

SECTION 15: Groundwater

Kingfish Maine has retained a group of experts to identify available groundwater conditions and to identify risks to groundwater. A geotechnical report has been prepared by SW Cole. A hydrogeologic study relating to aquifer yield has been prepared by Woodard & Curran. Maine Geological Survey (MGS) Sand and Gravel Aquifer Maps, MGS Surficial Geology maps and a MGS Bedrock Geological map have been incorporated into the studies performed, as well as onsite investigations including well development and pumping testing and analysis. These reports are included in this submission.

Groundwater will be extracted from existing onsite wells developed in 2020 to assess water capacity. The domestic demand for the project and water supply for the operation associated with processing will be derived from the wells drilled onsite. A small yield of <4gpm will serve the drinking water and domestic supply needs for the facility. The remaining requested freshwater yield, approximately 25gpm, is used for general operations and cleaning within the RAS operation. In addition, seawater will be used in limited applications to minimize freshwater needs. The seawater supply will be sourced from a filtered sidestream of the RAS facility's seawater supply. This water will be treated in a primary system prior to recombining with the other seawater effluent of the facility and subsequently treated by the wastewater treatment system before being discharged to the permitted outfalls in Chandler Bay. As a result, this water is not withdrawn from the groundwater aquifer and is not introduced to the aquifer. This demand is estimated to vary between freshwater sources and sidestream to prevent deleterious effects on groundwater as expressed in the attached Hydrogeology and Groundwater Supply Report. The report is appended to Section 16.

Materials planned to be stored onsite that are risks to groundwater are diesel fuel for the generators associated with backup power for the facility. The diesel fuel storage will be accommodated in ten (10) 15,000 gallon double wall above ground storage tanks. These tanks will comply with the Maine Fire Marshal's permitting and registration requirements. The following standards for double-walled tanks are applicable: The tanks shall be equipped with a monitoring tube to allow for manual or electronic monitoring of the tank's interstitial space for the presence of liquid. The tanks shall be equipped with an audible overfill alarm set to go off at 90% tank capacity, an automatic shutoff device set to shut off product flow to the tank when it reaches 95% capacity and a liquid level gauge accessible to the delivery operator. The tanks shall be equipped with an emergency vent for the interstitial space of each tank plus an emergency vent for each tank chamber. The tanks shall be equipped with above ground double wall supply/return piping and pipe sump leak detection, as applicable.

Owing to the facility's high standards related to food supply requirements, stored chemicals are strictly controlled. A full list of chemicals is appended to this section, and the storage locations are indicated on architectural plans. Materials for the facility processes, including cleaners, water treatment chemicals, and water quality chemicals will only be stored indoors in allocated spaces that are rated for containment and safe storage.

Bulk tanks for the storage of methanol is planned to be located indoors. Methanol storage and handling practices will comport with the Methanol Institute's Safe Handling Practices manual. Ethanol may also be stored in bulk tanks. These tanks will also comply with the Maine Fire Marshal's permitting and registration requirements for flammable and combustible liquids. Materials of construction will comply with the regulator's requirements.

Sodium Hydroxide (25-50%) is also planned to be stored in suitable bulk tanks.

The balance of the identified materials will be stored on containment pallets in their original packaging.

Federal and State Emergency Planning and Community Right-to-Know Laws place requirements on facilities that maintain inventories in excess of threshold amounts of specific hazardous materials. The inventory threshold standards are threefold, and pertain to hazardous chemicals above 10,000 pounds (~1,500 gallons liquid capacity) or Extremely Hazardous Substances (EHS) at either 500 pounds or the listed Threshold Planning Quantity (TPQ) for each chemical, whichever is less. For this facility, those components identifiable as hazardous chemicals are:

- Sodium Hydroxide, a hazardous chemical, which will be stored in excess of the inventory threshold of 10,000 pounds.
- Hydrogen Peroxide, an EHS, which will be stored in excess of the inventory threshold of 500 pounds.

For the substances which exceed thresholds, Kingfish Maine shall report those inventories each year to: the Jonesport fire department, Washington County Emergency Management Agency and The State Emergency Response Commission annually, using US EPA's Tier II Submit software. If in excess of the threshold inventory level over the TPQ of an EHS, Kingfish Main shall develop an emergency plan, provide it to the local LEPC and fire department, and annually review and exercise the plan.

These materials are stored indoors and are stored so as not to be exposed to rainfall and runoff; Kingfish Maine plans to submit a No Exposure Certification for stormwater at this facility.

Wastewater disposal systems for the employees and visitors to the facility are planned, and will comply with the Maine Subsurface Wastewater Disposal rules. The proposed subsurface wastewater disposal systems are shown on the HHE-200s, Site Plans, Utility Plans and the related detail sheets, and are further addressed in Section 17.

Appended to this section are supplemental materials.

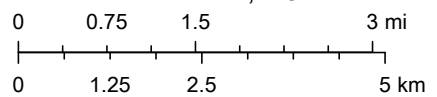
APPENDIX 15A

Maps

Bedrock Geologic Map of Maine



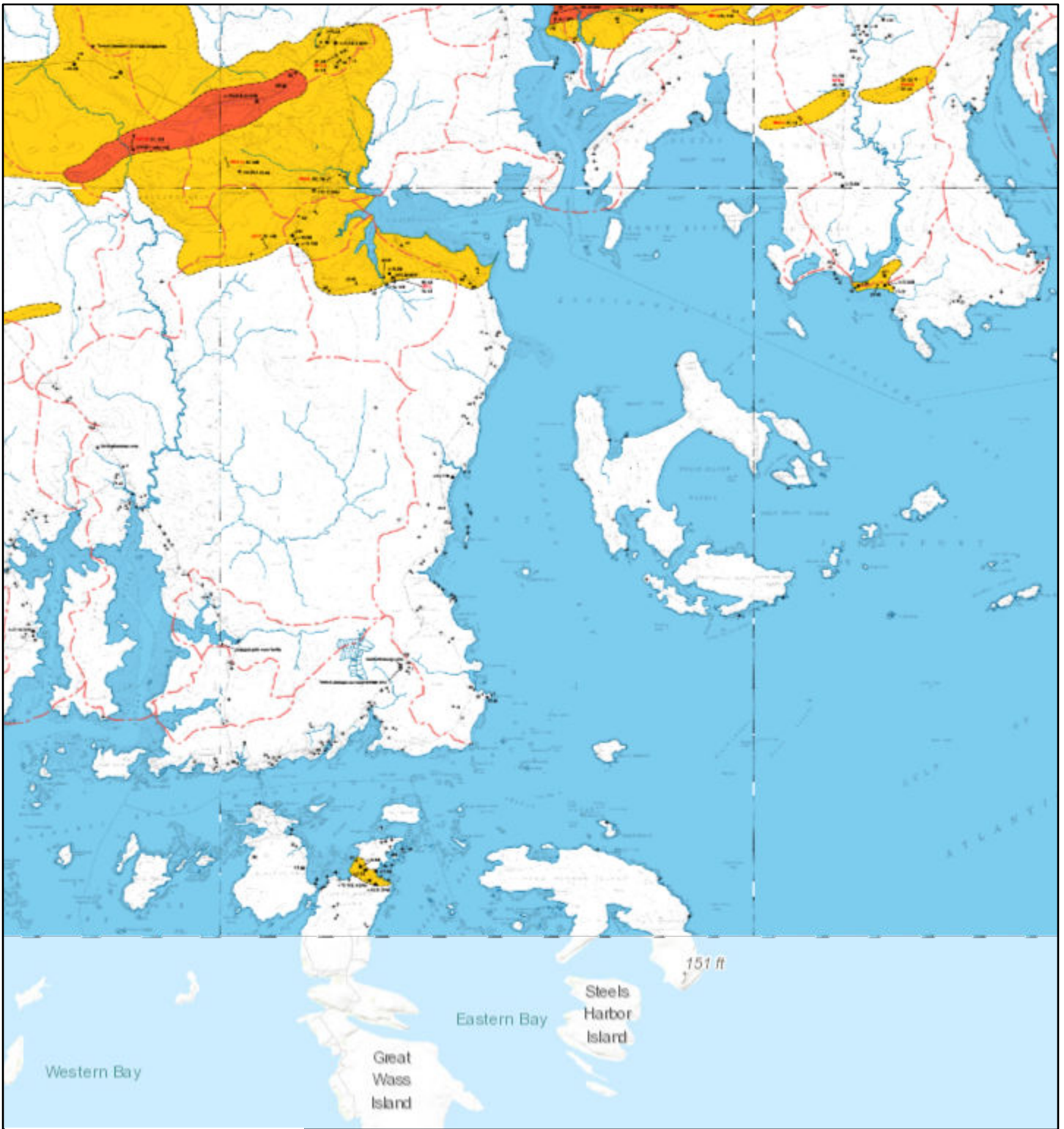
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KINGFISH
MAINE

