

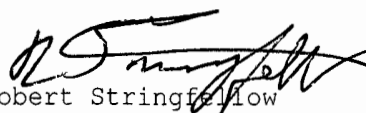
UNITED STATES GOVERNMENT
MEMORANDUM

August 12, 2003

To: Public Information (MS 5034)
From: Plan Coordinator, FO, Plans Section (MS 5231)
Subject: Public Information copy of plan
Control # - N-07861
Type - Initial Exploration Plan
Lease(s) - OCS-G23881 Block - 336 Eugene Island Area
Operator - Cabot Oil & Gas Corporation
Description - Wells A and B
Rig Type - JACKUP

Attached is a copy of the subject plan.

It has been deemed submitted as of this date and is under review for approval.


Robert Stringfellow
Plan Coordinator

Site Type/Name	Botm Lse/Area/Blk	Surface Location	Surf Lse/Area/Blk
WELL/A	G23881/EI/336	4885 FSL, 430 FWL	G23881/EI/336
WELL/B	G23881/EI/336	4885 FSL, 430 FWL	G23881/EI/336



Cabot Oil & Gas Corporation

August 8, 2003

U.S. Department of the Interior
Minerals Management Service
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394

Attention: Mr. Nick Wetzel
Plans Unit

RE: Initial Exploration Plan for Lease OCS-G 23881, Eugene Island Block 336, OCS Federal Waters, Gulf of Mexico, Offshore, Louisiana

Gentlemen:

In accordance with the provisions of Title 30 CFR 250.203 and that certain Notice to Lessees (NTL 2002-G08), Cabot Oil & Gas Corporation (Cabot) hereby submits for your review and approval nine (9) copies of an Initial Exploration Plan (Plan) for Lease OCS-G 23881, Eugene Island Block 336, Offshore, Louisiana. Five (5) copies are "Proprietary Information", and four (4) copies are "Public Information".

Excluded from the Public Information copies are certain geologic and geophysical discussions and attachments.

Contingent upon receiving regulatory approvals and based on equipment and personnel availability, Cabot anticipates operations under this Plan commencing as early as October 15, 2003.

Should additional information be required, please contact the undersigned, or our regulatory consultant, R.E.M. Solutions, Inc., Attention: Christine Groth at 281.492.8562.

Sincerely,

CABOT OIL & GAS CORPORATION

Kimberly A. Dillard
Regulatory Supervisor

KAD:CAG
Attachments

**Public
Information**

CABOT OIL & GAS CORPORATION

1200 Enclave Parkway
Houston, Texas 77077

Kimberly A. Dillard
kim.dillard@cabotog.com

INITIAL EXPLORATION PLAN

LEASE OCS-G 23881

EUGENE ISLAND BLOCK 336

PREPARED BY:

Christine Groth
R.E.M. Solutions, Inc.
17171 Park Row, Suite 390
Houston, Texas 77084
281.492.8562 (Phone)
281.492.6117 (Fax)
christine@remolutionsinc.com

DATED:

August 8, 2003

SECTION A PLAN CONTENTS

A. Description, Objectives and Schedule

Lease OCS-G 23881, Eugene Island Block 336 was acquired by Cairn Energy USA, Inc. at the Central Gulf of Mexico Lease Sale No. 182 held on March 20, 2002. The lease was issued with an effective date of June 1, 2002 and a primary term ending date of May 31, 2007.

The current lease operatorship and ownership are as follows:

Area/Block Lease No.	Operator	Ownership
Eugene Island Block 336	Cabot Oil & Gas Corporation	Cabot Oil & Gas Corporation

Cabot proposes to drill, complete, potentially test and install minimal well protector structures over Well Locations A and B in Eugene Island Block 336. Information pertaining to the geological targets, including a narrative of trapping features, is included as ***Attachment A-1***.

Cabot proposes to conduct these operations as outlined in the following activity schedule:

<i>Proposed Activity</i>	<i>Start Up Date</i>	<i>Completion Date</i>
Drill Well Location A	10/15/2003	12/03/2003
Drill, Complete and Test Well Location B and Install Well Protector Structure	12/04/2003	02/08/2004
Complete and Test Well Location A and Install Well Protector Structure	02/09/2004	02/23/2004

B. Location

Included as ***Attachments A-2 through A-4*** are Form MMS-137 "OCS Plan Information Form", Well Location Plat, and Bathymetry Map detailing the proposed well surface location disturbance areas.

Cabot proposes to utilize a typical jack-up type drilling rig; therefore, no anchors will be used.

C. Drilling Unit

Cabot will utilize a typical jack-up drilling rig for the proposed drilling, completion and potential testing operations provided for in this Plan. Actual rig specifications will be included with the Applications for Permit to Drill.

SECTION A

Contents of Plan - Continued

Safety of personnel and protection of the environment during the proposed operations is of primary concern with Cabot, and mandates regulatory compliance with the contractors and vendors associated with the proposed operations as follows:

Minerals Management Service regulations contained in Title 30 CFR Part 250, Subparts C, D, E, G and O mandate the operations comply with well control, pollution prevention, construction and welding procedures as described in Title 30 CFR Part 250, Subparts C, D, E, G and O; and as further clarified by MMS Notices to Lessees.

Minerals Management Service conducts periodic announced and unannounced onsite inspections of offshore facilities to confirm operators are complying with lease stipulations, operating regulations, approved plans, and other conditions; as well as to assure safety and pollution prevention requirements are being met. The National Potential Incident of Noncompliance (PINC) List serves as the baseline for these inspections.

U. S. Coast Guard regulations contained in Title 33 CFR mandate the appropriate life rafts, life jackets, ring buoys, etc., be maintained on the facility at all times.

U. S. Environmental Protection Agency regulations contained in the NPDES General Permit GMG290000 mandate that supervisory and certain designated personnel on-board the facility be familiar with the effluent limitations and guidelines for overboard discharges into the receiving waters.

Geological Targets and Trapping Features

**Attachment A-1
(Proprietary Information)**

OCS Plan Information Form

**Attachment A-2
(Public Information)**

OCS PLAN INFORMATION FORM
(USE SEPARATE FORM FOR EACH LEASE)

EXPLORATION PLAN	<input checked="" type="checkbox"/>	DEVELOPMENT OPERATIONS COORDINATION DOCUMENT			DEVELOPMENT & PRODUCTION PLAN	
OPERATOR:		Cabot Oil & Gas Corporation			ADDRESS: 1200 Enclave Parkway, Houston, Texas 77077	
MMS OPERATOR NO.:		01355				
CONTACT PERSON:		Christine Groth at R.E.M. Solutions, Inc.			PHONE NO. 281.492.8562	
PROPOSED START DATE:		10/15/2003		RIG TYPE:	JU	
				DISTANCE TO CLOSEST LAND (IN MILES):		81.3
NEW OR UNUSUAL TECHNOLOGY	YES		NO	<input checked="" type="checkbox"/>	ONSHORE SUPPORT BASE: Fourchon, Louisiana	
NARRATIVE DESCRIPTION PROPOSED ACTIVITIES:		Drill, complete, potentially test and install a well protector type structure over Well Locations A and B in Eugene Island Block 336.				
					PROJECT NAME, IF APPLICABLE: NA	

PROPOSED WELL/STRUCTURE LOCATIONS

WELL / STRUCTURE NAME	SURFACE LOCATION		BOTTOM-HOLE LOCATION (FOR WELLS)	
Well A Name:	CALLS: 4885' F S L and 430' F W L OF LEASE OCS G 23881 , Eugene Island AREA, BLOCK 336		CALLS: LEASE OCS G 23881 , Eugene Island AREA, BLOCK 336	
	X: 1,850,208.40'		X:	
	Y: -174,678.40'		Y:	
	LAT: 28°11'07.973" N		LAT:	
	LONG: 91°47'53.152" W		LONG:	
	TVD (IN FEET):	MD (IN FEET):	WATER DEPTH (IN FEET): 265'	
Well B Name:	CALLS: 4885' F S L and 430' F W L OF LEASE OCS G 23881 , Eugene Island AREA, BLOCK 336		CALLS: LEASE OCS G 23881 , Eugene Island AREA, BLOCK 336	
	X: 1,850,208.40'		X:	
	Y: -174,678.40'		Y:	
	LAT: 28°11'07.973" N		LAT:	
	LONG: 91°47'53.152" W		LONG:	
	TVD (IN FEET):	MD (IN FEET):	WATER DEPTH (IN FEET): 265'	

Well Location Plat

**Attachment A-3
(Public Information)**

EI332

EI334

PROPOSED LOCATIONS									
LOC'N.	CALLS		X COORDINATE	Y COORDINATE	LATITUDE	LONGITUDE	WD	MD	TVD
A SURFACE	4,885.00' FSL	430.00' FWL	1,850,208.40'	-174,678.40'	28° 11' 07.973"N	91° 47' 53.152"W			
B SURFACE	4,885.00' FSL	430.00' FWL	1,850,208.40'	-174,678.40'	28° 11' 07.973"N	91° 47' 53.152"W			

EI336

OCS-G-23881

CABOT

EI337

○ A,B SURFS

EI335

GRID NORTH

EI355

**PUBLIC
INFORMATION**



Cabot Oil & Gas Corporation

EXPLORATION PLAN

OCS-G-23881

BLOCK 336
EUGENE ISLAND AREA
GULF OF MEXICO

FUGRO CHANCE INC.

