UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

MAR 29 2013

CERTIFIED MAIL 7008 1140 0002 7576 3322
RETURN RECEIPT REQUESTED

Mr. John Ericsson
BioMarine Technologies, Inc. / Gulf Marine Institute of Technology
100 North Cliff Drive
P.O. Box 776
Gulf Breeze, Florida 32562

Subject: National Pollutant Discharge Elimination System Permit Reissuance
BioMarine Technologies, Inc. and Gulf Marine Institute of Technology
Permit No. AL0067237

Dear Mr. Ericsson:

Enclosed is the National Pollutant Discharge Elimination System (NPDES) permit for the above referenced facility. This action constitutes the U.S. Environmental Protection Agency's final permit decision in accordance with Title 40, Code of Federal Regulations (CFR) § 124.15(a). The permit will become effective as specified, provided that a request for review of the permit decision is not received by the EPA's Environmental Appeal Board (EAB) within 30 days according to 40 CFR § 124.19.

All pleadings filed by mail must be addressed to the Environmental Protection Agency, Clerk of the Board, Environmental Appeals Board (MC 1103B), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, D.C. 20460. Documents that are hand delivered must be delivered to the EAB offices at Colorado Building, 1341 G Street, NW, Suite 600, Washington, D.C. 20005. Documents may be filed with the Clerk of the Board between the hours of 8:30 a.m. and 4:30 p.m. eastern standard time, Monday through Friday (excluding federal holidays) only. The website for the EAB is www.epa.gov/eab. The webpage's Frequently Asked Questions deal with filing issues, which you may want to refer to regarding the permit appeal process.

Further information on procedures pertaining to the filing of a request for review of the permit decision or other legal matters may be obtained by contacting Mr. Paul Schwartz, Assistant Regional Counsel, at (404) 562-9576. For information regarding technical aspects of the permit, unrelated to any anticipated request for review of the permit decision, please contact Mr. Kip Tyler of my staff at (404) 562-9294.

Sincerely,

James D. Giattina
Director
Water Protection Division

Enclosures
1. Evidentiary Hearing Procedures
2. Final NPDES Permit
3. Final Statement of Basis

cc: Ms. Glenda Dean, Alabama Department of Environmental Management (via email)
Ms. Joy Earp, U.S. Army Corps of Engineers (via email)
Dr. Jessica Beck-Stimpert, National Marine Fisheries Service (via email)
Mr. Donald Imm, U.S. Fish & Wildlife Service (via email)
Mr. Steve Bortone, Gulf of Mexico Fishery Management Council (via email)

ENVIRONMENTAL PROTECTION AGENCY
REGION 4

PERMITS, GRANTS, AND TECHNICAL ASSISTANCE BRANCH
WATER MANAGEMENT DIVISION

APPEAL OF NPDES PERMITS

The following is a list of acronyms/abbreviations used:

EPA	Environmental Protection Agency
NPDES	National Pollutant Discharge Elimination System
PSD	Prevention of Significant Deterioration
RCRA	Resource Conservation and Recovery Act
UIC	Underground Injection Control
U.S.C.	United States Code

The following regulation discusses the appeal procedures for NPDES permits and is cited from the regulations as found in Title 40, Code of Federal Regulations (40 CFR) Part 124--Procedures for Decisionmaking, Subpart A-General Program Requirements, Volume 21, pages 283-285, revised as of July 1, 2005.

Section 124.19 Appeal of RCRA, UIC, NPDES, and PSD Permits.

(a) Within 30 days after a RCRA, UIC, NPDES, or PSD final permit decision (or a decision under 270.29 of this chapter to deny a permit for the active life of a RCRA hazardous waste management facility or unit) has been issued under Section 124.15 of this part, any person who filed comments on that draft permit or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit decision. Persons affected by an NPDES general permit may not file a petition under this section or otherwise challenge the conditions of the general permit in further Agency proceedings. They may, instead, either challenge the general permit in court, or apply for an individual NPDES permit under Section 122.21 as authorized in Section 122.28 and then petition the Board for review as provided by this section. As provided in Section 122.28(b)(3), any interested person may also petition the Director to require an individual NPDES permit for any discharger eligible for authorization to discharge under an NPDES general permit. Any person who failed to file comments or failed to participate in the public hearing on the draft permit may petition for administrative review only to the extent of the changes from the draft to the final permit decision. The 30-day period within which a person may request review under this section begins with the service of notice of the Regional Administrator's action unless a later date is specified in that notice. The petition shall include a statement of the reasons supporting that review, including a demonstration that any issues being raised were raised during the public comment period (including any public hearing) to the extent required by these regulations and when appropriate, a showing that the condition in question is based on:

(1) A finding of fact or conclusion of law which is clearly erroneous, or

(2) An exercise of discretion or an important policy consideration which the Environmental Appeals Board should, in its discretion, review.

(b) The Environmental Appeals Board may also decide on its own initiative to review any condition of any RCRA, UIC, NPDES, or PSD permit decision issued under this part for which review is available under paragraph (a) of this section. The Environmental Appeals Board must act under this paragraph within 30 days of the service date of notice of the Regional Administrator's action.

(c) Within a reasonable time following the filing of the petition for review, the Environmental Appeals Board shall issue an order granting or denying the petition for review. To the extent review is denied, the conditions of the final permit decision become final agency action. Public notice of any grant of review by the Environmental Appeals Board under paragraph (a) or (b) of this section shall be given as provided in Section 124.10. Public notice shall set forth a briefing schedule for the appeal and shall state that any interested person may file an amicus brief. Notice of denial of review shall be sent only to the person(s) requesting review.

(d) The Regional Administrator, at any time prior to the rendering of a decision under paragraph (c) of this section to grant or deny review of a permit decision, may, upon notification to the Board and any interested parties, withdraw the permit and prepare a new draft permit under Section 124.6 addressing the portions so withdrawn. The new draft permit shall proceed through the same process of public comment and opportunity for a public hearing as would apply to any other draft permit subject to this part. Any portions of the permit which are not withdrawn and which are not stayed under Section 124.16(a) continue to apply.

(e) A petition to the Environmental Appeals Board under paragraph (a) of this section is, under 5 U.S.C. 704, a prerequisite to the seeking of judicial review of the final agency action.

(f) (1) For purposes of judicial review under the appropriate Act, final agency action occurs when a final RCRA, UIC, NPDES, or PSD permit decision is issued by EPA and agency review procedures under this section are exhausted. A final permit decision shall be issued by the Regional Administrator:

(i) When the Environmental Appeals Board issues notice to the parties that review has been denied;

(ii) When the Environmental Appeals Board issues a decision on the merits of the appeal and the decision does not include a remand of the proceedings; or

(iii) Upon the completion of remand proceedings if the proceedings are remanded, unless the Environmental Appeals Board's remand order specifically provides that appeal of the remand decision will be required to exhaust administrative remedies.

