Hawaii is one of a few States in the U.S. that allow companies to lease an ocean column for fish farming.

The Hawaii Board of Land and Natural Resources granted HOT a Conservation District Use Permit (CDUP – HA3495) in October 2009. Our ocean lease (GL – 6017) was finalized in June 2012. We are the only mariculture company in Hawaii to complete a full Environmental Impact Statement for a proposed open ocean mairculture project in order to qualify for a Conservation District Use Permit instead of only doing just an Environmental Assessment.

Advisors include leading ocean scientists from the University of Hawaii School of Ocean and Earth Science and Technology, John Wiltshire, Ph.D. who is the Director of the Hawaii Undersea Research Laboratory and the Associate Chairman of the Department of Ocean Research and Engineering, Joanne C. Leong, Director of the Hawaii Institute of Marine Biology and Syd Kraul, formerly of Oceanic Institute, the Honolulu Aquarium and Owner of Pacific Planktonics, one of the leaders in larval rearing of marine species. Our lead investor is local venture capital firm, Kolohala Ventures.

What is an Oceansphere?

The Oceansphere, a) operates submerged below the surface of the ocean, b) does not need to be tethered to the ocean floor making it easy to move if sea conditions change or hazards approach, c) is designed to reduce bio-fouling and impact from surface wind and waves, d) is very large, allowing the production of up to 3,000 tons of seafood protein depending upon the species being farmed, and e) does not affect the view plane of residents on land while fish are being grown.

Our permitted lease site is for one square kilometer or 248 acres off of the North Kohala coast off of Hawaii Island 2.6 miles west of Malae Point outside the Hawaiian Islands Humpback Whale National Marine Sanctuary in 1,320 feet of water. The Oceansphere

uses a high degree of automation and remote control, remote monitoring, an automated feeding buoy and other technologies to improve efficiency and reduce environmental impact. The Hawaii Oceansphere site is in such deep water that it creates a more natural environment for the fish, so that they can grow faster and are less likely to contract disease. There is no significant negative environmental impact from such operations as the effluent is quickly mineralized by the huge volume of sea water contained in the deep ocean column by supplying nutrients to phytoplankton and zooplankton that make up the lowest part of the ocean food chain and are typically the only creatures that exist in the low productivity conditions of the deep ocean.

Why do this in Hawaii?

Hawaii is one of the only places in the world where there is a regulatory infrastructure that allows a company to lease an ocean column to farm seafood in the open ocean. The state determined that because Hawaii had such a large 200,000 square mile federal Exclusive Economic Zone, that mariculture (open ocean aquaculture) was one of our unique strategic economic opportunities and something that should be encouraged. The state therefore passed legislation that made it possible for a company to perform mariculture in state waters. If Hawaii Oceanic Technology is successful, our technology can help Hawaii make farmed seafood its biggest agriculture export, create high paying jobs and assure local seafood sustainability for future generations and eventually expand to federal waters when regulations permit.

How does the company make money?

To date, Hawaii Oceanic Technology has been privately funded through equity investment, with half from local Hawaii investors and half from mainland investors. We expect to make money initially from our own farming operation in Hawaii. Within six years, our permitted farm in Hawaii can generate lease revenues to the State, GET from farm sales and income tax from employment created by the operation that is expected to create several hundred direct and indirect jobs.

Current Status

It has taken us more than seven years to get all of the permits required to operate our business. Our final permit from the U.S. Army Corp of Engineers, that allows us to deploy one Oceansphere was granted in August 2013.

At present, we are finalizing a relationship with a major U.S. company that has a sincere commitment to our vision as well as the technical and financial ability to execute on a viable business plan. This company has a great appreciation and respect for what it takes to operate in Hawaii as a responsible steward of the environment.

PLEASE CONTACT: Bill Spencer, CEO 808-225-3579 bspencer@hioceanictech.com