200 Dulles Dr. Lafayette, Louisiana 70506-3001 (337) 237-1300



GEODETIC DATUM: NAD27
PROJECTION: LOUISIANA SOUTH
GRID UNITS: US SURVEY FEET

SCALE 0 2,000'
IN FEET

Job No.: 03-2538

Date: 8/04/03

Drwn: VAG

Chart: Of: 1 1

Printed: 8/4/03

Dwgfile: O:\CADBASE\WPERMIT\LASOUTH\EI\Permit\336ep-ab

Bathymetry Map

**Attachment A-4
(Public Information)**

SECTION B General Information

A. Contact

Questions or requests for additional information should be made to Cabot's authorized representative for this project:

Christine Groth
R.E.M. Solutions, Inc.
17171 Park Row, Suite 390
Houston, Texas 77084
281.492.8562 (Phone)
281.492.6117 (Fax)
christine@remolutionsinc.com

B. New or Unusual Technology

Cabot does not propose using any new and/or unusual technology for the operations proposed in this Plan.

C. Bonding Information

In accordance with Title 30 CFR Part 256, Subpart I, Cabot elected and has on file with the Minerals Management Service Gulf of Mexico Regional Office a \$3,000,000 Areawide Development Bond.

As deemed warranted, Minerals Management Service will contact the designated operator in the event a supplemental bond is required for the proposed operations, as outlined in Notice to Lessees (NTL) 2003-N06 to cover plugging liability of the wellbores, removal of associated well protector structures and site clearance.

Cabot is aware that such bonding may be imposed, and will submit accordingly upon notification from the Minerals Management Service.

D. Onshore Base and Support Vessels

The proposed surface disturbances in Eugene Island Block 336 will be located approximately 81.3 miles from the nearest Louisiana shoreline, and approximately 125 miles from the onshore support base to be located in Fourchon, Louisiana.

SECTION B

General Information - Continued

Cabot will use an existing onshore base to accomplish the following routine operations:

- Loading/Offloading point for equipment supporting the offshore operations,
- Dispatching personnel and equipment, and does not anticipate the need for any expansion of the selected facilities as a result of the activities proposed in this Plan,
- Temporary storage for materials and equipment
- 24-Hour Dispatcher

Personnel involved in the proposed operations will typically use their own vehicles as transportation to and from the selected onshore base; whereas the selected vendors will transport the equipment by a combination of trucks, boats and/or helicopters to the onshore base. The personnel and equipment will then be transported to the drilling rig via the transportation methods and frequencies shown below, taking the most direct route feasible as mandated by weather and traffic conditions:

Support Vessel	Drilling and Completion Trips Per Week
Crew Boat	2
Supply Boat	7
Helicopter	4

The proposed operations are temporary in nature and do not require any immediate action to acquire additional land, expand existing base facilities.

A Vicinity Plat showing the surface location of Eugene Island Block 336 relative to the shoreline and onshore base is included as ***Attachment B-1***.

E. Lease Stipulations

Under the Outer Continental Shelf Lands Act, the Minerals Management Service is charged with the responsibility of managing and regulating the exploration and development on the OCS.

As part of the regulatory process, an Environmental Impact Statement (EIS) is prepared for each lease sale, at which time mitigation measures are addressed in the form of lease stipulations, which then become part of the oil and gas lease terms and are therefore enforceable as part of that lease.

SECTION B

General Information - Continued

As part of this process, the designated operator proposing to conduct related exploratory and development activities, must review the applicable lease stipulations, as well as other special conditions, which may be imposed by the Minerals Management Service, and other governing agencies.

Lease OCS-G 23881, Eugene Island Block 336 is subject to the following stipulations and conditions:

Military Warning Area

The hold and save harmless section of the Military Areas Stipulation serves to protect the U.S. Government from liability in the event of an accident involving the designated oil and gas lease operator and military activities.

The electromagnetic emissions section of the stipulation requires the operator and its agents to reduce and curtail the use of radio or other equipment emitting electromagnetic energy within some areas.

This serves to reduce the impact of oil and gas activity on the communications of military missions and reduces the possible effects of electromagnetic energy transmissions on missile testing, tracking, and detonation.

The operational section requires notification to the military of oil and gas activity to take place within a military use area. This allows the base commander to plan military missions and maneuvers that may avoid the areas where oil and gas activities are taking place or to schedule around these activities. Prior notification helps reduce the potential impacts associated with vessels and helicopters traveling unannounced through areas where military activities are underway.

The Military Areas Stipulation reduces potential impacts, particularly in regards to safety, but does not reduce or eliminate the actual physical presence of oil and gas operations in areas where military operations are conducted.

The reduction in potential impacts resulting from this stipulation makes multiple-use conflicts most unlikely. Without the stipulation, some potential conflict is likely. The best indicator of the overall effectiveness of the stipulation may be that there has never been an accident involving a conflict between military operations and oil and gas activities.

SECTION B

General Information - Continued

The proposed surface disturbances in Eugene Island Block 336 are located within Military Warning Area W-59A. Therefore, in accordance with the requirements of the referenced stipulation, Cabot will contact the Naval Air Station in order to coordinate and control the electromagnetic emissions during the proposed operations.

Marine Protected Species

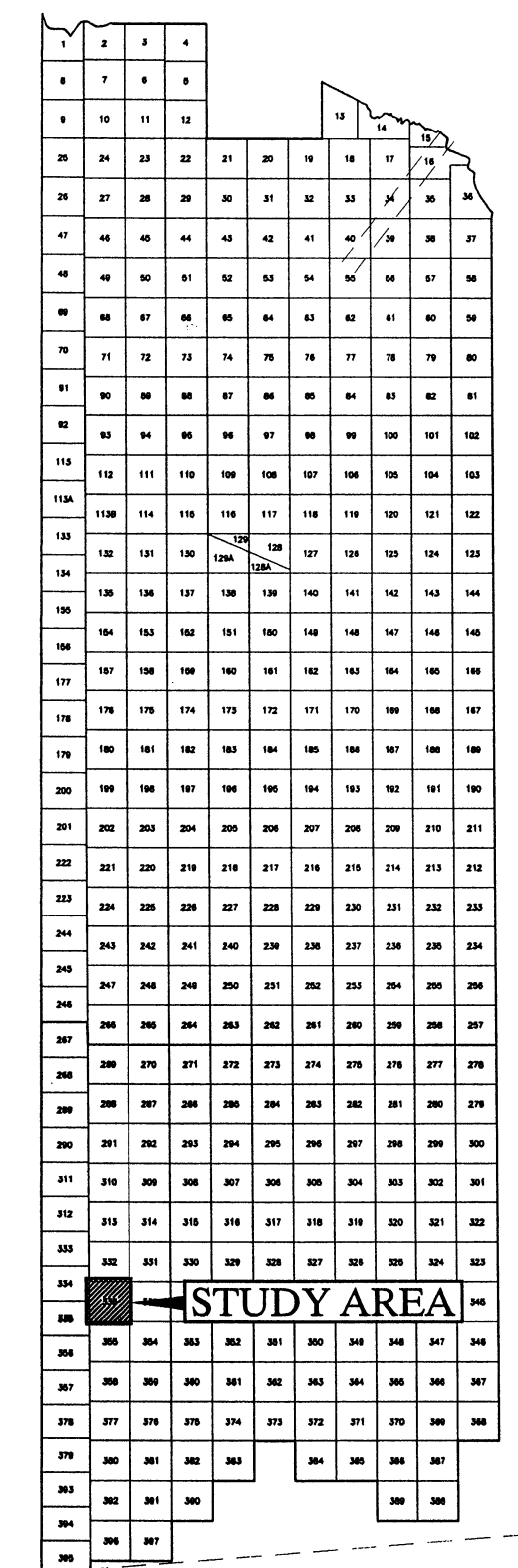
Lease Stipulation No. 6 is to reference measures to minimize or avoid potential adverse impacts to protected species (sea turtles, marine mammals, gulf sturgeon, and other federally protected species). MMS has issued Notice to Lessees NTL 2003-G08 "Implementation of Seismic Mitigation Measures", NTL 2003-G10 "Vessel Strike Avoidance and Injured/Dead Protected Species Reporting" and NTL 2003-G11 "Marine Trash and Debris Awareness and Elimination".