(2) Notice of any final agency action regarding a PSD permit shall promptly be published in the Federal Register.

(g) Motions to reconsider a final order shall be filed within ten (10) days after service of the final order. Every such motion must set forth the matters claimed to have been erroneously decided and the nature of the alleged errors. Motions for reconsideration under this provision shall be directed to, and decided by, the Environmental Appeals Board. Motions for reconsideration directed to the administrator, rather than to the Environmental Appeals Board, will not be considered, except in cases that the Environmental Appeals Board has referred to the Administrator pursuant to Section 124.2 and in which the Administrator has issued the final order. A motion for reconsideration shall not stay the effective date of the final order unless specifically so ordered by the Environmental Appeals Board.

[48 FR 14264, April 1, 1983, as amended at 54 FR 9607, March 7, 1989; 57 FR 5335, February 13, 1992; 65 FR 30911, May 15, 2000]

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the CWA, as amended (33 USC 1251 et seq.; the "Act"), the

Biomarine Technologies, Inc. / Gulf Marine Institute of Technology
100 Northcliff Drive
PO Box 776
Gulf Breeze FL 32562

is authorized to discharge from a facility located at

Mariculture Platform Facility
Gulf of Mexico (Within OCS Block 842)
Latitude 30 9.4' North Longitude 87 31.3' West

to receiving waters named

Gulf of Mexico

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein. The permit consists of this cover sheet and Parts I through VI.

This permit shall become effective on March 31, 2013.

This permit and the authorization to discharge shall expire at midnight on March 30, 2018.

MAR 29 2013

Date Issued

James D. Giattina, Director
Water Protection Division

PART I - EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date and lasting through the expiration date of this permit, the permittee is authorized to discharge sanitary wastewater, deck/equipment wash down, fish food, and storm water runoff to the Gulf of Mexico. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristics	Discharge Limitations	Measurement Frequency	Sample Type	Recorded Value
Sanitary Waste [1] (continuously manned for 30 or more consecutive days by 10 or more persons)				
Total Residual Chlorine (mg/l) [2]	1.0 mg/l, minimum	Monthly	Grab	Monthly Average
Solids	No floating solids	Daily	Observation [3]	Days observed
Flow rate (gal/day)	Report	Monthly	Estimate	Monthly Average
Sanitary Waste [1] (continuously manned for 30 or more consecutive days by 9 or fewer persons or intermittently by any number)				
Solids	No floating solids	Daily	Observation [3]	Days observed
Flow rate (gal/day)	Report	Monthly	Estimate	Monthly Average
Domestic Wastes [4]				
Solids	No floating solids	Daily	Observation [3]	Days observed
Deck Drainage & Equipment / Deck Washdown Water [5]				
Free Oil	No Free Oil [6]	Daily	Observation [7]	Days observed
Other				
Feed rate (lbs/day)	Report	Daily	Estimate	Monthly Average
Feed rate (%/day) [8]	Report	Daily	Calculated	Monthly Average
Medicinal Products (lbs or gal) [9]	Report	As applicable	Calculated	Amount

[1] Sanitary waste means human body waste discharged from toilets and urinals. Any facility which purposely operates and maintains a marine sanitation device (MSD) that complies with pollution control standards and regulations under CWA Section 312 shall be deemed to be in compliance with permit limitations for sanitary waste. The MSD shall be tested yearly for proper operation and test results maintained at the facility.

[2] Hach method CN-55-DPD is approved. The minimum concentration of chlorine (1.0 mg/l) shall be achieved and maintained as closely to this concentration as possible.

[3] Monitoring shall be accomplished by visual observation of the receiving water surface in the vicinity of sanitary and domestic water outfalls. Observations shall be made following either the morning or mid-day meals and at a time during daylight hours and maximum estimated discharge.

[4] Domestic Waste means material discharged from all galleys, sinks, showers, safety showers, eye wash stations, hand washing stations, fish cleaning stations, and laundries. The discharge of food waste is prohibited within 12 nautical miles from nearest land. Comminuted food waste able to pass through a 25 mm mesh screen may be discharged more than 12 nautical miles from nearest land.

[5] Deck Drainage means any waste resulting from deck washings, spillage, rainwater, and runoff from gutters and rains including drip plans and work areas within facilities subject to this permit.

[6] No Free Oil means the waste streams from deck drainage cannot be discharged when they would cause a sheen on the receiving water surface. Sheen means a silvery or metallic sheen, film, gloss, increased reflectivity, visual color, or iridescence on the water surface.

[7] When discharging and facility is manned, the monitoring shall be accomplished during daylight hours by visual observation of sheen on the receiving water surface in the vicinity of the discharge.

[8] The feed rate shall be reported as the ratio of feed weight per day to animal weight (biomass).

[9] Only medicinal products (all veterinary therapeutic products, antibiotics, and other treatments) and medicinal premixes for inclusion in fish feeds, which are approved for use in aquaculture by the Food and Drug Administration, shall be used. The withdrawal times for all medicines used in the treatment or prevention of fish disease must be adhered to. The discharge of any medicinal products shall be reported as an attachment to the Discharge Monitoring Report Form (EPA No. 3320-1). The report shall include the number of pounds or gallons of product discharged, the product, and the duration that the product was used.

2. The monitoring program outlined in Part III shall be initiated 90 days prior to when the project is going to commence. All reports shall be submitted in accordance with the requirements of Parts II and III.

3. There shall be no discharge of floating solids or visible foam in other than trace amounts.

4. The effluent shall not cause a visible sheen on the receiving water.

5. The discharge of surfactants, dispersants, and detergents shall be minimized.

6. The discharge of any solid material not in compliance with the other parts of the permit is prohibited. This permit includes limitations set forth by the U.S. Coast Guard in regulations implementing Annex V of Marpol 73/78 for domestic waste disposal or exploitation of seabed mineral resources (33 Code of Federal Regulations (CFR) § 151). These limitations, as specified by Congress (33 United States Code (USC) § 1901, the Act to Prevent Pollution from Ships), apply to all navigable Waters of the United States. Annex V (33 CFR §§ 151.51 through 151.77) prohibits the discharge of garbage, including food wastes, within 12 nautical miles from land. Comminuted food waste (able to pass through a screen with a mesh size no larger than 25 mm) may be discharged within 12 nautical miles or more from land. Gray water, drainage from dishwater, shower, laundry, bath, and washbasins are not considered garbage within the meaning of Annex V. Incineration ash and non-plastic clinkers may be discharged beyond 12 nautical miles from nearest land.