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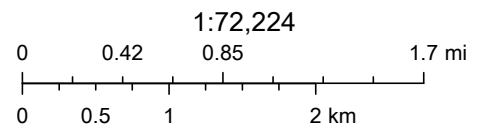
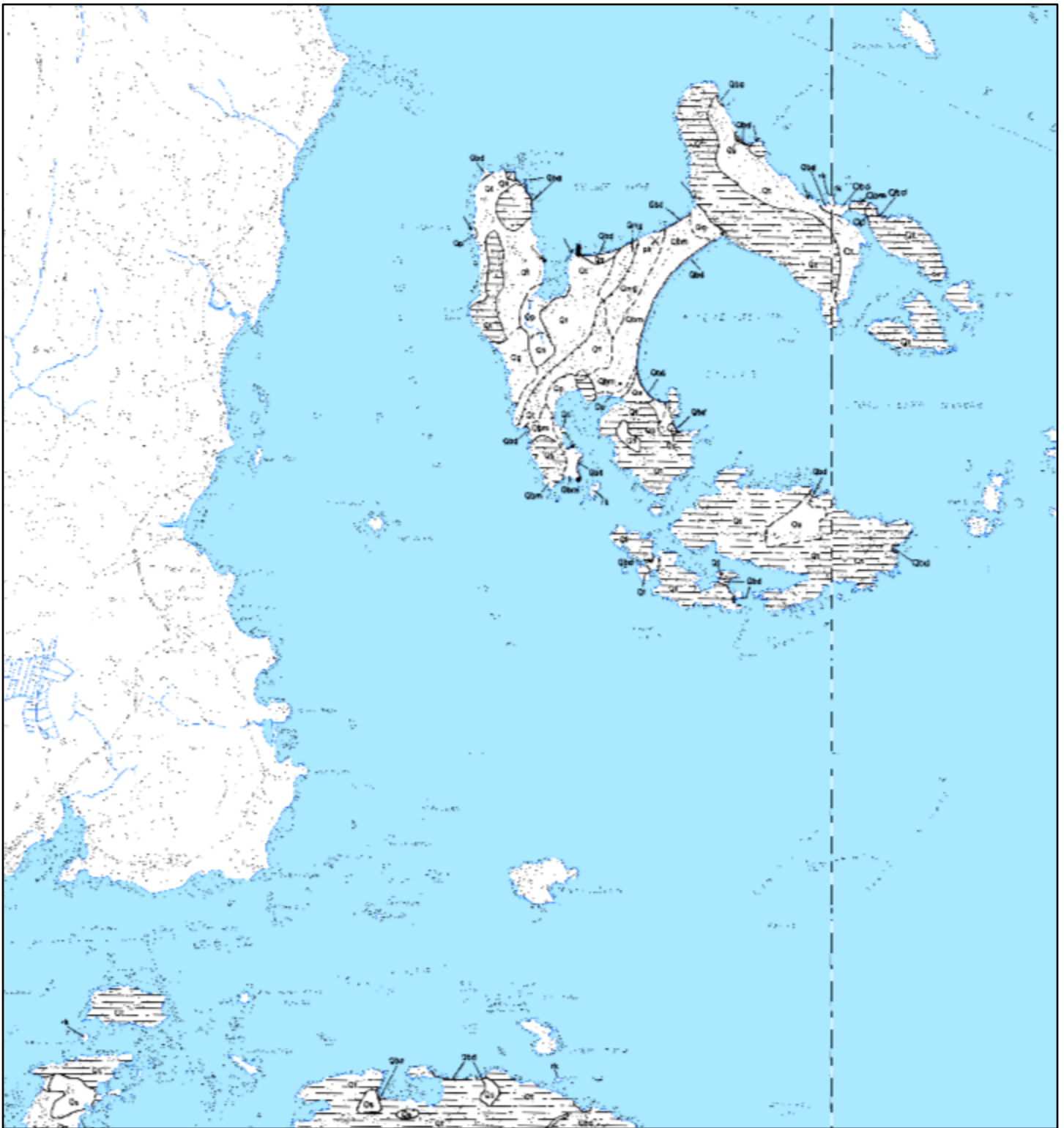
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Surficial Geology 1:24,000



KINGFISH
MAINE

Province of New Brunswick, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, NGA, EPA, USDA, AAFC, NRCan