Special Conditions

The proposed surface disturbance activities in Eugene Island Block 336 will not be affected by any special conditions and/or multiple uses, such as designated shipping/anchorage areas, lightering zones, rigs-to-reef zone, ordnance disposal zones.

Vicinity Plat

**Attachment B-1
(Public Information)**



VICINITY MAP



SECTION C

Geological, Geophysical & H2S Information

A. Structure Contour Maps

Included as **Attachment C-1** are current structure maps (depth base and expressed in feet subsea) depicting the entire lease coverage area; drawn on the top of each prospective hydrocarbon sand. The maps depict each proposed bottom hole location and applicable geological cross section.

B. Interpreted Deep Seismic Lines

Included as **Attachment C-2** (original copy only) are page size copies of the migrated and annotated (shot point, time lines, well paths) deep seismic lines within 500 feet of the surface locations.

C. Geological Structure Cross Sections

Interpreted geological cross sections depicting the proposed well locations and depth of the proposed wells is included as **Attachment C-3**. Such cross sections correspond to each seismic line being submitted.

D. Shallow Hazards/Archaeological Reports

Fugro GeoServices, Inc. conducted a high resolution geophysical survey in Eugene Island Block 336 during May 2003 on behalf of Cabot Oil & Gas Corporation. The purpose of the survey was to evaluate geologic conditions and inspect for potential hazards or constraints to lease development.

Minerals Management Service has classified Eugene Island Block 336 as a low probability area for cultural resources.

Three (3) copies of these reports are being submitted to the Minerals Management Service under separate cover.

E. Shallow Hazards Assessment

A shallow hazards analysis has been prepared for the proposed surface locations, evaluating seafloor and subsurface geologic and manmade features and conditions, and is included as **Attachment C-4**.

F. High Resolution Seismic Lines

Included as **Attachment C-5** (original copy only) are copies of the annotated high resolution survey data lines for each surface location disturbance proposed in this Plan.

SECTION C

Geological, Geophysical & H2S Information-Continued

G. Stratigraphic Column

A generalized biostratigraphic/lithostratigraphic column from the seafloor to the total depth of the proposed wells is included as *Attachment C-6*.

H. Time Vs. Depth Tables

A time versus depth table is included as *Attachment C-7*.

I. Hydrogen Sulfide Classification

In accordance with Title 30 CFR 250.417, Cabot requests that Eugene Island Block 336 be classified by the Minerals Management Service as an area where the absence of hydrogen sulfide has been confirmed based on the following wells which were drilled to the stratigraphic equivalent of the wells proposed in this Plan:

<i>Lease</i>	<i>Area/Block</i>	<i>Well No.</i>	<i>Stratigraphic Equivalent</i>
G 02116	EI 321	B-27, B-37 (S/T), B-39	Lentic

Structure Maps

**Attachment C-1
(Proprietary Information)**

Deep Seismic Lines
Original Copy Only

Attachment C-2
(Proprietary Information)

Cross Section Maps

**Attachment C-3
(Proprietary Information)**

Shallow Hazards Statement

**Attachment C-4
(Public Information)**



FUGRO GEOSERVICES, INC.

July 25, 2002

Cabot Oil & Gas Corporation
1200 Enclave Parkway
Houston, Texas 77077-1607

200 Dulles Drive
Lafayette, LA 70506
Main: 337-237-2636
Fax : 337-268-3221

Attention: Greg Aggon

**SUBJECT: EXPLORATION PLAN LETTER
PROPOSED WELL "A, B" LOCATION
EUGENE ISLAND AREA, BLOCK 336
FGSI JOB NO. 2403-1229**

Mr. Aggon:

Fugro GeoServices, Inc. (FGSI) was contracted by Cabot Oil & Gas Corporation to prepare an Exploration Plan Letter for the proposed "A, B" location in Eugene Island Area (EI), Block 336 (OCS-G-23881). This letter is intended to address specific seafloor and subbottom conditions within 1,000 feet of the proposed location. Interpretation for this letter has been based on the July 2003 Hazard Survey performed by FGSI in EI-335 and EI-336 for Cabot Oil & Gas Corporation. Enclosed with this letter are copies of the Bathymetry Map and the Hazard Map from the July 2003 report with the proposed well location plotted on both maps. Also included are permit plats for the proposed well location.

Field operations were conducted on May 18 - 21, 2003 aboard the *M/V L'Arpenteur*. Horizontal positioning of the survey vessel was accomplished with the Fugro STARFIX[®] Satellite System which provides 24-hour operation and has a field accuracy of ± 3 meters. Seismic profiling instruments included a SSI G.I. Air Gun Sound Source, Litton 48-Channel Streamer, and an OYO Geospace DAS-1 Recording System. Other geophysical systems deployed included the EdgeTech 260-TH Side Scan Sonar, O.R.E. Geopulse 5210A Pinger Profiler, EchoTrac DF3500 Fathometer, Sea-Spy GSM-19MD Proton Magnetometer, and Sea-Bird Seacat SBE-19-01 Velocimeter. The survey grid fully covered blocks EI-335 and EI-336 and consisted of 22 east-west primary tracklines (Lines 1 - 22) spaced 300 meters (~1,000 feet) apart and 12 north-south tielines (Lines 23 - 34) spaced 900 meters (~2,953 feet) apart. Each navigation fix is 12.5 meters (41 feet) apart and every tenth fix (125 meters or 410 feet) is shown on the study maps and geophysical data. The survey grid was designed to provide complete coverage of the seafloor with the sonar and a representative sampling with all other systems. The July 2003 hazard report only addresses that part of the survey grid that covers EI-336, including approximately 1,000 feet into the surrounding blocks.

All aspects of the fieldwork were carried out in accordance with the existing Federal Guidelines at the time of the survey. This letter was prepared after review of the prior interpretations and related maps, tables, and figures from the July 2003 hazard report.

The proposed surface location is situated near the western boundary of EI-336:

4,885.00' FSL	Y =	-174,678.40'	Lat:	28° 11' 07.973"N
430.00' FWL	X =	1,850,208.40'	Lon:	91° 47' 53.152"W

Geologic Evaluation

- The water depth at the proposed well location is -265 feet below sea level. The bathymetric contours reflect a smooth seafloor that slopes to the south at an approximately gradient 6 feet per mile (0.06°). No irregular topographic features were observed at the proposed location.





- Seafloor soils are reported to consist of silty clay at the proposed well site (M.M.S., 1983, Visual No. 3). The Holocene seafloor sediments in the area of the proposed well site are approximately 50 feet thick.
- The Murphy 6-inch pipeline is located 322 feet northwest of the proposed location. Caution should be used to avoid this pipeline.
- There were no unidentified magnetic anomalies or side scan sonar contacts near the proposed well location.
- The proposed location is within the boundaries of a deeply buried channel. This channel is buried 85 feet below the seafloor.

There are no significant hazards near the proposed "A, B" location; however, caution should be used near the Murphy 6-inch pipeline to the northwest. For additional information, please refer to the July 2003 Hazard Survey report for EI-336. Please call me at **(337) 268-3222** if you have any questions or additional request.

Sincerely,
Fugro GeoServices, Inc.

A handwritten signature in black ink, appearing to read "Stuart J. Breaux".

Stuart J. Breaux
Project Geologist



Shallow Hazards Lines
Original Copy Only

Attachment C-5
(Proprietary Information)

Stratigraphic Column

**Attachment C-6
(Proprietary Information)**

Time Vs. Depth Tables

**Attachment C-7
(Proprietary Information)**

SECTION D

Biological Information

A. Chemosynthetic Information

The proposed seafloor disturbing activities are in water depths less than 400 meters (1312 feet); therefore, this section of the Plan is not applicable.

B. Topographic Features Information

MMS and the National Marine Fisheries Service (NMFS) have entered into a programmatic consultation agreement for Essential Fish Habitat that requires that no bottom disturbing activities, including anchors or cables from a semi-submersible drilling rig, may occur within 500 feet of the no-activity zone of a topographic feature. If such proposed bottom disturbing activities are within 500 feet of a no activity zone, the MMS is required to consult with the NMFS.

The activities proposed in this Plan are not affected by a topographic feature.