7. The discharge of fish food and metabolic fish wastes from the facility shall not cause unreasonable degradation of the marine environment underneath the facility and in the surrounding area. Unreasonable degradation is defined in 40 CFR § 125.121 (e) as significant adverse changes in ecosystem diversity, productivity and stability of the biology community within the area of discharge and surrounding biological communities, [and/or] loss of esthetic, recreational, scientific or economic values which is unreasonable in relation to the benefit derived from the discharge. A determination of whether the facility is causing unreasonable degradation of the marine environment shall be based upon the considerations listed in 40 CFR § 125.122(a).

8. Feeding methods should maximize ingestion and food conversion by using slow-settling and highly digestible feed. Un-pelletized wet feed (minced fish or shellfish) shall not be discharged.

9. The permittee should reduce and/or cease feeding fish when temperature, turbidity, or other ambient conditions inhibit or otherwise interfere with feeding behavior.

10. Predator control shall not involve killing or abusive harassment of birds or mammals. Predator control methods shall comply with appropriate federal regulations. Each month, the permittee shall certify that no birds or mammals have been killed or harassed as the result of predator control. This certification shall be submitted as an attachment to the DMR Form.

11. The use or discharge of toxic chemicals to control the fouling of nets is prohibited.

12. Federally listed endangered or threatened species shall not be bought, taken, possessed, sold, delivered, carried, transported, or shipped, by any means, except in accordance with 50 CFR § 17.

PART II - OTHER REQUIREMENTS

1. Reporting of Monitoring Results

The Discharge Monitoring Reports (DMR) that are required in Part II of this permit for each calendar month shall be summarized for that month and reported on a DMR Form (EPA No. 3320-1), postmarked no later than the 28th day of the month following the completed calendar quarter. Signed copies of the DMRs shall be submitted to the Permit Issuing Authority at the following address:

Clean Water Enforcement Branch Chief
U.S. Environmental Protection Agency, Region 4
Water Protection Division | 61 Forsyth Street SW | Atlanta GA 30303-8960
404.562.9764 | r4cwebmailbox@epa.gov

If no discharge occurs during the reporting period, sampling requirements of this permit do not apply. The statement "No Discharge" shall be written on the DMR form. If, during the term of this permit, the facility ceases discharge to surface waters, the Permit Issuing Authority and the State shall be notified in writing immediately upon cessation of discharge.

2. Reopener Clause

This permit shall be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) & (D), 304(b)(2) and 307(a)(2) of the CWA, as amended, if the effluent standard or limitation so issued or approved:

a. Contains different conditions or is otherwise more stringent than any condition in the permit; or
b. Controls any pollutant not addressed in the permit.

The permit as modified or reissued under this paragraph shall contain any other requirements of the Act then applicable.

3. Schedule of Compliance

A. The permittee shall achieve compliance with the effluent limitations specified for the discharges from upon commencement of discharge.

B. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

PART III - ENVIRONMENAL MONITORING PLAN

An Environmental Monitoring Plan (EMP) shall be developed and submitted to the EPA prior to 60 days of the facility's operation. The EMP shall provide details regarding the sampling devices, methods, sample holding times, quality control/quality assurance, chain of custody, etc. to be used to collect water quality and benthic samples. All samples shall be collected consistent with the EMP that is submitted to the EPA, unless requested to be modified by the EPA.

1. Sample types and location

Benthic and water quality samples shall be collected at intervals on two perpendicular transects passing through the center of the cluster of cages (the cage cluster is formed by a circle drawn around the outermost edges of cages in a group of cages). Each transect shall be two kilometers in length and the two transects intersect at the center of the cage cluster. The first transect lies parallel to the predominant current direction and the second transect lies perpendicular to the first, or the predominant current.

Water quality parameters shall be measured at two depths, mid-water and a meter from the bottom, at three sampling sites located along each transect. The sampling sites, from the center of the cage cluster in both directions, include: 1) a point at the center of the cage cluster; 2) the edge of the cage cluster plus 25 meters; and 3) the edge plus 50 meters. Benthic samples are to be collected from the same sample locations and distance intervals along each transect. Each benthic sample is to consist of sufficient surface and below surface materials to adequately determine the parameter of interest. In addition, water quality and benthic samples shall also be collected at one sampling site to serve as a reference, located at the edge of the cage cluster plus one kilometer, positioned at a point equidistant from the main sampling transects. Sufficient replicate samples or sample quantity should be collected.

During each sampling event, at the beginning and end of the period of active sampling, sea surface conditions (wind, wave amplitude and frequency, rain, cloud cover, air temperature and salinity) and tide stage or change in tidal stage should be recorded plus: current stocking density, feeding rate reported on a per cage and total farm basis and an analysis of feed contents (feed label information).

2. Bathymetric and Topographic Description

Prior to sample collection, a complete description of the bathymetric and topographic characteristics within an area that projects out two kilometers from the center of the cage cluster shall be documented.

3. Water Quality and Benthic Parameters

Prior to the installation of the cages, each transect shall be sampled for the following:

Sediment Characteristics - A profile and description of the sediment to include particle size distribution, total solids, specific gravity, and settling rates. Sediment chemical composition shall include total volatile solids, total organic carbon, total nitrogen, total phosphate, hydrogen sulfide, and interstitial dissolved oxygen.[10]

Benthic Macroinvertebrate Community Structure - Benthic macroinvertebrates or infauna (organisms that are retained on a 0.5 mm sieve) shall be collected at each benthic sample location for community

[10] Analytical methods to determine TOC or TVS may be hampered by sediment grain size as influenced by scouring currents. In the event one or both of these parameters cannot be determined, the environmental monitoring management team must document such a failure.

structure analysis. Organisms shall be identified to the lowest possible identification level and counted. Infauna community structure analysis shall include species richness (calculated as Margalefs index: $d = (S-1)/\log N$, where N is the total number of species in the sample), diversity (calculated as Shannon diversity: $H' = -3_i\, p_i(\log p_i)$).

Physical and chemical water quality parameters shall include dissolved oxygen, salinity, temperature, turbidity, total suspended solids, chlorophyll a, ammonia-N, nitrite-N, nitrate-N and total phosphate. The above referenced water quality parameters are to be assessed at mid-water and a meter from the bottom at each of the water quality sampling sites. Current speed and direction shall be measured at each sampling event.

4. Sample Frequency

Water Quality – Prior to the installation of the cages, each location shall be sampled to provide a baseline condition. The following schedule is to be initiated following the initial introduction of animals or animal feed into cages and following any increase in animal stock density (abundance or biomass) or feeding rate 20% or higher. The listed water quality parameters shall be measured monthly at each site for the first three months. If no significant changes in water quality parameters are detected over three consecutive months at a given stock density and feeding rate, water sampling shall then be done quarterly until a 20% or greater increase in stock density or feeding rate occurs. In addition, a change in sampling frequency, sample location, or parameters measured may be directed by the EPA based on detection of water quality degradation.