APPENDIX 15B

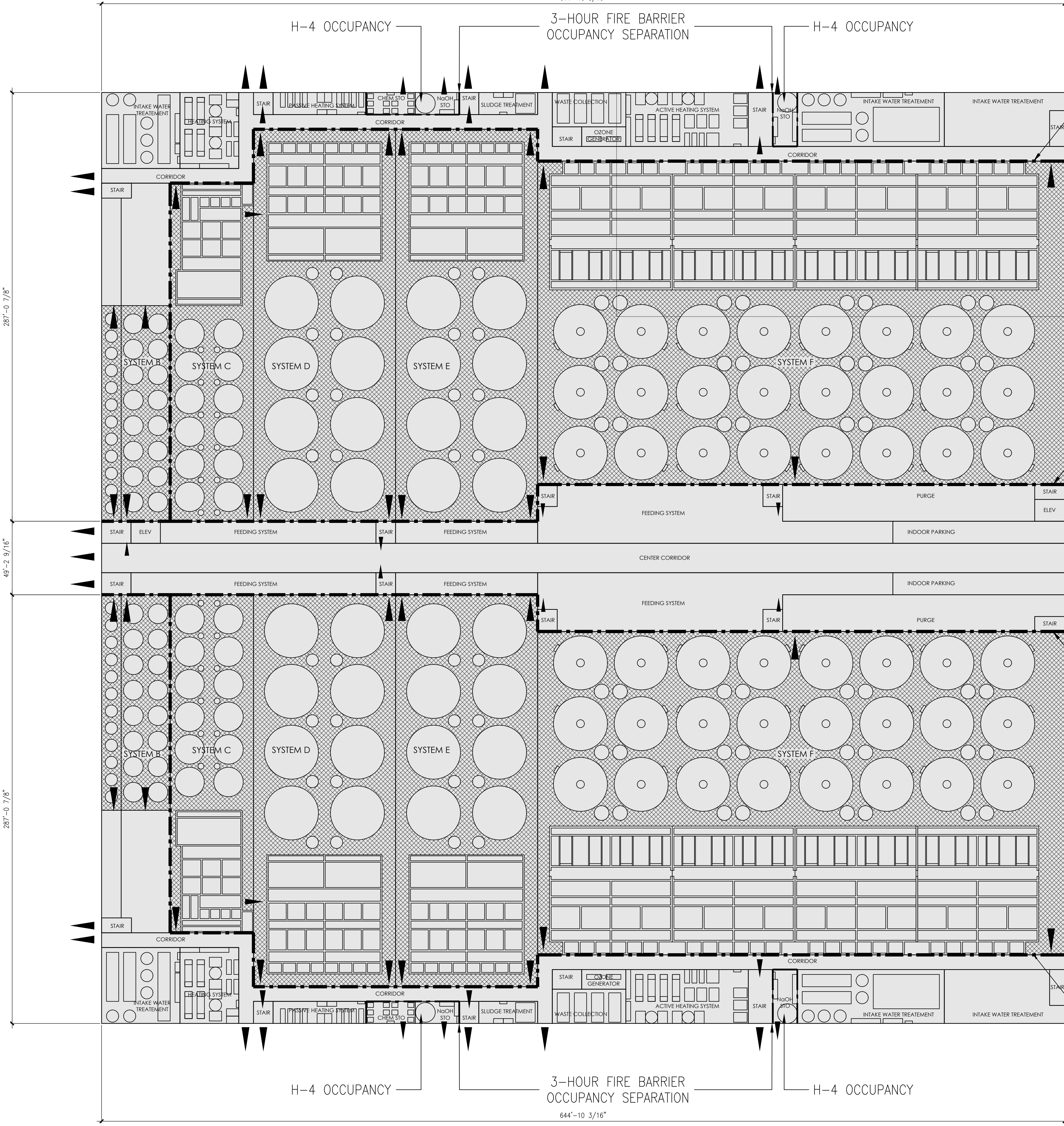
Chemical List

KINGFISH MAINE - CHEMICAL SUMMARY TABLE											
KEY	CHEMICAL OR PRODUCT	APPLICATION	STATE	CONCENTRATION (% BY WEIGHT)	CONTAINER TYPE	EXPECTED QUANTITY ONSITE	NFPA 704 PLACARD				HAZARDS
							HEALTH	FLAMMABILITY	REACTIVITY	SPECIAL	
1	HYDROCHLORIC ACID	pH Balancing, Cleaning Equipment	LIQUID	9%-36%	30 gal dell/50gal barrel	270 gallons	3	0	1	N/A	CORROSIVE
2	SODIUM HYDROXIDE	pH Balancing, Cleaning Equipment	LIQUID	25-50%	Bulk tanks	32000 gallons	3	0	0	N/A	CORROSIVE
3	DEMINEALIZED WATER	Calibrating Equipment	LIQUID	100%	1 gallon bottles	approx 50 gallons (lab)	0	0	0	N/A	No Hazard
4	SODIUM BICARBONATE	pH Balancing	POWDER	100%	50lb bags	approx 8-10 US ton	2	0	1	N/A	GASES/VAPORS
5	SODIUM HYPOCHLORIDE	Cleaning and Disinfecting Equipment	LIQUID	12.5%	50 gal barrel	approx 200 gallons	3	0	1	N/A	CORROSIVE
6	SODIUM THIOSULFATE	Neutralizing Sodium hypochlorite	SOLID	2.51%	40lb bags	approx 400lb	1	0	0	N/A	No Hazard
7	HYDROGEN PEROXIDE	Cleaning Equipment; External Fish Treatments	LIQUID	100%	30 gal dell	approx 60 gallons	0	0	0	N/A	CORROSIVE
8	FORMALIN	Extrenal Fish Treatment	LIQUID		50 gal barrel	approx 200 gallons	2	2	0	N/A	CLASS IIIB, COMBUSTIBLE LIQUID / IRRITANT
9	PVP IODINE	Disinfection of Fish Eggs	LIQUID	3%		<5 gallons	2	0	0	N/A	VAPORS
10	TRICAINA METHANESULFONATE	Anesthesia	SOLID	>95	2.2 lb tub with lid	<5gallons	3	1	0	N/A	IRRITANT
11	ANTIMICROBIAL HAND SOAP	General Cleaning	LIQUID				2	1	0	N/A	IRRITANT
12	CITRIC ACID	General Cleaning	LIQUID	100%		<5gallons	1	0	0	N/A	IRRITANT
13	VIRKON AQUATIC - PENTAPOTASSIUM BIS (PEROXYMONOSULPHATE) BIS(SULPHATE) & SODIUM DODECYLBENZENE SULFONATE	Cleaning & Disinfecting Equipment	SOLID		10lb buckets	approx 200 lb					
14	PHOSPHORIC ACID	Cleaning Processing Equipment	LIQUID	85%		Unknown	3	0	0	N/A	CORROSIVE
15	CHLORINATED ALKALINE	Cleaning Processing Equipment	LIQUID			Unknown	3	0	1	N/A	CORROSIVE
16	DIDECYLDIMETHYLAMMONIUM CHLORIDE	Cleaning & Disinfecting Processing Equipment	LIQUID	80-82%		Unknown	3	2	0	N/A	COMBUSTIBLE LIQUID / CORROSIVE
17	FERRIC CHLORIDE		SOLID	100%		Unknown	2	0	0	N/A	
18	AMMONIUM CHLORIDE	Biofilter Startup									No Hazard
19	SODIUM NITRITE	Biofilter Startup	SOLID	>95%	50lb bags	<100lbs	3	0	2	N/A	Cat 3 Oxidizer, IRRITANT
20	METHANOL	Carbon source for Denitrification	LIQUID	>90%		Unknown if use will be necessary	2	3	0	N/A	CLASS IB, FLAMMABLE LIQUID
21	ETHANOL	Carbon source for Denitrification	LIQUID	>90%		Unknown if use will be necessary					
22	MicroC	Carbon source for Denitrification	LIQUID	>90%		Unknown if use will be necessary					