C. Live Bottom (Pinnacle Trend) Information

Certain leases are located in areas characterized by the existence of live bottoms. Live bottom areas are defined as seagrass communities; those areas that contain biological assemblages consisting of sessile invertebrates living upon and attached to naturally occurring hard or rocky formations with rough, broken, or smooth topography; and areas where the lithotope favors the accumulation of turtles, fishes, or other fauna. These leases contain a Live Bottom Stipulation to ensure that impacts from nearby oil and gas activities on these live bottom areas are mitigated to the greatest extent possible.

For each affected lease, the Live Bottom Stipulation requires that you prepare a live bottom survey report containing a bathymetry map prepared by using remote sensing techniques. This report must be submitted to the Gulf of Mexico OCS Region (GOMR) before you may conduct any drilling activities or install any structure, including lease term pipelines in accordance with NTL 99-G16.

Eugene Island Block 336 is not located within the vicinity of a proposed live bottom area.

SECTION E

Wastes and Discharge/Disposal Information

The Minerals Management Service (MMS), U. S. Coast Guard (USCG) and the U.S. Environmental Protection Agency (EPA) regulate the overboard discharge and/or disposal of operational waste associated with drilling, completing, testing and/or production operations from oil and gas exploration and production activities.

Minerals Management Service regulations contained in Title 30 CFR 250.300 require operators to "prevent the unauthorized discharge of pollutants into offshore waters". These same regulations prohibit the intentional disposal of "equipment, cables, chains, containers, or other materials" offshore. Small items must be stored and transported in clearly marked containers and large objects must be individually marked. Additionally, items lost overboard must be recorded in the facility's daily log and reported to MMS as appropriate.

U. S. Coast Guard regulations implement the Marine Pollution Research and Control Act (MARPOL) of 1987 requiring manned offshore rigs, platforms and associated vessels prohibit the dumping of all forms of solid waste at sea with the single exception of ground food wastes, which can be discharged if the facility is beyond 12 nautical miles from the nearest shore. This disposal ban covers all forms of solid waste including plastics, packing material, paper, glass, metal, and other refuse. These regulations also require preparation, monitoring and record keeping requirements for garbage generated on board these facilities. The drilling contractor must maintain a Waste Management Plan, in addition to preparation of a Daily Garbage Log for the handling of these types of waste. MODU's are equipped with bins for temporary storage of certain garbage. Other types of waste, such as food, may be discharged overboard if the discharge can pass through 25-millimeter type mesh screen. Prior to off loading and/or overboard disposal, an entry will be made in the Daily Garbage Log stating the approximate volume, the date of action, name of the vessel, and destination point.

U. S. Environmental Protection Agency regulations address the disposal of oil and gas operational wastes under three Federal Acts. The Resource Conservation and Recovery Act (RCRA) which provides a framework for the safe disposal of discarded materials, regulating the management of solid and hazardous wastes. The direct disposal of operational wastes into offshore waters is limited under the authority of the Clean Water Act. And, when injected underground, oil and gas operational wastes are regulated by the Underground Injection Control program. If any wastes are classified as hazardous, they are to be properly transported using a uniform hazardous waste manifest, documented, and disposed at an approved hazardous waste facility.

A National Pollutant Discharge Elimination System (NPDES) permit, based on effluent limitation guidelines, is required for any discharges into offshore waters. Cabot has requested coverage under the Region VI NPDES General Permit GMG290000 for discharges associated with exploration and development activities in Eugene Island Block 336 and will take applicable steps to ensure all offshore discharges associated with the proposed operations will be conducted in accordance with the permit.

SECTION E

Wastes and Discharge/Disposal Information-Continued

A. Composition of Solid and Liquid Wastes

The major operational solid waste in the largest quantities generated from the proposed operations will be the drill cuttings, drilling and/or completion fluids. Other associated wastes include waste chemicals, cement wastes, sanitary and domestic waste, trash and debris, ballast water, storage displacement water, rig wash and deck drainage, hydraulic fluids, used oil, oily water and filters, and other miscellaneous minor discharges.

These wastes are generated into categories, being solid waste (trash and debris), nonhazardous oilfield waste (drilling fluids, nonhazardous waste including cement and oil filters), and hazardous wastes (waste paint or thinners).

The type of discharges included in this permit application allow for the following effluents to be discharged overboard, subject to certain limitations, prohibitions and recordkeeping requirements.

Overboard Discharges

In accordance with NTL 2002-G08, overboard discharges generated by the activities are not required for submittal in this Plan.

Disposed Wastes

The wastes detailed in *Attachment E-1* are those wastes generated by our proposed activities that are disposed of by means of offsite release, injection, encapsulation, or placement at either onshore or offshore permitted locations for the purpose of returning them back to the environment.

Cabot will manifest these wastes prior to being offloaded from the MODU, and transported to shore for disposal at approved sites regulated by the applicable State. Additionally, Cabot will comply with any approvals or reporting and recordkeeping requirements imposed by the State where ultimate disposal will occur.

Waste Disposal Table

**Attachment E-1
(Public Information)**

Cabot Oil & Gas Corporation
Eugene Island Block 335
Examples of Wastes and Discharges Information

Table 2. Disposal Table (Wastes to be disposed of, not discharged)

Type of Waste Approximate Composition	Amount*	Rate per day	Name/Location of Disposal Facility	Treatment and/or Storage, Transport and Disposal Method
Norm – contaminated wastes	1 ton	Not applicable	Eugene Island Block 336	Transport to a transfer station via dedicated barge
Trash and debris	1,000 ft ³	3 ft ³ /day	Newpark Environmental Fourchon, LA	Transport in storage bins on crew boat to disposal facility
Chemical product wastes	50 bbl/yr	2 bbl/day	Newpark Environmental Fourchon, LA	Transport in containers to shore location
Chemical product wastes	100 bbl	2 bbl/day	Newpark Environmental Fourchon, LA	Transport in barrels on crew boat to shore location

*can be expressed as a volume, weight, or rate

SECTION F

Oil Spill Response and Chemical Information

A. Regional Oil Spill Response Plan (OSRP) Information

Effective June 3, 2002, Minerals Management Service approved Cabot Oil & Gas Corporation's (Cabot's) Regional Oil Spill Response Plan (OSRP). The most recent modification, dated July 3, 2003 to include Cabot's potential Worse Case Discharge (WCD) for a development facility located greater than 10 miles from the nearest shoreline. Cabot Oil & Gas Corporation is the only entity covered under this OSRP. Activities proposed in this Initial Exploration Plan will be covered by the Regional OSRP.

B. Oil Spill Removal Organizations (OSRO)

Cabot utilizes Clean Gulf Associates (CGA) as its primary provider for equipment, which is an industry cooperative owning an inventory of oil spill clean-up equipment. CGA is supported by the Marine Spill Response Corporation's (MSRC), which is responsible for storing, inspecting, maintaining and dispatching CGA's equipment. The MSRC STARS network provides for the closest available personnel, as well as an MSRC supervisor to operate the equipment.

C. Worst-Case Scenario Comparison (WCD)

<i>Category</i>	<i>Current Regional OSRP WCD</i>	<i>Proposed Exploration Plan WCD</i>
Type of Activity	Drilling/Completion/Testing	Drilling/Completion/Testing
Facility Surface Location	East Cameron Block 113	Eugene Island Block 336
Facility Description	MODU	MODU
Distance to Nearest Shoreline (Miles)	31 Miles	81.3 Miles
Volume: Storage Tanks (total) Facility Piping (total) Lease Term Pipeline Uncontrolled Blowout (day) Potential 24 Hour Volume (Bbls.)	1050 bbls	500 bbls
Type of Liquid Hydrocarbon	Condensate	Condensate
API Gravity	50°	50°

SECTION F

Oil Spill Response and Chemical Information-Continued

Due to the estimated flow rates from an exploratory well blowout are speculative and temporary in nature, Cabot will not modify their Regional OSRP to change the WCD.

Since Cabot has the capability to respond to the worst-case discharge (WCD) spill scenario included in its Regional OSRP approved on June 3, 2003, and since the worst-case scenario determined for our EP does not replace the worst-case scenario in our Regional OSRP, I hereby certify that Cabot has the capability to respond, to the maximum extent practicable, to a worst-case discharge, or a substantial threat of such a discharge, resulting from the activities proposed in our EP.

SECTION G

Air Emissions Information

The primary air pollutants associated with OCS exploration activities are:

- Carbon Monoxide
- Particulate Matter
- Sulphur Oxides
- Nitrogen Oxides
- Volatile Organic Compounds

These offshore air emissions result mainly from the drilling rig operations, helicopters, and support vessels. These emissions occur mainly from combustion or burning of fuels and natural gas and from venting or evaporation of hydrocarbons. The combustion of fuels occurs primarily on diesel-powered generators, pumps or motors and from lighter fuel motors. Other air emissions can result from catastrophic events such as oil spills or blowouts.