Sediment Characteristics - Prior to the installation of the cages, each location shall be sampled to provide a baseline condition. The following schedule is to be initiated following the initial introduction of animals or animal feed into cages and following any increase in animal stock density (abundance or biomass) or feeding rate 20% or higher. The listed sediment quality parameters shall be measured monthly at each site for the first three months. If no significant changes in water quality parameters are detected over three consecutive months at a given stock density and feeding rate, sediment sampling and analysis shall then be done quarterly until a 20% or greater increase in stock density or feeding rate occurs. In addition, a change in sampling frequency, sample location, or parameters measured may be directed by the EPA based on detection of sediment quality degradation.

Benthic Infauna Community Structure - Prior to the installation of the cages, each location shall be sampled to provide a baseline condition. The purpose of infauna community analysis is to determine ecological impacts of significant changes to sediment quality and, therefore, scheduling should be tied to detected changes in sediment quality rather than on a predetermined frequency. Following the initial baseline (pre-stocking) sampling and analysis of benthic infauna, subsequent sampling and analysis shall be done if sediment quality degradation is detected based on measured sediment characteristics.

5. Contingency Sampling

The presence or impact of certain chemicals and metals could occur depending upon structure maintenance or fish health management practices adopted to counter the negative impact of cage biofouling or disease or parasites on the fish being cultured.

Therapeutic Compounds - If approved therapeutic compounds are used, then appropriate methodology to detect those chemicals and their breakdown products shall be included in the water quality and

benthic sampling. If antibiotics are administered, then indicator bacteria shall be selected for resistance testing. Sampling for the indicator bacteria and resistance testing shall be completed during each transect sampling event.

In addition, during the treatment period and for a withdrawal period as directed by the USDA-accredited veterinarian, or as described in the label directions, a representative sample of fish and crustaceans in the immediate vicinity of the cage or cage cluster must be captured and analyzed for the presence of the disease or pathogen, the therapeutic compound and its breakdown products and/or antibiotic resistance by an associated bacterial indicator.[11]

6. Heavy Metals

Cage materials requiring the application of anti-fouling coatings or attachments (i.e., sacrificial zincs) to the cage structure shall require the addition of appropriate sampling methodology of the sediments to detect accumulation of heavy metals (zinc or copper). Such chemical analyses are not required if such coating and attachments are not used.

7. Failure to Sample

Should conditions arise so that some or all of the sampling or analytical procedures prescribed in this Monitoring Program are not done or reporting cannot occur on schedule, the EPA must be notified in writing (email) within 5 calendar days. The notification should include the nature of the problem and recommended solutions.

8. Modifications to the Monitoring Program

The specifications in the monitoring program are subject to modification by the EPA if warranted, based on evaluation of physical, chemical, and biological data or proposed changes. The permit applicant may request modifications of the monitoring program in writing to the EPA. The EPA shall consider modification requests based on findings of the monitoring program, in consultation with the applicant.

9. Submission of Monitoring Results and the EMP

The results of each monthly monitoring event prescribed by this Monitoring Program as per 40 CFR, Part 125, Subpart M, shall be submitted to the EPA within 60 working days of sample collection. Results shall include any narrative reporting in electronic format (.doc, .txt, etc.). All processed and raw data shall be included in Excel (.xls) format. The EMP plan shall include the NPDES number, the name of the facility, the date the plan was developed, and signed by an authorized representative pursuant to 40 CFR § 122.22. The EMP plan shall be submitted to the EPA at the following address:

Roland Ferry
U.S. Environmental Protection Agency, Region 4
Water Protection Division | Wetlands, Coastal, and Oceans Branch
61 Forsyth Street SW | Atlanta GA 30303-8960
404.562.9387 | ferry.roland@epa.gov

[11] Periodic sampling for the presence of diseases and parasites in wild fish and crustacean populations prior to and during the sea cage installation or operation may be beneficial to provide farm management with information regarding ambient disease/parasite presence.

Part IV - BEST MANAGEMENT PRACTICES PLAN

The permittee shall prepare and submit a Best Management Practices (BMP) plan to the EPA within 60 days prior to when the project is scheduled to become operational. The BMP plan should include the below components.[12]

1. Material Storage

The BMP plan shall address the proper storage of drugs, feed, pesticides, petroleum products, and hazardous materials. This plan shall include information and procedures related to the prevention of spills and unplanned discharges of petroleum products and other hazardous materials.

a. The plan shall provide a complete and up-to-date list of all petroleum products and other hazardous materials stored at and transferred between the facility, its support craft, and its shore-based storage facilities.
b. The plan shall include descriptions of the procedures used to prevent, control, and/or treat spills and unplanned discharges of petroleum products and other hazardous materials according to the type and magnitude of spill or discharge.
c. The plan shall include a description of the supplies and equipment which prevent, control, and/or treat spills and unplanned discharges and a compliance schedule to install any necessary items.
d. The plan shall include the description of the reporting system which shall be used to alert responsible facility management and appropriate legal and regulatory authorities.
e. All members of the facilities staff shall have an operational familiarity with the plan.

2. Maintenance

The BMP plan shall address the maintenance of all structures and equipment to ensure staff safety and protection of the environment including routinely inspecting the net pen systems to identify problems and performing repairs of nets, any floating structures, and feeding equipment.

3. Record Keeping

The BMP plan shall describe a record keeping system for all operations at the facility including but not limited to the frequency of cleaning, inspections, maintenance, repairs, feed amounts, weights of aquatic animals, and feed conversion ratios.

4. Training

The BMP plan shall address training for all operations and equipment at the facility.

5. Feed Management

The BMP shall address the feeding methods used to minimize solids production and uneaten feed beneath the facility.

6. Waste Collection and Disposal

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[12] Additional information can be found in the EPA's *Compliance Guide for the Concentrated Aquatic Animal Production Point Source Category* (EPA-821-B-05-001), March 2006.

The BMP plan shall describe how the facility shall collect, return to shore, and properly dispose of all feed bags, packaging materials, netting, and any other waste materials.

7. Transport and Harvest Discharge

The BMP plan shall identify the collection disposal methods to prevent any processing or harvesting waste from entering into waters of the United States.

8. Carcass Removal

The BMP plan shall cover the carcass removal and disposal practices that shall be employed to prevent mortality discharge to waters of the United States.