APPENDIX 15C
Representative Floor Plan

BUILDING NO. 3
TOTAL AREA: 37,461 SF
CALC OL = 125
ACTUAL OL = 10
644'-10 3/16"

F-2 OCCUPANCY
TYPE IIB CONSTRUCTION TYPE
SPRINKLERED



BUILDING NO. 3
TOTAL AREA: 37,461 SF
CALC OL = 125
ACTUAL OL = 10
F-2 OCCUPANCY
TYPE IIB CONSTRUCTION TYPE
SPRINKLERED

BUILDING NO. 5
TOTAL AREA: 49,100 SF
CALC OL = 164
ACTUAL OL = 15
F-2 OCCUPANCY
TYPE IIB CONSTRUCTION TYPE
SPRINKLERED

BUILDING NO. 4
TOTAL AREA: 37,461 SF
CALC OL = 125
ACTUAL OL = 10
F-2 OCCUPANCY
TYPE IIB CONSTRUCTION TYPE
SPRINKLERED

2-HOUR FIRE WALL ASSY
BUILDING SEPARATION, TYP.

BUILDING NO. 1
TOTAL AREA: 138,976 SF
CALC OL = 464
ACTUAL OL = 25
F-2 OCCUPANCY
TYPE IIB CONSTRUCTION TYPE
NON-SPRINKLERED

2-HOUR FIRE WALL ASSY
BUILDING SEPARATION, TYP.

BUILDING NO. 5
TOTAL AREA: 49,100 SF
CALC OL = 164
ACTUAL OL = 15
F-2 OCCUPANCY
TYPE IIB CONSTRUCTION TYPE
SPRINKLERED

2-HOUR FIRE WALL ASSY
BUILDING SEPARATION, TYP.

BUILDING NO. 2
TOTAL AREA: 138,976 SF
CALC OL = 464
ACTUAL OL = 25
F-2 OCCUPANCY
TYPE IIB CONSTRUCTION TYPE
NON-SPRINKLERED

2-HOUR FIRE WALL ASSY
BUILDING SEPARATION, TYP.

BUILDING NO. 4
TOTAL AREA: 37,461 SF
CALC OL = 125
ACTUAL OL = 10

F-2 OCCUPANCY
TYPE IIB CONSTRUCTION TYPE
SPRINKLERED

FIRST FLOOR DATUM FFE: 100'-0"

DESIGNER
OWNER
PROJECT
DRAWING
REVISIONS

CWS
ARCHITECTURE + INTERIOR DESIGN
264 US ROUTE ONE
SCARBOROUGH, MAINE 04074
T. 207.774.4441
WWW.CWSARCH.COM

KINGFISH, MAINE
DAN GARDIN, P.E.
JONESPORT, MAINE

AQUAFARM GROWOUT
FACILITY
DAN GARDIN, P.E.
JONESPORT, MAINE

GROWOUT FACILITY
PRELIMINARY FIRST FLOOR
LIFE SAFETY PLAN
CWS PROJECT NUMBER:

DRAWING NUMBER
LS1-10

SCALE: 1/32" = 1'-0"
DATE: 08/28/2020

APPENDIX 15D
DRAFT SPCC Plan



KINGFISH

MAINE

**KINGFISH MAINE
RAS AQUACULTURE FACILITY**

Oil SPCC Plan

**9 Dun Garvin Road
Jonesport, Maine**

Revision 0 DRAFT

**DRAFT ISSUE - March 2021
(FACILITY PLANNING PHASE)**

**Prepared by
Gartley & Dorsky Engineering & Surveying, Inc.
59 Union Street
Camden, Maine 04843**

**Oil SPCC Plan
Kingfish Maine
Jonesport, Maine**

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Note: Bracketed notes in Table of Contents indicate cross-reference to 40 CFR 112

MANAGEMENT APPROVAL & REVIEW – [112.5 & 112.7(d)(2)]

MANAGEMENT APPROVAL

The Management of Kingfish Maine is committed to the prevention of discharges of oil to navigable waters or the environment, and maintains the highest standards for spill prevention control and countermeasures through periodic review, updating, and implementation of this Spill Prevention

Control and Countermeasure (SPCC) Plan. The Management of Kingfish Maine will provide the manpower, equipment and materials required to expeditiously control and remove any quantity of oil discharged that may be harmful.

Authorized Facility Representative:

Title: Operations Manager

Signature: _____

MANAGEMENT REVIEW

A review and evaluation of this SPCC Plan is conducted at least once every five years. As a result of this review and evaluation, Kingfish Maine will amend the SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of review.

This SPCC Plan will also be amended within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility’s potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.

Any technical amendment to the SPCC Plan shall be certified by a Professional Engineer.

<u>Review Dates</u>	<u>Signature</u>	<u>Amendment Required? (Y/N)</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

PROFESSIONAL ENGINEER’S REVIEW – [112.3(d)(1)]

The undersigned Registered Professional Engineer is familiar with the requirements of Chapter 40 of the Code of Federal Regulations Part 112 (40 CFR 112) and has supervised examination of the facility. The undersigned Registered Professional Engineer attests that this Oil Spill Prevention Control and Countermeasure Plan has been prepared in accordance with good engineering practices including applicable industry standards, and in accordance with the requirements of Chapter 40 of the Code of Federal Regulations Part 112 (40 CFR 112); that procedures have been established for required inspections and testing; and that the Plan is adequate for the facility.

Signature

William T. Lane
Name

Vice President
Title

Gartley & Dorsky Engineering & Surveying, Inc.
Company

TBD
Date

7577
P.E. Registration Number

1.0 INTRODUCTION

1.1 Purpose

The purpose of this Oil Spill Prevention Control and Countermeasure (SPCC) plan is to prevent oil spills from occurring, and to perform safe, efficient and timely response in the event of a spill or leak (both referred to as “spills” herein). In accordance with United States Environmental Protection Agency (EPA) oil pollution prevention regulations (40 CFR 112), Kingfish Maine must prepare and implement an SPCC plan for facilities that could reasonably be expected to discharge oil into or upon navigable waters or adjoining shorelines; and, meet one of the following conditions:

- ◆ Above-ground oil storage capacity exceeds 1,320 gallons; or
- ◆ Underground oil storage capacity exceeds 42,000 gallons, unless the underground tanks are subject to all of the technical requirements of 40 CFR 280 or a state program approved under 40 CFR 281. (Maine’s approved program is Department of Environmental Protection, Chapter 691 – Rules for Underground Storage Facilities.)

As defined by 40 CFR Part 112, oil includes all grades of motor oil, hydraulic oil, lube oil, fuel oil, gasoline and diesel, automatic transmission fluid (ATF), waste oil, and transformer mineral oil. The definition of oil also includes non-petroleum oils such as animal or vegetable oils and synthetic oils.