A. Calculating Emissions

Included as ***Attachment G-1*** is the Projected Air Quality Emissions Report (Form MMS-138) providing for the drilling, completion and potential testing operations utilizing a typical jack-up drilling unit, with related support vessels and construction barge information.

B. Screening Questions

As evidenced by ***Attachment G-1***, the worksheets were completed based on the proposed flaring and burning operations.

C. Emission Reduction Measures

The projected air emissions are within the exemption level; therefore, no emission reduction measures are being proposed.

D. Verification of Non-Default Emissions Factors

Cabot has elected to use the default emission factors as provided in ***Attachment G-1***.

E. Non-Exempt Activities

The proposed activities are within the exemption amount as provided in ***Attachment G-1***.

SECTION G

Air Emissions Information-Continued

F. Review of Activities with Emissions Below the Exemption Level

The proposed activities are below the exemption amount and should not affect the air quality of an onshore area, as provided in *Attachment G-1*.

G. Modeling Report

The proposed activities are below the exemption amount and should not affect the air quality of an onshore area.

Air Emissions Report

**Attachment G-1
(Public Information)**

EXPLORATION PLAN (EP)**OMB Control No. 1010-0049****AIR QUALITY SCREENING CHECKLIST****OMB Approval Expires: September 30, 2003**

COMPANY	Cabot Oil & Gas Corporation
AREA	Eugene Island Block
BLOCK	336
LEASE	OCS-G 23881
RIG	Jack-Up
WELL	A & B
COMPANY CONTACT	Christine Groth, R.E.M. Solutions, Inc.
TELEPHONE NO.	281.492.8562
REMARKS	Drill, complete and potentially test Well Locations A and B.

Screening Questions for EP's	Yes	No
Is any calculated Complex Total (CT) Emission amount (in tons associated with your proposed exploration activities more than 90% of the amounts calculated using the following formulas: $CT = 3400D^{2/3}$ for CO, and $CT = 33.3D$ for the other air pollutants (where D = distance to shore in miles)?		X
Does your emission calculations include any emission reduction measures or modified emission factors?		X
Are your proposed exploration activities located east of 87.5° W longitude?		X
Do you expect to encounter H ₂ S at concentrations greater than 20 parts per million (ppm)?		X
Do you propose to flare or vent natural gas for more than 48 continuous hours from any proposed well?	X	
Do you propose to burn produced hydrocarbon liquids?	X	

Air Pollutant	Plan Emission Amounts ¹ (tons)	Calculated Exemption Amounts ² (tons)	Calculated Complex Total Emission Amounts ³ (tons)
Carbon monoxide (CO)	61.89	63807.63	NA
Particulate matter (PM)	8.25	2707.29	NA
Sulphur dioxide (SO ₂)	37.86	2707.29	NA
Nitrogen oxides (NOx)	283.67	2707.29	NA
Volatile organic compounds (VOC)	8.51	2707.29	NA

¹ For activities proposed in your EP or DOCD, list the projected emissions calculated from the worksheets.

² List the exemption amounts in your proposed activities calculated using the formulas in 30 CFR 250.303(d).

³ List the complex total emissions associated with your proposed activities calculated from the worksheets.

EMISSIONS CALCULATIONS 1ST YEAR

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL		CONTACT		PHONE	REMARKS						
Cabot Oil & Gas Corporat	Eugene Island Block	336	OCS-G 23881	Jack-Up	A & B			Christine Groth, R.E.M. Solutions	281.492.8562							
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN TIME		MAXIMUM POUNDS PER HOUR					ESTIMATED TONS				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	VOC	CO	PM	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	11400	550.62	13214.88	24	78	8.04	36.86	276.21	8.29	60.26	7.52	34.50	258.53	7.76	56.41
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER diesel	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	2065	99.7395	2393.75	8	22	1.46	6.68	50.03	1.50	10.92	0.13	0.59	4.40	0.13	0.96
	VESSELS>600hp diesel(supply)	2065	99.7395	2393.75	10	78	1.46	6.68	50.03	1.50	10.92	0.57	2.60	19.51	0.59	4.26
VESSELS>600hp diesel(tugs)	4200	202.86	4868.64	12	2	2.96	13.58	101.76	3.05	22.20	0.04	0.16	1.22	0.04	0.27	
FACILITY INSTALLATION	DERRICK BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MATERIAL TUG diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC.	BPD	SCF/HR	COUNT												
	TANK-	0			0	0				0.00					0.00	
DRILLING WELL TEST	OIL BURN	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	GAS FLARE		0		0	0		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00
2003 YEAR TOTAL							13.91	63.80	478.04	14.34	104.30	8.25	37.86	283.67	8.51	61.89
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											2707.29	2707.29	2707.29	2707.29	63807.63
	81.3															

EMISSIONS CALCULATIONS 2ND YEAR

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL		CONTACT			PHONE	REMARKS					
Cabot Oil & Gas Corpora	Eugene Island Block	336	OCS-G 23881	Jack-Up	A & B			Christine Groth, R.E.M. Solutions	281.492.8562							
OPERATIONS	EQUIPMENT	RATING	MAX. FUEL	ACT. FUEL	RUN TIME		MAXIMUM POUNDS PER HOUR					ESTIMATED TONS				
	Diesel Engines	HP	GAL/HR	GAL/D												
	Nat. Gas Engines	HP	SCF/HR	SCF/D												
	Burners	MMBTU/HR	SCF/HR	SCF/D	HR/D	DAYS	PM	SOx	NOx	VOC	CO	PM	SOx	NOx	VOC	CO
DRILLING	PRIME MOVER>600hp diesel	11400	550.62	13214.88	24.00	54.00	8.04	36.86	276.21	8.29	60.26	5.21	23.89	178.99	5.37	39.05
	PRIME MOVER>600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	PRIME MOVER>600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	BURNER diesel	0			0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	AUXILIARY EQUIP<600hp diesel	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	2065	99.7395	2393.75	8.00	15.00	1.46	6.68	50.03	1.50	10.92	0.09	0.40	3.00	0.09	0.65
	VESSELS>600hp diesel(supply)	2065	99.7395	2393.75	10.00	54.00	1.46	6.68	50.03	1.50	10.92	0.39	1.80	13.51	0.41	2.95
VESSELS>600hp diesel(tugs)	4200	202.86	4868.64	12.00	2.00	2.96	13.58	101.76	3.05	22.20	0.04	0.16	1.22	0.04	0.27	
FACILITY INSTALLATION	DERRICK BARGE diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MATERIAL TUG diesel	0	0	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(crew)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	VESSELS>600hp diesel(supply)	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	MISC. TANK-	BPD 0	SCF/HR	COUNT						0.00				0.00		
DRILLING WELL TEST	OIL BURN	250			24	4	4.38	71.15	20.83	0.10	2.19	0.21	3.42	1.00	0.00	0.11
	GAS FLARE		208333.33		24	4		0.12	14.87	12.56	80.94		0.01	0.71	0.60	3.88
2004 YEAR TOTAL							18.28	135.07	513.75	27.01	187.42	5.93	29.67	198.43	6.51	46.91
EXEMPTION CALCULATION	DISTANCE FROM LAND IN MILES											2707.29	2707.29	2707.29	2707.29	63807.63
	81.3															

SUMMARY

COMPANY	AREA	BLOCK	LEASE	PLATFORM	WELL
Cabot Oil & Gas Corporation	Eugene Island Block	336	OCS-G 23881	Jack-Up	A & B
Year	Emitted Substance				
	PM	SOx	NOx	VOC	CO
2003	8.25	37.86	283.67	8.51	61.89
2004	5.93	29.67	198.43	6.51	46.91
Allowable	2707.29	2707.29	2707.29	2707.29	63807.63

SECTION H

Environmental Impact Analysis

A. IMPACT PRODUCING FACTORS (IPF'S)

The following matrix is utilized to identify the environmental resources that could be impacted by these IPF's. An "x" has been marked for each IPF category that Cabot has determined may impact a particular environmental resource as a result of the proposed activities. For those cells which are footnoted, a statement is provided as to the applicability of the proposed activities, and where there may be an effect, an analysis of the effect is provided.