9. Submission of the BMP plan

The BMP plan shall include the NPDES number, the name of the facility, the date the BMP plan was developed, and signed by an authorized representative pursuant to 40 CFR § 122.22. The BMP plan shall be submitted to the EPA at the following address:

Kip Tyler
U.S. Environmental Protection Agency, Region 4
Water Protection Division | Pollution Control and Implementation Branch
61 Forsyth Street SW | Atlanta GA 30303-8960
404.562.9294 | tyler.kip@epa.gov

Part V – FACILITY DAMAGES CONTROL AND SPILL CONTROL ACTIVITIES

1. Facility Damage Control Activities and Plan

A. Fish/Aquatic Life Containment and Transfer

The permittee shall contain and transfer commercial fish and other aquatic life in a manner which shall prevent the unconfined entry of commercial aquatic life into waters of the U.S. and in a manner which shall prevent release by overstocking, tipping, or rupture. All containment and transfer structures/facilities shall conform with and be maintained in accordance all applicable manufacturer and U.S. Coast Guard requirements/recommendations.

B. Disaster Prevention Practices

The permittee shall maintain the mariculture facility, confinement structures, support and emergency craft, and shore-based storage facilities in a structurally sound manner and in proper mechanical operating order so as to minimize the impact of disasters. The permittee shall conduct periodic inspection, cleaning and maintenance of the facility, confinement structures, support and emergency craft, and shore-based storage facilities.

The permittee shall provide and have on hand at all times appropriate material and tools in sufficient quantities to contain and collect commercial fish and aquatic life at the mariculture facility, on support and emergency craft, and in shore-based storage facilities.

C. Disaster Cleanup

The permittee shall, in the event of a disaster, undertake actions to limit and prevent the release of commercial fish and aquatic life to the waters of the U.S. The permittee shall, in the event of a disaster, notify the appropriate agencies as soon as possible and within 24 hours. Cleanup efforts shall:

a. commence immediately and be completed as soon as possible, taking precedence over normal work; and
b. be in accordance with an approved Facilities Damages Control Plan; and
c. include the proper disposal of dead or parts of commercial fish, aquatic life, and debris at an approved facility.

D. Facilities Damages Control Plan

The permittee shall prepare and submit a Facilities Damage Prevention Plan to EPA within 60 days prior to when the project is scheduled to become operational. This plan shall include information and procedures related to the prevention of natural and man-made disasters:

a. provide a complete and up-to-date list of all facilities used to transport, deliver, remove and confine commercial fish and other aquatic life, its support and emergency craft, and its shore-based storage facilities;
b. include descriptions of the procedures used to prevent, control, and/or confine natural and man-made disasters according to the type and magnitude of the disaster;
c. include a description of the supplies and equipment which prevent, control, and/or confine natural and man-made disasters and a compliance schedule to install any necessary items;

d. include a maintenance schedule of all necessary facilities/items;
e. include the description of the reporting system which shall be used to alert responsible facility management and appropriate legal and regulatory authorities; and
f. the plan shall certify that all members of the facility's staff have an operational familiarity with the plan.

The Facilities Damage Prevention Plan shall include the NPDES number, the name of the facility, the date the plan was developed, and signed by an authorized representative pursuant to 40 CFR § 122.22. The plan shall be submitted to the EPA at the following address:

Kip Tyler
U.S. Environmental Protection Agency, Region 4
Water Protection Division | Pollution Control and Implementation Branch
61 Forsyth Street SW | Atlanta GA 30303-8960
404.562.9294| tyler.kip@epa.gov

2. Spill Control Activities and Plan

A. Storage and Transfer of Chemicals, Waste Materials, and Petroleum Products

The permittee shall not store toxic (as defined in 40 CFR § 122, Appendix D) or deleterious materials at the facility. The permittee shall store and transfer oil, gas, kerosene, antibiotics, solid chemicals, chemical solutions, paints, solvents, acids, caustic solution, and waste material, including batteries, in a manner which shall prevent the entry of these materials into waters of the U.S. and in a manner which shall prevent spillage by overfilling, tipping, or rupture. The permittee shall limit on-site supplies of petroleum products and other hazardous materials to small quantities or those amounts required for use during the time period between supply shipments.

a. All petroleum products and other hazardous materials shall be held in durable, impervious containers which are clearly labeled to indicate their contents. Fuel used for boat and small engine operation shall be stored in U.S. Coast Guard-approved containers.
b. All petroleum products and other hazardous materials shall be stored under cover, such as tarpaulins or roofed structures.
c. The quantity of petroleum products and other hazardous materials stored on the net-pen facility shall be minimized and maintained in well-defined, discrete areas.
d. Incompatible or reactive materials shall be segregated and securely stored in separate containment areas that prevent the mixing of chemicals.
e. All petroleum products and other hazardous materials shall be handled and transferred from containers to equipment using tools and other transfer items designed and intended for use with such materials.

B. Spill Prevention Practices

The permittee shall maintain the mariculture facility, its support craft, and shore-based storage facilities in clean and tidy condition so as to minimize the possibility of accidents and spills of petroleum products and other hazardous materials in the operation of the facility. The permittee shall conduct periodic inspection, cleaning, and maintenance of the facility, its support craft, and shore-based storage facilities. The permittee shall provide and has on-hand at all times absorbent materials and appropriate

tools in sufficient quantities to contain and collect chemicals spilled at the mariculture facility, on its support craft, and in shore-based storage facilities.

C. Spill Cleanup

The permittee shall, in the event of an accidental discharge of petroleum products and other hazardous materials, undertake actions to limit and prevent the spreading of the discharge to the waters of the U.S. The permittee shall, in the event of a spill, notify the appropriate agencies as soon as possible and within 24 hours. Cleanup efforts shall:

a. commence immediately and be completed as soon as possible, taking precedence over normal work; and
b. be in accordance with an approved Spill Prevention Plan; and
c. include the proper disposal of any spilled materials and used cleanup materials (chemical wastes and spilled chemicals shall be removed from the mariculture facility and disposed of at an approved facility); and
d. no emulsifiers or dispersants shall be used in waters of the U.S. without approval of EPA.

D. Submission of the Spill Control Plan

A Spill Control Plan shall be developed and submitted to the EPA prior to 60 days of the facility's operation. The Spill Control Plan shall provide details regarding chemical, waste material, and petroleum product storage, transfer, spill prevention, and spill cleanup. The Spill Control Plan shall be submitted to the EPA at the following address:

Kip Tyler
U.S. Environmental Protection Agency, Region 4
Water Protection Division | Pollution Control and Implementation Branch
61 Forsyth Street SW | Atlanta GA 30303-8960
404.562.9294 | tyler.kip@epa.gov

PART VI - STANDARD CONDITIONS FOR NPDES PERMITS

SECTION A GENERAL CONDITIONS

1. Duty to Comply [40 CFR §§ 122.41(a) and 122.41(a)(1)]

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA or Act) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

2. Penalties for Violations of Permit Conditions [40 CFR § 122.41(a)(2) and 40 CFR § 122.41(a)(3)]

(Note: Civil and administrative penalty amounts described in this subsection are based on adjustments to the original statutory amounts based on inflation, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990 (28 U.S.C. § 2461 note; Pub. L. 101- 410, enacted October 5, 1990; 104 Stat. 890), as amended by the Debt Collection Improvement Act of 1996 (31 U.S.C. § 3701 note; Public Law 104-134, enacted April 26, 1996; 110 Stat. 1321) and as set forth at 40 CFR § 19.4.)