1.1.1 Using the Plan

In addition to satisfying a regulatory requirement, this SPCC plan should be working document at the facility. The plan should be used frequently in the following ways:

- ◆ As a reference for oil storage and containment system information.
- ◆ As a tool for informing new employees and refreshing existing employees on practices for preventing and responding to spills.
- ◆ As a guide to periodic training programs for employees.
- ◆ As a guide to facility inspections.
- ◆ As a resource during an emergency response.

1.1.2 SPCC Plan Revisions

Kingfish Maine must revise this SPCC plan for any change in the facility design, construction, operation or maintenance that affects the facility’s potential for discharging oil. Revisions must occur as soon as possible, but no later than six months after the change occurs. The Environmental Compliance Officer is responsible for initiating and coordinating such revisions.

Additionally, this SPCC plan must be reviewed at least once every five years. Revisions to the plan, if any, must be made within six months of the review. Facility information related to the SPCC plan must be submitted to the United States Environmental Protection Agency (EPA) Regional Administrator whenever the facility discharges more than 1,000 gallons in a single event, or discharges more than 42 gallons of oil in each of two spill events within a 12-month period.

1.2 Facility Description [112.7(a)(3)]

1.2.1 Location & Use

The facility is located in a rural mixed use area in Jonesport at 9 Dun Garvin Road in Jonesport, Maine. A site location map is shown on Figure 1.

The site is comprised of approximately 93.2 acres of land. Prior improvements consist of disused buildings from prior uses. Improvements include access road, store, broodstock building, growout building, support buildings and equipment including backup power generators in enclosed buildings, administrative buildings, residential buildings, and water treatment buildings and supporting infrastructure. Facility site plans are attached in Appendix C.

The facility is planned to serve as a fish farm utilizing recirculating aquaculture system (RAS) technology.

1.2.2 Waterways and Abutters

The nearest body of water to the site is Chandler Bay abutting the parcel to the east (Figure 1). Surface runoff in developed areas at the site discharges through planned stormwater management measures to the east and ultimately discharges to Chandler Bay. Personnel at the facility must be made aware that spills leaving the site can impact habitats associated with aquatic organisms generally, fish, riparian zone users like mammals and amphibians, and their predators.

1.2.3 Site Drainage

At this time, planned improvements will convey surface runoff through the developed area from north to south through a network of swales, catch basins, and drainage pipes to treatment areas. The proposed redevelopment of this site will create at total 6.91 acres of impervious and 7.73 acres of developed area. A significant portion of the impervious (5.45 acres) and developed area (5.92) will be collected and treated in a proposed wet pond, including the portions of the facility that will store petroleum products. The only impervious and developed areas that will not be treated are associated with the access road, which is offset by the existing site impacts. The developed site will flow to the same established drainage ways as does the existing surface runoff, relieving to the south.

2.0 POTENTIAL SPILL SOURCES AND SPCC FEATURES

2.1 SPCC Compliance [112.7(a)(1) & 112.7(a)(2) & 112.8]

Storage of fuels and other petroleum products will be in accordance with this plan and state and federal requirements. All petroleum products will be stored in approved containers with adequate associated protections. The primary storage functions are for service and operation of the Department equipment and trucks. No public or non-municipal utilization is associated with this facility.

The products will be delivered by approved fuel carriers and will not be subsequently handled or transferred other than for piped connection to equipment. Above Ground diesel fuel tanks are to provide fuel to emergency generators. One methanol above ground storage tank will be located in the primary building. Storage of process chemicals occurs in the primary building, on containment pallets. Storage and handling of flammables shall comply with workplace safety standards, including storage in purpose built spaces that comply with construction standards that are commensurate with the .

2.2 Tables [112.7(a)(3)(i & iii) & 112.7(b) & 112.7(c)]

ABOVEGROUND STORAGE TANKS

TANK NO.	CAPACITY (gallons)	PRODUCT	HI-LEVEL ALARM	ESTIMATED SPILL DIRECTION AND RATE	CONTAINMENT & SPILL CONTROL FEATURES
1-12	12,000	Diesel	Yes	East via catch basins and pipe network collection to wet pond; Pumping rate (~ 4 gpm) or Rupture ~3000 gal/hr	Double wall tank, level indicator annular space sensor fill sump, emergency stop
13	TBD	Methanol	Yes	Contained in Room (110% of volume); no rate	Double wall tank in secondary Containment, UL-142 conforming, above ground piping
TBD	TBD	TBD			

UNDERGROUND STORAGE TANKS

TANK NO.	CAPACITY (gallons)	PRODUCT	TANK MONITOR	ESTIMATED SPILL DIRECTION AND RATE	CONTAINMENT & SPILL CONTROL FEATURES
NONE					

ABOVEGROUND PIPING

TANK NO.		PRODUCT		ESTIMATED SPILL DIRECTION AND RATE	CONTAINMENT & SPILL CONTROL FEATURES
1-12		Diesel		East to wet pond;	Exposed piping at grade
13		Facility Fuel Oil		Contained in Facility; pumping rate 1/3 - 2 gpm	Exposed piping above grade; Spill containment fill box.

2.2 Tables [112.7(a)(3)(i & iii) & 112.7(b) & 112.7(c)] (Continued)

UNDERGROUND PIPING

TANK NO.	PRODUCT	LEAK DETECTION SYS.	ESTIMATED SPILL DIRECTION AND RATE	CONTAINMENT & SPILL CONTROL FEATURES
NONE				

MOTOR FUEL DISPENSERS

DISP. #	# OF HOSES	PRODUCT	NEAREST DRAIN	ESTIMATED SPILL DIRECTION AND RATE	CONTAINMENT & SPILL CONTROL FEATURES
NONE					

DRUM STORAGE

BLDG. or LOCATION	# OF DRUMS	PRODUCT & gal./drum	NEAREST DRAIN	ESTIMATED SPILL DIRECTION AND RATE	CONTAINMENT & SPILL CONTROL FEATURES
Bldg 1	TBD	TBD	N/A	N/A	Containment Pallet, secured area
Bldg 2	TBD	TBD	N/A	N/A	Containment Pallet, secured area
Bldg 4	TBD	TBD	N/A	N/A	Containment Pallet, secured area
Bldg 10	TBD	TBD	N?A	N/A	Containment Pallet, secured area

3.0 SPILL PREVENTION AND RESPONSE

3.1 Discharge Prevention

3.1.1 SPCC Features and Operating Procedures [112.7(a)(3) & 112.8]

Kingfish Maine employees are trained to implement spill prevention practices for work with and around oil sources. Kingfish Maine personnel shall be familiar with standard procedure, use common sense and utilize on spill prevention practices at all times to minimize the potential for a release of oil.