Environmental Resources	Emissions (air, noise, light, etc.)	Effluents (muds, cuttings, other discharges to the water column or seafloor)	Physical Disturbances To the seafloor (rig or anchor emplacement, etc.)	Wastes Sent to Shore for Treatment Or disposal	Accidents (e.g. oil spills, chemical spills, H2S releases)	Other IPF's identified
Site Specific at Offshore Location						
Designated topographic feature						
Pinnacle Trend area live bottoms						
Eastern Gulf live bottoms						
Chemosynthetic communities						
Water quality		X			X	
Fisheries		X			X	
Marine mammals	X	X			X	
Sea turtles	X	X			X	
Air quality						
Shipwreck sites (known or potential)						
Prehistoric archaeological sites						
Vicinity of Offshore Location						
Essential fish habitat					X	
Marine and pelagic birds					X	
Public health and safety						
Coastal and Onshore						
Beaches					X	
Wetlands					X	
Shorebirds and coastal nesting birds					X	
Coastal wildlife refuges					X	
Wilderness areas					X	
Other Resources						

SECTION H

Environmental Impact Analysis-Continued

B. VICINITY OF OFFSHORE LOCATION ANALYSES

1. Designated Topographic Features

There are no anticipated effluents, physical disturbances to the seafloor, and accidents from the proposed activities that could cause impacts to topographic features. The proposed surface disturbances within Eugene Island Block 336 are located approximately 4 miles away from the closest designated topographic feature (Fishnet Bank). The crests of designated topographic features in the northern Gulf are found below 10 m. In the event of an accidental oil spill from the proposed activities, the gravity of such oil (high gravity condensate and/or diesel fuel) would rise to the surface, quickly dissipate, and/or be swept clear by the currents moving around the bank; thereby avoiding the sessile biota.

2. Pinnacle Trend Live Bottoms

There are no anticipated effluents, physical disturbances to the seafloor, and accidents from the proposed activities that could cause impacts to a pinnacle trend area. The proposed surface disturbances within Eugene Island Block 336 are located a significant distance (> 100 miles) from the closest pinnacle trend live bottom stipulated block. The crests of the pinnacle trend area are much deeper than 20 m. In the event of an accidental oil spill from the proposed activities, the gravity of such oil (high gravity condensate and/or diesel fuel) would rise to the surface, quickly dissipate, and/or be swept clear by currents moving around the bank; and thus not impacting the pinnacles.

3. Eastern Gulf Live Bottoms

There are no anticipated effluents, physical disturbances to the seafloor, and accidents from the proposed activities that could cause impacts to Eastern Gulf live bottoms. The proposed surface disturbances within Eugene Island Block 336 are located a significant distance (>100 miles) from the closest pinnacle Eastern Gulf live bottom stipulated block. In the event of an accidental oil spill from the proposed activities, the gravity of such oil (high gravity condensate and/or diesel fuel) would rise to the surface, quickly dissipate, and/or be swept clear by currents moving around the bank; and would not be expected to cause adverse impacts to Eastern Gulf live bottoms because of the depth of the features and dilutions of spills.

4. Chemosynthetic Communities

Water depths in Eugene Island Block 336 range from 254 feet to 270 feet. Therefore, the proposed activities are not located within the vicinity of any known chemosynthetic communities, which typically occur in water depths greater than 400 meters.

SECTION H

Environmental Impact Analysis-Continued

5. Water Quality

Accidental oil spill releases from the proposed activities, and cumulative similar discharge activity within the vicinity could potentially cause impacts to water quality. It is unlikely that an accidental oil spill release would occur from the proposed activities. In the event of such a release, the water quality would be temporarily affected by the dissolved components and small droplets. Currents and microbial degradation would remove the oil from the water column or dilute the constituents to background levels.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Cabot's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill. Cabot will conduct the proposed activities under EPA's Region VI NPDES General Permit GMG290000 which authorizes the discharge of certain effluents, subject to certain limitations, prohibitions and recordkeeping requirements. As such, it is not anticipated these discharges will cause significant adverse impacts to water quality.

6. Fisheries

Accidental oil spill releases from the proposed activities, and cumulative similar discharge activity within the vicinity may potentially cause some detrimental effects on fisheries. It is unlikely a spill would occur; however, such a release in open waters closed to mobile adult finfish or shellfish would likely be sublethal and the extent of damage would be reduced to the capability of adult fish and shellfish to avoid a spill, to metabolize hydrocarbons, and to excrete both metabolites and parent compounds.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Cabot's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill. Cabot will conduct the proposed activities under EPA's Region VI NPDES General Permit GMG290000 which authorizes the discharge of certain effluents, subject to certain limitations, prohibitions and recordkeeping requirements. As such, it is not anticipated these discharges will cause significant adverse impacts to water quality.

7. Marine Mammals

As a result of the proposed activities, marine mammals may be adversely impacted by traffic, noise, accidental oil spills, cumulative similar discharge activity, and loss of trash and debris. Chronic and sporadic sublethal effects could occur that may stress and/or weaken individuals of a local group or population and make them more susceptible to infection from

SECTION H

Environmental Impact Analysis-Continued

natural or anthropogenic sources. Few lethal effects are expected from accidental oil spill, chance collisions with service vessels and ingestion of plastic material.

The net results of any disturbance would depend on the size and percentage of the population affected, ecological importance of the disturbed area, environmental and biological parameters that influence an animal's sensitivity to disturbance and stress, and the accommodation time in response to prolonged disturbance (Geraci and St. Aubin), 1980). Collisions between cetaceans and ship could cause serious injury or death (Laist et al., 2001). Sperm whales are one of 11 whale species that are hit commonly by ships (Laist et al., 2001). Collisions between OCS vessels and cetaceans within the project area are expected to be unusual events.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Cabot's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill. Cabot will conduct the proposed activities under EPA's Region VI NPDES General Permit GMG290000 which authorizes the discharge of certain effluents, subject to certain limitations, prohibitions and recordkeeping requirements. As such, it is not anticipated these discharges will cause significant adverse impacts to water quality. Additionally, Cabot and its contractors will conduct the proposed activities under the additional criteria addressed by MMS in Notice to Lessee's (NTL's) 2003-G10 "Vessel Strike Avoidance and Injured/Dead Protective Species" and NTL 2003-G11 "Marine Trash & Debris Awareness & Elimination".

8. Sea Turtles

As a result of the proposed activities, sea turtles may be adversely impacted by traffic, noise, accidental oil spills, cumulative similar discharges, and loss of trash and debris. Small numbers of turtles could be killed or injured by chance collision with service vessels or by eating indigestible trash, particularly plastic items accidentally lost from drilling rigs, production facilities and service vessels. Drilling rigs and project vessels (construction barges) produce noise that could disrupt normal behavior patterns and create some stress to sea turtles, making them more susceptible to disease. Accidental oil spill releases are potential threats which could have lethal effects on turtles. Contact and/or consumption of this released material could seriously affect individual sea turtles. Most OCS related impacts on sea turtles are expected to be sublethal. Chronic and/or avoidance of effected areas could cause declines in survival or productivity, resulting in gradual population declines.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Cabot's Regional Oil Spill Response Plan which address

SECTION H

Environmental Impact Analysis-Continued

available equipment and personnel, techniques for containment and recovery, and removal of the oil spill. Cabot will conduct the proposed activities under EPA's Region VI NPDES General Permit GMG290000 which authorizes the discharge of certain effluents, subject to certain limitations, prohibitions and recordkeeping requirements.

As such, it is not anticipated these discharges will cause significant adverse impacts to water quality. Additionally, Cabot and its contractors will conduct the proposed activities under the additional criteria addressed by MMS in Notice to Lessee's (NTL's) 2003-G10 "Vessel Strike Avoidance and Injured/Dead Protective Species" and NTL 2003-G11 "Marine Trash & Debris Awareness & Elimination".

9. Air Quality

The proposed activities are located approximately 81.3 miles to the nearest shoreline. There would be a limited degree of air quality degradation in the immediate vicinity of the proposed activities. Air quality analyses of the proposed activities are below the MMS exemption level.

10. Shipwreck Site (Known or Potential)

There are no physical disturbances to the seafloor which could impact known or potential shipwreck sites, as the review of high resolution shallow hazards data indicate there are no known or potential shipwreck sites located within the surveyed area.

11. Prehistoric Archaeological Sites

There are no physical disturbances to the seafloor which could cause impacts to prehistoric archaeological sites, as the review of high resolution shallow hazards data and supporting studies did not reflect the occurrence of prehistoric archaeological sites.

Site Specific Offshore Location Analyses

1. Essential Fish Habitat

An accidental oil spill that may occur as a result of the proposed activities has potential to cause some detrimental effects on essential fish habitat. It is unlikely that an accidental oil spill release would occur; however, if a spill were to occur in close proximity to finfish or shellfish, the effects would likely be sublethal and the extent of damage would be reduced to the capability of adult fish and shellfish to avoid a spill, to metabolize hydrocarbons, and to excrete both metabolites and parent compounds.