The CWA provides that any person who violates Section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under Section 402, or any requirement imposed in a pretreatment program approved under Sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed $37,500 per day for each violation. The CWA provides that any person who negligently violates Sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under Section 402 of the Act, or any requirement imposed in a pretreatment program approved under Section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than one year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than two years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than three years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than six years, or both. Any person who knowingly violates Section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in Section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.

Any person may be assessed an administrative penalty by the Administrator for violating Section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of this Act. Administrative penalties for Class I violations are not to exceed $16,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $37,500. Penalties for Class II violations are not to exceed $16,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $177,500.

The specific penalty amounts described above for violations reflect those in effect at the time of permit issuance and are subject to change.

3. Civil and Criminal Liability [40 CFR § 122.41(m) and (n)]

Except as provided in permit conditions on "Bypassing" Section B, Paragraph 3, and "Upset" Section B, Paragraph 4, nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

4. Duty to Mitigate [40 CFR § 122.41(d)]

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

5. Permit Actions [40 CFR § 122.41(f)]

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

6. Toxic Pollutants [40 CFR § 122.44(b)(1)]

If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in the permit, the Director shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.

7. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the CWA.

8. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the CWA.

9. Effect of a Permit

Except for any toxic effluent standards and prohibitions imposed under Section 307 of the CWA and "standards for sewage sludge use or disposal" under Section 405(d) of the CWA, compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Sections 301, 302, 306, 307, 318, 403, and 405 (a)-(b) of the CWA. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in 40 CFR §§ 122.62 and 122.64.

Compliance with a permit condition which implements a particular "standard for sewage sludge use or disposal" shall be an affirmative defense in any enforcement action brought for a violation of that "standard for sewage sludge use or disposal" pursuant to Sections 405(e) and 309 of the CWA. [40 CFR § 122.5(a)(l) and (2)]

10. Property Rights [40 CFR § 122.5(b), 40 CFR § 122.41(g), and 40 CFR § 122.5(c)]

This permit does not convey any property rights of any sort, or any exclusive privilege. The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations.

11. Onshore or Offshore Construction

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any waters of the United States.

12. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

13. Duty to Provide Information [40 CFR § 122.41(h)]

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

SECTION B OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance [40 CFR § 122.41(e)]

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

2. Need to Halt or Reduce Activity Not a Defense [40 CFR § 122.41(c)]

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

3. Bypass of Treatment Facilities [40 CFR § 122.41(m)(1)-(4)]

a. Definitions

(1) "**Bypass**" means the intentional diversion of waste streams from any portion of a treatment facility.

(2) "**Severe property damage**" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

b. Bypass not exceeding limitations.

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Paragraphs c. and d. of this subsection.

c. Notice

(1) **Anticipated bypass.** If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

(2) **Unanticipated bypass.** The permittee shall submit notice of an unanticipated bypass as required in Section D, Subsection 8 (24-hour notice).

d. Prohibition of bypass

(1) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

(a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(c) The permittee submitted notices as required under Paragraph c. of this subsection.

(2) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in Paragraph d.(1) of this subsection.

4. Upsets [40 CFR § 122.41(n)(1)-(4)]

a. Definition

"**Upset**" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an upset

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Paragraph c. of this subsection are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions necessary for a demonstration of upset

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the permittee can identify the cause(s) of the upset;

(2) The permitted facility was at the time being properly operated;

(3) The permittee submitted notice of the upset as required in Section D, Subsection 8 (24 hour notice); and

(4) The permittee complied with any remedial measures required under Section A, Subsection 4.

d. Burden of proof

In any enforcement preceding the permittee seeking to establish the occurrence of an upset has the burden of proof.

5. Removed Substances

This permit does not authorize discharge of solids, sludge, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters of the United States unless specifically limited in Part I.

SECTION C MONITORING AND RECORDS

1. Representative Sampling [40 CFR § 122.41(j)(1)]

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Director.

2. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to insure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of all measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than $\pm$ 10% from the true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration, and operation of acceptable flow measurement devices can be obtained from the following references. These references are available from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161; phone number: (800) 553-6847 or (703) 487-4650.

"A Guide to Methods and Standards for the Measurement of Water Flow," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 100 pp. (Order by NTIS No. COM-7510683.)

"Water Measurement Manual," U.S. Department of Interior, Bureau of Reclamation, Revised Edition, 1984, 343 pp. (Order by NTIS No. PB-85221109.)

"Flow Measurement in Open Channels and Closed Conduits," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1977, 982 pp. (Order by NTIS No. PB-273535.)

"NPDES Compliance Flow Measurement Manual," U.S. Environmental Protection Agency, Office of Water Enforcement, Publication MCD-77, September 1981, 149 pp. (Order by NTIS No. PB-82131178.)

3. Monitoring Procedures [40 CFR § 122.41(j)(4)]

Monitoring results must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of Sewage sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, unless other test procedures have been specified in the permit.

4. Penalties for Tampering [40 CFR § 122.41(j)(5)]

The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be

punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

5. Retention of Records [40 CFR § 122.41(j)(2)]

Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

6. Record Contents [40 CFR § 122.41(j)(3)(i)-(vi)]

Records of monitoring information shall include:

a. The date, exact place, and time of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of such analyses.

7. Inspection and Entry [40 CFR § 122.41(i)(1)-(4)]

The permittee shall allow the Director or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.

SECTION D REPORTING REQUIREMENTS

1. Change in Discharge [40 CFR § 122.41(l)(1)(i)-(iii)]

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR § 122.29(b); or

b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under Section D, Subsection 11.

c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. Anticipated Noncompliance [40 CFR § 122.41(l)(2)]

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during noncritical water quality periods and carried out in a manner approved by the Director.

3. Transfer of Ownership of Control [40 CFR § 122.41(l)(3), § 122.61, and § 122.61(b)]

a. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the CWA.

b. In some cases modification or revocation and reissuance is mandatory.

c. Automatic transfers. As an alternative to transfers of permits by modification, any NPDES permit may be automatically transferred to a new permittee if:

(1) The current permittee notifies the Director at least 30 days in advance of the proposed transfer date in Subparagraph b.(2) of this subsection;

(2) The notice includes a written agreement between the existing and new permittee(s) containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

(3) The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify or revoke and reissue the permit. A modification under this subparagraph may also be a minor modification under 40 CFR § 122.63. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Subparagraph b.(2) of this subsection.