For example, the following “common sense” practices are recommended:

- ◆ keep container lids securely fastened at all times;
- ◆ do not leave portable sources unattended;
- ◆ return portable sources to their storage location after use;
- ◆ use pads, drip pans, and funnels when transferring petroleum products from a portable container;
- ◆ protect oil sources from damage by moving equipment;
- ◆ do not store oil sources near catch basins or floor drains; and
- ◆ loading and unloading of petroleum products shall be attended at all times.

Spill prevention during oil deliveries (offloading) is the primary responsibility of the supplier until the product is safely in the tank. Kingfish Maine implements spill prevention measures for normal fuel transfer operations.

Supplier Approval

All suppliers must meet the minimum requirements and regulations for tank truck unloading as established by the United States Department of Transportation. Kingfish Maine will also ensure that all suppliers understand the site layout, know the protocols for entering the site and unloading product, and have the necessary spill equipment on board to respond to a spill from the vehicle or fuel delivery hose.

Observation of Deliveries

The Facility Manager or designee will supervise deliveries for all new suppliers and will periodically observe deliveries for existing, approved suppliers. Delivery observations include:

- ◆ vehicle inspection prior to delivery and departure (e.g., to make sure the driver does not drive away with the hose in the fill pipe);
- ◆ inquiry to ensure the truck contains the right product for the tank;
- ◆ verification that the tank can hold what the supplier intends to deliver; and
- ◆ adequate spill response equipment is on board the vehicle.
- ◆ Verify pre-transfer protocols are followed (e.g., ensuring proper securing of the truck, ensuring proper grounding of the truck, etc.).

3.1.2 Tests and Inspections [112.7(e) & 112.8(c)(6)]

The personnel at the facility shall perform testing, inspection, and maintenance of all petroleum equipment to keep it performing in an efficient and environmentally sound manner. The tests and inspections shall be performed as discussed in the following subsections.

3.1.2.1 Inspecting ASTs, Piping and Dispensing Systems

Facility personnel periodically observe the ASTs during operating hours. The ASTs and associated piping and dispensing systems shall be inspected monthly, and the results shall be recorded on the Monthly AST Inspection Report, as included in Appendix E. Spill response kits kept on site shall also be checked during the monthly AST inspection, and restocked as necessary. The monthly inspection reports shall be kept for at least three years in a file maintained by the Facility Manager. Inspections of the tanks include observations of the exterior of the tank for signs of deterioration or spills (leaks), observations of the tank foundation and supports for signs of instability, and observations of the vent, fill and discharge pipes for signs of poor connection, that could cause a spill. In addition to these monthly inspections, the facility will periodically verify the integrity of each tank in accordance with an industry standard inspection procedure such as STI – SP001-03 or API 653. The frequency of such testing will be as specified by the selected industry standard procedure.

3.1.2.2 Tank and Equipment Maintenance

All petroleum tank and piping problems shall be immediately reported to the Facility Manager. Visible oil spills (leaks) that cause a loss of oil from tank walls, piping or other components shall be repaired or replaced as soon as possible to prevent the potential for a major spill from the source. This is especially important for sources located outside containment or near drains or catch basins that discharge to the environment.

3.1.3 Training [112.7(f)]

Kingfish Maine shall provide SPCC spill training for personnel involved with handling petroleum products. The Environmental Compliance Officer shall arrange for annual training, which shall include the following training topics:

- ◆ an introduction to pollution control laws;

- ◆ rules and regulations pertaining to the use and storage of petroleum products;
- ◆ inspection, operation and maintenance of spill equipment, and petroleum storage and dispensing equipment;
- ◆ spill response and cleanup;
- ◆ spill notification and record keeping; and
- ◆ spill prevention practices.

Records of attendance at training and topics covered shall be maintained by the Facility Manager.

3.1.3.1 Documentation for Training

Annual SPCC training shall be documented to include the instructor's name, course outline, date and duration of training, attendant's names and signatures, and corrective action list for areas in need of improvement, if any. This information shall be filed and maintained for at least 3 years at the office of the Environmental Compliance Officer. A Certificate of Training shall be presented to each Kingfish Maine employee that has completed the training. The Environmental Compliance Officer shall forward a copy of this certificate to the Human Resource Department for inclusion in the employee's file.

3.1.4 Security [112.7(g)]

The facility is not a public facility, and access is limited to staff and visitors. The facility is secured by a guardhouse and an entry gate that divides the stored materials from the public road. The entry gate will be monitored. The facility has the potential to be operated at all hours, owing to the nature of operations of the facility and facilitates ready detection and emergency response by staff. For this purpose, approved staff will be able to access the facility at any time.

The facility will be lit for security, and will contain some building mounted and pole mounted site lighting.

3.1.5 Conformance with State of Maine and Local Requirements [112.7(j)]

ASTs 1 through 10 will be registered with and permitted by the Maine State Fire Marshal's Office.

The Facility will have no underground piping.

No secondary containment dikes will be exposed to weather.

ASTs 1 through 12 will be registered with the Maine Emergency Management Agency. If mandated, inventory reporting will be performed on an annual basis is mandated.

3.2 Emergency Response [112.7(a)(3)(iv), 112.7(a)(4) and 112.7(c)]

This section describes the cleanup response and protocols to follow in the event of an oil spill. The uncontrolled discharge of oil to groundwater, surface water or soil is prohibited by State or Federal laws. It is imperative that action be taken to respond to a spill once it has occurred. Depending on the volume and characteristics of the material released, Kingfish Maine has defined spill response as either a “Minor Spill Response” or “Major Spill Response” (“Spill Emergency”). A list of Emergency Contacts is included in Appendix A. A list of spill response materials kept at the facility is included in Appendix F.

3.2.1 Minor Spill Response [112.7(a)(3)(iv)]

A “Minor Spill Response” is defined as one that poses no significant harm to human health or the environment. These spills involve generally less than 5 gallons and can usually be cleaned up by Kingfish Maine personnel. Other characteristics of a minor spill include the following:

- ◆ the spilled material is easily stopped or controlled at the time of the spill;
- ◆ the spill is localized;
- ◆ the spilled material is not likely to reach surface water or groundwater;
- ◆ there is little danger to human health; and
- ◆ there is little danger of fire or explosion.

In the event of a minor spill the following guidelines shall apply:

- ◆ Stop the source if the spill is ongoing.
- ◆ Immediately notify the senior on-site person (i.e., Facility Manager).
- ◆ Call the Maine Department of Environmental Protection (1-800-482-0777) within two hours.
- ◆ Under the direction of a senior on-site person, contain the spill with spill response materials and equipment.
- ◆ Place spill debris in properly labeled waste containers.
- ◆ Complete the Spill Notification Form (Appendix B) and send to the Environmental Compliance Officer.

3.2.2 Major Spill Response (Spill Emergency) [112.7(a)(3)(iv)]

A “Spill Emergency” is defined as one involving a spill that cannot be safely controlled or cleaned up. Characteristics include the following:

- ◆ the spill is large enough to spread beyond the immediate spill area;
- ◆ the spilled material enters surface water or groundwater (regardless of spill size);
- ◆ the spill requires special training and equipment to cleanup;
- ◆ the spilled material is dangerous to human health; and/or
- ◆ there is a danger of fire or explosion.