SECTION H

Environmental Impact Analysis-Continued

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Cabot's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

2. Marine and Pelagic Birds

An accidental oil spill that may occur as a result of the proposed activities has potential to impact marine and pelagic birds, by the birds coming into contact with the released oil. It is unlikely that an accidental oil spill release would occur.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Cabot's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

3. Public Health and Safety Due to Accidents

There are no anticipated IPF's from the proposed activities that could impact the public health and safety. Cabot has requested MMS approval to classify the proposed objective area as absent of hydrogen sulfide.

Coastal and Onshore Analyses

1. Beaches

An accidental oil spill release from the proposed activities could cause impacts to beaches. However, due to the distance from shore (approximately 81.3 miles), and the response capabilities that would be implemented, no significant adverse impacts are expected. Both historical spill data and the combined trajectory/risk calculations referenced in the publication of OCS EIA /EA MMS 2202-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Cabot's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

SECTION H

Environmental Impact Analysis-Continued

2. Wetlands

An accidental oil spill release from the proposed activities could cause impacts to wetlands. However, due to the distance from shore (approximately 81.3 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both historical spill data and the combined trajectory/risk calculations referenced in the publication of OCS EIA /EA MMS 2202-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Cabot's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

3. Shore Birds and Coastal Nesting Birds

An accidental oil spill release from the proposed activities could cause impacts to shore birds and coastal nesting birds. However, due to the distance from shore (approximately 81.3 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both historical spill data and the combined trajectory/risk calculations referenced in the publication of OCS EIA /EA MMS 2202-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Cabot's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

4. Coastal Wildlife Refuges

An accidental oil spill release from the proposed activities could cause impacts to coastal wildlife refuges. However, due to the distance from shore (approximately 81.3 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both historical spill data and the combined trajectory/risk calculations referenced in the publication of OCS EIA /EA MMS 2202-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Cabot's Regional Oil Spill Response Plan which address

SECTION H

Environmental Impact Analysis-Continued

available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

5. Wilderness Areas

An accidental oil spill release from the proposed activities could cause impacts to wilderness areas. However, due to the distance from shore (approximately 81.3 miles) and the response capabilities that would be implemented, no significant adverse impacts are expected. Both historical spill data and the combined trajectory/risk calculations referenced in the publication of OCS EIA /EA MMS 2202-052 indicate there is little risk of contact or impact to the coastline and associated environmental resources.

In the event of an unanticipated blowout resulting in an oil spill, it is unlikely to have an impact based on the industry wide standards for using proven equipment and technology for such responses, implementation of Cabot's Regional Oil Spill Response Plan which address available equipment and personnel, techniques for containment and recovery, and removal of the oil spill.

Other Identified Environmental Resources

Cabot has not identified any other environmental resources other than those addressed above.

Impacts on Proposed Activities

No impacts are expected on the proposed activities as a result of taking into consideration the site specific environmental conditions.

A High Resolution Shallow Hazards Survey was conducted, a report prepared in accordance with NTL 2002-G08 and NTL 98-20.

Based on the analysis of the referenced data, there are no surface or subsurface geological and manmade features and conditions that may adversely affect the proposed activities. Cabot will institute procedures to avoid pipelines and abandoned wells within the vicinity of the proposed operations.

Alternatives

Cabot did not consider any alternatives to reduce environmental impacts as a result of the proposed activities.

SECTION H

Environmental Impact Analysis-Continued

Mitigation Measures

Cabot will not implement any mitigation measures to avoid, diminish, or eliminate potential environmental resources, other than those required by regulation and policy.

Consultation

Cabot has not contacted any agencies or persons for consultation regarding potential impacts associated with the proposed activities. Therefore, a list of such entities is not being provided.

References

The following documents were utilized in preparing the Environmental Impact Assessment:

<i>Document</i>	<i>Author</i>	<i>Dated</i>
Shallow Hazards Survey	Fugro GeoSolutions, Inc.	2003
MMS Environmental Impact Statement Report No. 2002-15	Minerals Management Service	2002
NTL 2003-G10 "Vessel Strike Avoidance and Injured/Dead Protective Species"	Minerals Management Service	2003
NTL 2003-G11 "Marine Trash & Debris Awareness & Elimination"	Minerals Management Service	2003
NTL 2002-G09 "Regional and Subregional Oil Spill Response Plans"	Minerals Management Service	2002
NTL 2002-G08 "Information Requirements for Exploration Plans and Development Operations Coordination Documents"	Minerals Management Service	2002
NTL 2002-G01 "Archaeological Resource Surveys and Reports"	Minerals Management Service	2002
NTL 2000-G16 "Guidelines for General Lease Surety Bonds"	Minerals Management Service	2000
NTL 98-20 "Shallow Hazards Survey Requirements"	Minerals Management Service	1998
NTL 2003-N06 "Supplemental Bond Procedures"	Minerals Management Service	2003
NTL 98-16 "Hydrogen Sulfide Requirements"	Minerals Management Service	1998
NPDES General Permit GMG290000	EPA – Region VI	1998
Regional Oil Spill Response Plan	Cabot Oil & Gas Corporation	2003

SECTION I CZM Consistency

Under direction of the Coastal Zone Management Act (CMZA), the States of Alabama, Florida, Louisiana, Mississippi and Texas developed Coastal Zone Management Programs (CZMP) to allow for the supervision of significant land and water use activities that take place within or that could significantly impact their respective coastal zones.

A certificate of Coastal Zone Management Consistency for the State of Louisiana is enclosed as *Attachment I-1*. Included as *Attachment I-2* are the enforceable policies from the State of Louisiana that are related to OCS Plan Filings.

Louisiana CZM Statement

**Attachment I-1
(Public Information)**

COASTAL ZONE MANAGEMENT CONSISTENCY CERTIFICATION

INITIAL EXPLORATION PLAN

EUGENE ISLAND BLOCK 336

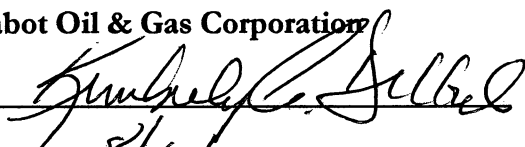
LEASE OCS-G 23881

The proposed activities described in detail in the enclosed Plan comply with Louisiana's approved Coastal Zone Management Program and will be conducted in a manner consistent with such Program.

By: Cabot Oil & Gas Corporation

Signed By:

Dated:


8/6/03

Louisiana Coastal Zone Management
Enforceable Policies

Attachment I-2
(Public Information)

STATE OF LOUISIANA

COASTAL ZONE CONSISTENCY POLICIES

A. Guidelines Applicable to All Users

1.2 Air and Water Quality Standards

- a. **Air emissions** associated with the proposed activities have been projected using a matrix and formula supplied by the Minerals Management Service who has primacy from the Environmental Protection Agency for regulating such emissions. As detailed in *Section G* of this Plan, the resultant emissions are below the exemption levels for Carbon Monoxide, Particulate Matter, Sulphur Oxides, Nitrogen Oxides and Volatile Organic Compounds.
- b. **Overboard discharges** (i.e., drilling fluids and associated cuttings) associated with the proposed activities must be tested first for toxicity limitations as mandated by EPA's NPDES General Permit GMG290000. Other solid waste such as ground food will first pass through a 25-millimeter type mesh screen before being discharged overboard, as regulated by the U.S. Coast Guard's Marine Pollution Research and Control Act (MARPOL) of 1987. Solid wastes will be collected and stored on the facility, and then transported by an offshore support vessel to an authorized onshore disposal site with the State of Louisiana. These wastes will be manifested and disposed as per the State of Louisiana Department of Environmental Quality's regulations.

Refer to *Section E* of the Plan for more detailed comprehensive information pertaining to the types of wastes generated, discharged and/or disposed of as a result of the proposed activities.

1.6. General Factors that will be utilized by the permitting authority.

The proposed activities will be approved by the Minerals Management Service with consistency certification from the State of Louisiana. Additional authorities will be received by the Environmental Protection Agency for overboard discharges, and the U. S. Coast Guard for marking of navigational aids, and general workplace safety.

1.7. Adverse effects from land and water uses in the coastal area.

The proposed activities are located in OCS Federal Waters, Gulf of Mexico, approximately 81.3 miles from the nearest Louisiana shoreline. The greatest potential risk to land and/or water uses in the coastal area could result from a blowout or oil spill.

Protection of the environment during the proposed operations is of primary concern; with Cabot mandating regulatory compliance from its contractors and vendors associated with the proposed activities.

Cabot Oil & Gas Corporation (Cabot) has adopted industry standards for safe well operations to prevent potential blowout situations, as well as implementing a Regional Oil Spill Response Plan to respond to a potential spill incident.

The likelihood of land and water uses in the coastal area being impacted is minimal based on the temporary nature of the proposed activities, the implementation measures Cabot would employ in the event of a blowout or oil spill, along with the wind and wave currents which could potentially divert such an unanticipated release outside the coastal areas.