4. Monitoring Reports [40 CFR § 122.41(l)(4) and 40 CFR § 122.41(l)(4)(i)]

Monitoring results shall be reported at the intervals specified in Part III of the permit. Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sewage sludge use or disposal practices.

5. Additional Monitoring by the Permittee [40 CFR § 122.41(l)(4)(ii)]

If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or, in the case of sewage sludge use or disposal, approved under 40 CFR part 136 unless otherwise specified in 40 CFR part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sewage sludge reporting form specified by the Director.

6. Averaging of Measurements [40 CFR § 122.41(l)(4)(iii)]

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

7. Compliance Schedules [40 CFR § 122.41(l)(5)]

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. Any reports of noncompliance shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

8. Twenty-Four Hour Reporting [40 CFR § 122.44(g), 40 CFR § 122.41(l)(6), and 40 CFR § 122.44(g)]

The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5-calendar days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The following shall be included as information which must be reported within 24 hours under this paragraph. The Director may waive the written report on a case-by-case basis for reports under this subsection if the oral report has been received within 24 hours.

a. Any unanticipated bypass which exceeds any effluent limitation in the permit.

b. Any upset which exceeds any effluent limitation in the permit.

c. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours.

9. Other Noncompliance [40 CFR § 122.41(l)(7)]

The permittee shall report all instances of noncompliance not reported under Section D at the time monitoring reports are submitted. The reports shall contain the information listed in Section D, Subsection 8.

10. Other Information [40 CFR § 122.41(l)(8)]

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information to the Director.

11. Changes in Discharge of Toxic Substances [40 CFR § 122.42(a)(1)(i-iii) and 40 CFR § 122.42(a)(2)(i-iii)]

The following conditions apply to all NPDES permits within the categories specified below:

a. Existing manufacturing, commercial, mining, and silvicultural dischargers. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

(1) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(a) One hundred micrograms per liter (100 µg/l);

(b) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony; or

(c) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7).

(2) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(a) Five hundred micrograms per liter (500 µg/l);

(b) One milligram per liter (1 mg/l) for antimony; or

(c) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR § 122.21(g)(7).

b. Publicly owned treatment works. All POTWs must provide adequate notice to the Director of the following:

(1) Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Section 301 or 306 of CWA if it were directly discharging those pollutants; and

(2) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

(3) For purposes of this paragraph, adequate notice shall include information on the quality and quantity of effluent introduced into the POTW, and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW. [40 CFR § 122.42(b)]

12. Duty to Reapply [40 CFR § 122.41(b), § 122.21(d), § 122.6(a), and § 122.6(b)]

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

The application should be submitted at least 180 days before the expiration date of this permit. The Regional Administrator may grant permission to submit an application later than the 180 days in advance, but no later than the permit expiration date.

When EPA is the permit-issuing authority, the conditions of an expired permit continue in force under 5 U.S.C. 558(c) until the effective date of a new permit if the permittee has submitted a timely application under this subsection which is a complete application for a new permit; and the Regional Administrator, through no fault of the permittee, does not issue a new permit with an effective date on or before the expiration date of the previous permit.

Permits continued under this section remain fully effective and enforceable.

13. Signatory Requirements [40 CFR § 122.41(k)(1) and 40 CFR § 122.22]

All applications, reports, or information submitted to the Director shall be signed and certified.

a. Applications. All permit applications shall be signed as follows:

(1) For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or

(b) The manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

NOTE: EPA does not require specific assignments or delegations of authority to responsible corporate officers identified in this subparagraph. The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under this subparagraph rather than to specific individuals.

(2) For a partnership or sole proprietorship. By a general partner or the proprietor, respectively; or

(3) For a municipality, State, Federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

(a) the chief executive officer of the agency, or

(b) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

b. All reports required by permits, and other information requested by the Director shall be signed by a person described in Paragraph a. of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in Paragraph a. of this section;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company.

(3) The written authorization is submitted to the Director.

c. Changes to authorization. If an authorization under Paragraph b. of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Paragraph b. of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

d. Certification. Any person signing a document under Paragraph a. or b. of this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

14. Availability of Reports and the Administrative Record [40 CFR §§ 124.18 & 122]

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Permit Issuing Authority. As required by the Act, permit applications, permits and effluent data shall not be considered confidential.

15. Penalties for Falsification of Reports [40 CFR § 122.41(k)(2)]

The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six (6) months per violation, or by both.

SECTION E DEFINITIONS

1. Permit Issuing Authority [40 CFR § 122.2]

The Regional Administrator of EPA Region 4 or his/her designee is the **"Permit Issuing Authority,"** unless at some time in the future the State or Indian Tribe receives authority to administer the NPDES program and assumes jurisdiction over the permit at which time, the Director of the State program receiving the authorization becomes the issuing authority.

The use of the term "**Director**" in this permit shall apply to the EPA Regional Administrator, Region 4.

2. Act [40 CFR § 124.2]

"**Act**" means the CWA (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483, and Public Law 97-117, 33 U.S.C. 1251 et seq.

3. Discharge Monitoring Report (DMR) [40 CFR § 122.2]

"**Discharge Monitoring Report**" means the EPA national form (Form 3320-1) including any subsequent additions, revisions, or modifications for the reporting of self-monitoring results by permittees. EPA will prepare and mail "pre-printed" DMR forms to permittees for completion. These "pre-printed" DMR forms will indicate the appropriate reporting requirements and limitations as found in Part I of the permit.

4. Measurements [40 CFR § 122.2]

a. The "Daily **discharge**" means the "discharge of a pollutant" measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.
   i) For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day.
   ii) For pollutants with limitations expressed in other units of measurement (i.e., concentration), the "daily discharge" is calculated as the average measurement of the pollutant over the day.

b. The "**average annual discharge limitation**" means the highest allowable average of "daily discharges" over a period of twelve consecutive calendar months, calculated as the "arithmetic mean" of the monthly averages for the current calendar month and the eleven prior calendar months. The annual average is calculated each month. This limitation is identified as "Annual Average" in Part I of the permit.

c. The "**average monthly discharge limitation**" other than for bacterial indicators, means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month. For bacterial indicators, the "average monthly discharge limitation" is calculated using a "geometric mean." This limitation is identified as "Monthly Average" or "Daily Average" in Part I of the permit.

d. The "**average weekly discharge limitation**" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week. This limitation is identified as "Weekly Average" in Part I of the permit.

e. The "**maximum daily discharge limitation**" means the highest allowable "daily discharge." This limitation is identified as "Daily Maximum" in Part I of the permit.