In the event of a spill emergency, the following guidelines shall apply:

- ◆ Stop the source if the spill is ongoing only if safe to do so.
- ◆ All workers shall immediately evacuate the spill site and move to a safe distance away from the spill.
- ◆ A senior on-site person shall call for medical assistance if workers are injured (no worker shall engage in rescue operations unless they have been properly trained and equipped).
- ◆ A senior on-site person shall immediately Dial 911 to notify the Jonesport Fire Department, Sherriff, and EMA.
- ◆ Thereafter, contact the Maine Department of Environmental Protection (1-800-482-0777) and the National Response Center (1-800-424-8802). Document the telephone calls on the Spill Notification Form in Appendix B.
- ◆ A senior on-site person shall contact the Facility Manager and provide details regarding the spill.
- ◆ The Facility Manager or Environmental Compliance Officer will coordinate cleanup and seek assistance from a cleanup contractor as necessary.

If a senior on-site person is not available at the time of the spill, then the next highest Kingfish Maine employee in command shall assume responsibility.

3.2.3 Waste Disposal [112.7(a)(3)(v)]

Non-hazardous wastes resulting from a minor spill response will be containerized in impervious bags, drums or buckets. Unsaturated oil spill clean up debris will be disposed of as special waste by a licensed waste hauler within two weeks. Any saturated oil spill clean up debris or recovered free product will be stored in drums and either re-used as fuel or disposed of properly.

Wastes resulting from a major spill response will be removed and disposed by a cleanup contractor.

3.2.4 Notification and Reporting [112.4 and 112.7(a)(4)]

3.2.4.1 Spill Notification Forms [112.7(a)(4)]

After making the appropriate phone calls and the spill is contained, a Spill Notification Form, included in Appendix B, shall be completed and submitted to the Environmental Compliance Officer. The Spill Notification Form includes a checklist to document the proper notification of state and federal agencies. The form shall be filed by facility name and maintained as long as Kingfish Maine owns and/or operates this facility.

3.2.4.2 Submittal of Additional Information to the EPA and Maine DEP [112.4]

If a single spill greater than 1,000 gallons occurs, or two spills each greater than 42 gallons occur within any 12 month period, at this Kingfish Maine, the Environmental Compliance Officer shall, in addition to the notification procedures above, provide written information to the EPA Regional Administrator as required by the federal SPCC rules. A copy of this information must be provided to the Maine Department of Environmental Protection.

3.2.5 Area Plans

The Environmental Protection Agency (EPA) and Coast Guard (USCG) administer Area Plans for spill contingency response by Region throughout the United States. The USCG covers coastal areas, and EPA covers inland areas. In a major spill event, contacting the National Response Center hotline will trigger assistance from the appropriate agency, if needed.

4.0 REQUIRED FACILITY IMPROVEMENTS

The Professional Engineer's certification of this plan is contingent on the following facility improvements being implemented for compliance with SPCC regulations 40 CFR 112:

1. Construct improvements as shown on plans prepared for facility construction by A/E team depicting compliant improvements.

APPENDIX A

Emergency Contacts [112.7(a)(3)(vi)]

Emergency Contacts

Spill Reporting Hotlines

Agency	Telephone #
Maine Department of Environmental Protection Oil Spill Response	1-800-482-0777
National Response Center USCG/USEPA	1-800-424-8802

Local Emergency Agencies

Agency	Telephone #
Jonesport Fire Department (non-emergency: 207-497-2857)	911
Washington County EMA Department (non-emergency: 207-255-3931)	911
Washington County Sherriff Department (non-emergency: 207-255-4422)	911

Spill Response Contractors

Company/Location	Telephone #
Clean Harbors	1-800-645-8265

Owner/Operator (Kingfish Maine)

Name/Title	Telephone #
Megan Sorby, Operations Manager	TBD
Tom Sorby, Operations Manager	TBD

See Appendix B for Emergency Response – Spill Notification Form

APPENDIX B

Spill Notification Form

&

Spill Records

AR-1 rev 7/12
HAZARDOUS MATERIALS INCIDENT
INITIAL NOTIFICATION

1.	Date of Incident:	Time of Incident: <input type="checkbox"/> AM <input type="checkbox"/> PM
2.	Location (street or route, town, and county):	
3.	Contact Information:	
	Spiller/Responsible Party:	Call back Person/Number:
4.	Type of Incident:	
5.	Material Released (if known):	
	Quantity Released (if known): <input type="checkbox"/> <input type="checkbox"/>	
6.	Is the Release on going: Yes <input type="checkbox"/> No <input type="checkbox"/>	
7.	Released to: Soil <input type="checkbox"/> Water <input type="checkbox"/> Ocean <input type="checkbox"/> Air <input type="checkbox"/> Well <input type="checkbox"/> Sewer <input type="checkbox"/> Containment <input type="checkbox"/> Other: <input type="checkbox"/>	
8.	Any Injuries or Fatalities? Yes <input type="checkbox"/> No <input type="checkbox"/>	
9.	Assistance Needed: Police <input type="checkbox"/> Fire <input type="checkbox"/> Ambulance <input type="checkbox"/> HazMat Team <input type="checkbox"/> Other: <input type="checkbox"/>	
10.	THE FACILITY MUST CALL THESE NUMBERS IMMEDIATELY: <input type="checkbox"/> <input type="checkbox"/> CLOSEST LOCAL FIRE DEPARTMENT <input type="checkbox"/> DEP 1-800-482-0777 (before 5:00pm) <input type="checkbox"/> MEMA 1-800-452-8735 (before 5:00pm) <input type="checkbox"/> MAINE STATE POLICE 1-800-452-4664 (After 5:00pm to reach DEP and MEMA) <input type="checkbox"/> COUNTY SHERIFF'S OFFICE (see reverse for telephone number) for Local Emergency <input type="checkbox"/> Coordinator notification <input type="checkbox"/> NATIONAL RESPONSE CENTER 1-800-424-8802	
11.	Notification: Date: Time:	Received by:

This report is required for any release that goes beyond the facility boundary and is a release of a reportable quantity of a CERCLA Hazardous or Extremely Hazardous Substance. All chemical spills must be reported to the Maine DEP.