Please refer to *Sections B, E and F* for additional measures implemented by Cabot to avoid any adverse alteration or destruction to the coastal area.

1.9 Permitting multiple uses to avoid conflict.

The proposed activities will not impact or be impacted by potential multiple use conflicts, other than military warning area exercises which may be conducted by the Department of Defense. Cabot will coordinate our activities with the appropriate command headquarters to avoid any potential conflict.

C. Guidelines for Linear Facilities

1.1 Linear use alignments.

No linear facilities are planned for the proposed activities addressed in this Plan.

1.2 Linear facilities dredging or filling avoidance.

No linear facilities involving dredging or filling avoidance criteria are anticipated for the proposed activities addressed in this Plan.

1.3 Linear facilities dredging or filling guidelines.

No linear facilities involving dredging or filling guidelines are anticipated for the proposed activities addressed in this Plan.

1.4 Pipeline “push ditch” methodology.

The proposed activities are temporary and speculative in nature, and therefore do not include any pipeline related development activity.

1.5 Facilities with corridors, rights-of-way, canals, and streams.

The proposed activities are temporary and speculative in nature, and therefore do not include any linear facilities with corridors, rights-of-way and/or streams. Therefore, there should not be any resultant adverse impacts to these areas.

1.6 Multiple uses

The proposed activities will not impact or be impacted by potential multiple use conflicts, other than military warning area exercises which may be conducted by the Department of Defense. Cabot will coordinate our activities with the appropriate command headquarters to avoid any potential conflict.

1.7 Barrier Island traverses.

The proposed activities are temporary and speculative in nature, and therefore do not include any barrier island traversing for a linear facility related development activity. Therefore, there should not be any resultant adverse impacts to these areas.

1.8 Beach, tidal passes, protective reef, or shoreline traverses.

The proposed activities are temporary and speculative in nature, and therefore do not include any linear facility related development activity. Therefore, there should not be any resultant adverse impacts to these areas.

1.9 Location guidelines.

The proposed activities are temporary and speculative in nature, and do not include any linear facility related development activity. Therefore, there should not be any applicable location guidelines.

1.10 Planning guidelines.

The proposed activities are speculative in nature, and therefore do not include any facility related development activity, other than potential installation of a well protector structure. Therefore, there should not be any applicable planning guidelines.

1.11 Saline to freshwater channeling.

The proposed activities are temporary and speculative in nature, and therefore do not include any linear facility related development activity. Therefore, there should not be any adverse impacts of saline to freshwater channeling associated with linear facilities.

1.12 Directional drilling, multiuse canals, and accesses.

The proposed activities are temporary and speculative in nature, and do not include any directional drilling, multiuse canals and accesses for linear facility related development activity. Therefore, there should not be any adverse impacts as a result of the proposed operations.

1.13 Pipeline guidelines.

The proposed activities are temporary and speculative in nature, and do not include any linear pipeline facility related development activity. Therefore, there should not be any adverse impacts as a result of the proposed operations.

1.14 Restoration.

The proposed activities are temporary and speculative in nature, and do not include any linear facility related development activity which may require restoration of state water bottom lands. Therefore, there should not be any adverse impacts as a result of the proposed operations.

1.15 Best practical techniques.

The proposed activities are temporary and speculative in nature, and do not include any linear facility related development activity which would require review for best practical techniques other than adhering to company and industry wide standards for conducting safe, and environmentally sound drilling related operations. Therefore, there should not be any adverse impacts as a result of the proposed operations.

1.16 Dead end canals.

The proposed activities are temporary and speculative in nature, and do not include any linear facility related development activity which would require use of dead end canals. Therefore, there should not be any adverse impacts as a result of the proposed operations.

D. Guidelines for Dredged Spoil Deposition

4.1 Best practical techniques.

The proposed activities do not provide for any potential dredging activities.

4.2 Beneficial use of soil.

The proposed activities do not provide for any potential dredging activities, which would result in reviewing the beneficial use of soil deposition.

4.3 Preventing impounding or draining wetlands.

The proposed activities do not provide for any potential dredging activities which would result in reviewing techniques and options available for preventing impounding or draining of wetlands.

4.4 Disposal restrictions.

The proposed activities do not provide for any potential dredging activities which would result in restrictions to soil disposal.

4.5 Preventing navigation, fishing, and timber growth hindrances.

The proposed activities do not provide for any potential dredging activities which could impact navigation, fishing and/or timber growth hindrances.

4.6 Spoil retention techniques.

The proposed activities do not provide for any potential dredging activities which would result in review of spoil retention techniques.

4.7 DNR Consent for State-Owned Property.

The proposed activities do not provide for any potential dredging activities which would require approval from the Department of Natural Resources on state-owned property.

F. Guidelines for Surface Alterations

1.1 Industrial, commercial, urban, residential, and recreational use guidelines.

The proposed activities are temporary and speculative in nature, and do not include surface alterations within the coastal zone (i.e., lands 5 feet or more above sea level, and/or have foundation conditions sufficiently stable to support the use).

Related onshore support base activities will be from an existing infrastructure in the Fourchon, Louisiana area.

G. Guidelines for Hydrologic and Sediment Transport Modifications

7.1 Controlled diversion of sediment-laden waters to initiate marsh building.

The proposed activities are temporary and speculative in nature, occurring in OCS Waters only, and should not result in the controlled diversion of sediment-laden waters.

7.3 Undesirable deposition of sediments.

The proposed activities are temporary and speculative in nature, and should not result in the undesirable deposition of sediments.

7.9 Withdrawal of surface and ground water.

The proposed activities are temporary and speculative in nature, and should not result in the withdrawal of surface and ground water.

H. Guidelines for Disposal of Wastes

8.1 Location and operation of waste storage, treatment, and disposal facilities.

Wastes generated from the proposed activities which cannot be discharged overboard, will be manifested and transported by an offshore supply vessel to an existing approved facility within the State of Louisiana.

Prior to transporting these wastes, Cabot will manifest same utilizing the Department of Environmental Quality Form UIC-28.

8.2 Generation, transportation, treatment, storage, and disposal facilities.

Waste generated from the proposed activities which cannot be discharged overboard, will be manifested and transported by an offshore supply vessel to an existing approved facility within the state.

Prior to transporting and/or prior to disposal of same, Cabot will manifest same utilizing the Department of Environmental Quality Form UIC-28, and conduct any required testing for toxicity, naturally occurring radioactivity.

8.8 Approved disposal sites.

Waste generated from the proposed activities which cannot be discharged overboard, will be manifested and transported by an offshore supply vessel to an existing approved facility within the State of Louisiana.

8.9 Radioactive waste.

Cabot does not anticipate any radioactive wastes associated with the proposed activities.

I. Guidelines for Uses that Result in the Alteration of Waters Draining into Coastal Waters

9.2 Developed area runoff.

The proposed activities are temporary and speculative in nature, and do not include any permanent installations which may have an impact on area runoff in coastal waters.

J. Guidelines for Oil, Gas, and other Mineral Activities

10.3 Siting of exploration, production and refining activities.

The proposed activities are located approximately 81.3 miles from the nearest Louisiana shoreline, and will not impact any critical wildlife and/or vegetation areas.

10.5 Access to sites.

The related crew and supply vessels will utilize existing waterways to access the surface locations proposed in this Plan. Therefore, we do not anticipate any adverse impacts on critical wildlife and/or vegetation areas.

10.6 Best practical techniques for drilling and production sites.

Cabot has adopted industry standards for conducting the proposed exploratory operations. Such standards are adopted to prevent unanticipated occurrences such as a well blowout or oil spill release, which could potentially cause adverse water/air environmental consequences. Such anticipated occurrences will be handled as quickly as possible by Cabot implementing their Regional Oil Spill Response Plan and/or well control standards and procedures.

Anticipated operations will include the overboard discharge of generated waste from the proposed activities; which are regulated by the EPA NPDES General Permit GMG290000, as well as the U.S. Coast Guard's MARPOL.

Refer to *Sections B, E, F and G* of this Plan for more comprehensive details to these issues.

10.10 Guidelines for drilling and production equipment for preventing adverse effects.

Cabot has selected the proposed surface locations addressed in the Plan based on the results of shallow hazards assessments.

The proposed activities will be conducted in accordance with industry standards to minimize adverse environmental impacts.

Refer to *Sections B and C* of this Plan for more comprehensive details to these issues.

10.11 Effective environmental protection and emergency or contingency plans.

The proposed activities will be conducted in accordance with applicable state and federal regulations, supplemented with Cabot Regional Oil Spill Response Plans, Emergency Evacuation Plan, and Waste Management Plan.