5. Types of Samples

a. Composite Sample: A "composite sample" is a combination of not less than eight influent or effluent portions (aliquots), of at least 100 ml, collected over the full time period specified in Part I of the permit. The composite sample must be flow proportioned by either a time interval between each aliquot, or by volume as it relates to effluent flow at the time of sampling, or by total flow since collection of the previous aliquot. Aliquots may be collected manually or automatically.

b. Grab Sample: A "**grab sample**" is a single influent or effluent portion which is not a composite sample. The sample(s) shall be collected at the period(s) most representative of the total discharge.

6. Calculation of Means

a. Arithmetic Mean: The "**arithmetic mean**" of any set of values is the sum of the individual values divided by the number of individual values.

b. Geometric Mean: The "**geometric mean**" of any set of values is the N^{th} root of the product of the individual values where N is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For purposes of calculating the geometric mean, values of zero (0) shall be considered to be one (1).

7. Hazardous Substance [40 CFR § 122.2]

A "**hazardous substance**" means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the CWA.

8. Toxic Pollutants [40 CFR § 122.2]

A "**toxic pollutant**" is any pollutant listed as toxic under Section 307(a)(1) of the CWA or, in the case of "Sewage sludge use or disposal practices," any pollutant identified in regulations implementing Section 405(d) of the CWA.

STATEMENT OF BASIS

APPLICANT:	Biomarine Technologies, Inc. / Gulf Marine Institute of Technology
FACILITY TYPE:	Mariculture Platform Facility (SIC code 0273)
LOCATION:	Gulf of Mexico (Latitude 30 9.4' North, Longitude 87 31.3' West)
NPDES #:	AL0067237
RECEIVING WATER:	Gulf of Mexico
PERMIT WRITER:	Kip Tyler

1. Facility Description

The operation is a 27.5 acre commercial (Biomarine Technologies, Inc.) and research (Gulf Marine Institute of Technology) mariculture facility. The operation would include a 16,146 ft^2 work platform, a maximum of forty-eight (48) 100-ft diameter production net pen cages, and a maximum of eight (8) 50-ft diameter nursery net pen cages. The floating net-pen cages will be anchored to the ocean floor and tethered to the work platform. A floating perimeter fence that extends eight (8) feet deep would surround the entire operation. The work platform would contain gantry cranes, crew quarters, enclosed hatchery, laboratory, and automated feeding/monitoring/harvesting equipment. The fish raised at this facility would include Cobia (*Rachycentron Canadum*), Greater Amberjack (*Seriola Dunerili*), and other warm water species indigenous to the Gulf of Mexico. The maximum annual production of Cobia, Greater Amberjack, and other species equals 3.0 million pounds, 2.0 million pounds, and 1.4 million pounds, respectively.

2. Basis for Effluent Limits and Permit Conditions

The current NPDES permit authorizing the facility to discharge pollutants into the Gulf of Mexico was issued on April 1, 2008 and expires on March 31, 2013. The permit monitoring conditions and limitations are based on the previous NPDES permit and the Best Professional Judgement (BPJ) of the permit writer. The permit conditions are consistent with the Clean Water Act (CWA) § 308, § 312, § 402, and § 403, and 40 CFR § 125 and the concentrated aquatic animal production facilities regulations (40 CFR §§ 122.24 and 451).

Part I – The monitoring conditions and effluent limitations for total chlorine, solids, and free oil are based upon the effluent guidelines for the Oil and Gas Extraction Point Source Category, Offshore Subcategory (40 CFR § 435). It was determined that the discharges from the manned platform at the mariculture facility are similar to those of offshore oil and gas extraction platforms; therefore, the limitations and conditions are transferable.

The prohibitions on the discharge of garbage and solid material are set forth by the U.S. Coast Guard in regulations implementing Annex V of Marpol 73/78 for domestic waste disposal (33 CFR § 151). These limitations, as specified by Congress (33 United States Code (USC) § 1901, the Act to Prevent Pollution from Ships), apply to all navigable Waters of the United States.

The requirement to report the feed rate and the feed rate as a percentage of biomass is based upon BPJ of the permit writer and is consistent with the CWA § 308(a). This condition is included in order to determine if there is correlation between the monitoring results of Part III and the amount of fish food discharged. The conditions placed upon aquatic feeding operations, and the use of antibiotics, antipreditor methods, and antifouling chemicals are based upon the Recommended Interim Guidelines for the Management of Salmon Net-Pen Culture in Puget Sound[1] and Fish Culture in Floating Net-Pens: Final Programmatic Environmental Impact Statement.[2] It was determined that the discharge for this facility is similar to those of which were examined in the two aforementioned documents and that the guidelines and recommendations are transferable.

Part III – The permit requires the implementation of an environmental monitoring program to examine the effects of the facility's discharges on the water quality and sediment quality of the receiving water body. The environmental monitoring plan was developed by the EPA Wetlands, Coastal, and Ocean Branch to ensure compliance with the requirements of CWA § 403 (Ocean Discharges) and is based upon 40 CFR § 125.123(d)(2). The requirement that there be no unreasonable degradation of the marine environment is based on 40 CFR §§ 125.122(a) and 125.123(c), and (d).

Part IV – The requirement to develop and certify a Best Management Practices Plan is to meet the effluent limit guidelines established for the Concentrated Aquatic Animal Production Point Source Category (40 CFR § 451).

Part V – The permit requires development and implementation of facilities damage control activities and a facilities damage control plan to prevent and contain facilities damages due to man-made and natural disasters. As part of the plan, the permittee will be required to identify equipment and procedures to be used to prevent and contain the facility's damages due to man-made and natural disasters. The requirement for the plan is included based upon the BPJ of the permit writer.

The permit requires development and implementation of a spill control plan to prevent and control spills of toxic or hazardous substances listed under CWA § 307(a) and § 311 that may reach surface waters. The permittee is required to identify any toxic chemicals used at the facility. The requirement of this plan is included based on CWA § 304(e) and § 402(a)(1).

3. EPA Contact

Additional information concerning the NPDES permit may be obtained by contacting the permit writer:

Kip Tyler
U.S. Environmental Protection Agency, Region 4
Water Protection Division | Pollution Control and Implementation Branch
61 Forsyth Street, SW | Atlanta, GA 30303-8960
404.562.9294 | tyler.kip@epa.gov

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[1] Washington Department of Ecology. 1986. *Final Report - Recommended Interim Guidelines for the Management of Salmon Net-Pen Culture in Puget Sound.*

[2] Washington State Department of Fisheries. 1990. *Fish Culture in Floating Net-Pens: Final Programmatic Environmental Impact Statement.*