A follow-up report is required within 14 days regarding actions taken to respond to and control the release; the cause and events leading to the release; known or anticipated health risks, medical attention needs of

LOCAL EMERGENCY COORDINATOR CONTACTS	
Androscoggin County	784-3622
Aroostook County	800-432-7842
Cumberland County	893-2810
Hancock County	667-8866
Franklin County	778-2680
Kennebec County	623-3591
Knox County	593-9132
Lincoln County	882-7332
Oxford County	800-733-1421
Penobscot County	942-7911
Piscataquis County	800-432-7372
Sagadahoc County	443-9711
Somerset County	877-200-9070
Waldo County	800-660-3398
Washington County	800-432-7303
York County	324-1111

Spill Notification Form

Part A: Basic Spill Data		
Type of Spilled Substance:	Notification Person:	
Quantity Released:	Spill Date and Time:	
Location of Spill:	Discovery Date and Time:	
	SPILL DURATION:	
Facility Name & Location: Kingfish Maine Facility 9 Dun Garvin Road Jonesport, ME	Release to: <input type="checkbox"/> air <input type="checkbox"/> water <input type="checkbox"/> ocean <input type="checkbox"/> well <input type="checkbox"/> soil <input type="checkbox"/> sewer <input type="checkbox"/> containment <input type="checkbox"/> other _____	
Owner / Company Name: Kingfish Maine 9 Dun Garvin Road Jonesport, ME 04649	Telephone: Facility: TBD 24 hr.: TBD	
Nature of spill and any environmental or health effects: <div style="text-align: right;"><input type="checkbox"/> Injuries <input type="checkbox"/> Fatalities</div>		
Part B: Notification Checklist		
Spill Type	Notification Date and Time	Name of Person that Received Call
Spill is any amount of petroleum product:		
Maine Dep't of Environmental Protection 1-800-482-0777		
Spill reaches groundwater or surface water:		
Maine Dep't of Environmental Protection 1-800-482-0777		
National Response Center 1-800-424-8802		

Send a copy of this form to the Kingfish Maine Environmental Compliance Officer. This form shall be filed by facility name and maintained as long as Kingfish Maine owns and/or operates the facility.

APPENDIX C

Facility Site Plans [112.7(a)(3)]

APPENDIX D

Substantial Harm Criteria Checklist

[112.20(e)]

**SUBSTANTIAL HARM CRITERIA CHECKLIST (40 CFR 112.20 (e))
CERTIFICATION OF THE APPLICABILITY**

FACILITY NAME: Kingfish Maine RAS Facility
FACILITY ADDRESS: 9 Dun Garvin Road Road, Jonesport, ME

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes No

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?

Yes No

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

Yes No

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?

Yes No

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes No

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Name (please type or print)

Signature

Title

Date

APPENDIX E

Facility Inspection Checklist

&

Inspection Records

AST Facility Monthly Inspection Report M: Y: Kingfish Maine

Tank/Product Capacity	Tank 1 12000 gallons	Tank 2 12000 gallons	Tank 3 12000 gallons
General Condition of Tank (Note any deformations, corrosion, staining, etc. Check for liquid in the interstitial space of double-walled tanks.)			
Tank Level Gauge and High Level Alarm Functional?			
General Condition of Secondary Containment (Note any cracks, drain valve closed/locked, accumulated water, presence of product.)			
Foundation/Tank Base (Note any staining, spills, water against base, etc.)			
Pumps, Piping & Dispensers (Check pumps, piping & dispensers for weeps or leaks; check sumps for water/product; and check piping leak detection systems .)			
Secondary Containment Clear			
Emergency Response Spill Kits	Location # Kit complete? ____ Kit restocked: ____		

Name: _____

Title: _____

Signature _____ Date: _____

This report shall be kept on file for at least three years.

AST Facility Monthly Inspection Report M: Y: Kingfish Maine

Tank/Product Capacity	Tank 4 12000 gallons	Tank 5 12000 gallons	Tank 6 12000 gallons
General Condition of Tank (Note any deformations, corrosion, staining, etc. Check for liquid in the interstitial space of double-walled tanks.)			
Tank Level Gauge and High Level Alarm Functional?			
General Condition of Secondary Containment (Note any cracks, drain valve closed/locked, accumulated water, presence of product.)			
Foundation/Tank Base (Note any staining, spills, water against base, etc.)			
Pumps, Piping & Dispensers (Check pumps, piping & dispensers for weeps or leaks; check sumps for water/product; and check piping leak detection systems .)			
Secondary Containment Clear			
Emergency Response Spill Kits	Location # Kit complete? ____ Kit restocked: ____		

Name: _____

Title: _____

Signature _____ Date: _____

This report shall be kept on file for at least three years.

AST Facility Monthly Inspection Report M: Y: Kingfish Maine

Tank/Product Capacity	Tank 7 12000 gallons	Tank 8 12000 gallons	Tank 9 12000 gallons
General Condition of Tank (Note any deformations, corrosion, staining, etc. Check for liquid in the interstitial space of double-walled tanks.)			
Tank Level Gauge and High Level Alarm Functional?			
General Condition of Secondary Containment (Note any cracks, drain valve closed/locked, accumulated water, presence of product.)			
Foundation/Tank Base (Note any staining, spills, water against base, etc.)			
Pumps, Piping & Dispensers (Check pumps, piping & dispensers for weeps or leaks; check sumps for water/product; and check piping leak detection systems .)			
Secondary Containment Clear			
Emergency Response Spill Kits	Location # Kit complete? ____ Kit restocked: ____		

Name: _____

Title: _____

Signature _____ Date: _____

This report shall be kept on file for at least three years.

AST Facility Monthly Inspection Report M: Y: Kingfish Maine

Tank/Product Capacity	Tank 10 12000 gallons		
General Condition of Tank (Note any deformations, corrosion, staining, etc. Check for liquid in the interstitial space of double-walled tanks.)			
Tank Level Gauge and High Level Alarm Functional?			
General Condition of Secondary Containment (Note any cracks, drain valve closed/locked, accumulated water, presence of product.)			
Foundation/Tank Base (Note any staining, spills, water against base, etc.)			
Pumps, Piping & Dispensers (Check pumps, piping & dispensers for weeps or leaks; check sumps for water/product; and check piping leak detection systems .)			
Secondary Containment Clear			
Emergency Response Spill Kits	Location # _____ Kit complete? ____ Kit restocked: ____		

Name: _____

Title: _____

Signature _____ Date: _____

This report shall be kept on file for at least three years.

APPENDIX F

Spill Response Kit List

Spill Response Kits

The following are recommended items for on-site oil spill response kits. Spill kits should be well marked and kept in readily accessible locations. Facility personnel should be familiar with the location and contents of the spill kits.

Drums or other containers to hold contaminated materials (minimum two)

Loose absorbent for oil (minimum eight bags)

Drum or other container to hold contents of spill kit

Sorbent pads/wipes/pillows/booms/socks (minimum one 95 gal kit)

Nitrile gloves (Minimum 6 pairs)

Neoprene gloves for cold weather use (Minimum 6 pairs)

Vinyl/PVC Pull-On Overboots (Minimum 6 pairs)

Nonsparking Shovels (Minimum two)

24" Coarse Brooms (Minimum two)

36" Squeegee (Minimum one)

Expandable pipe plug/Mooring ball (minimum one)

APPENDIX G

Employee Training Log

Employee Training Log

Note: New employees shall receive initial training in the contents and implementation of this SPCC plan upon start of their employment. All employees shall receive annual refresher training in the contents and implementation of this SPCC plan.

Date of Training	Topics Covered	Names of Employees Attending	Instructor(s)

APPENDIX H

Figure 1