

## **APPENDIX C**

### **OIL POLLUTION ACT OF 1990 (OPA 90) ADDENDUM**

**U.S. Environmental Protection Agency (EPA)**

**U.S. Department of Transportation (DOT)**

**U.S. Coast Guard (USCG)**

# **U.S. ENVIRONMENTAL PROTECTION AGENCY**

**POINT THOMSON  
OIL DISCHARGE PREVENTION AND CONTINGENCY PLAN**

**CROSS REFERENCE TO  
U.S. ENVIRONMENTAL PROTECTION AGENCY  
[40 CFR 112, APPENDIX F]**

REGULATION SECTION (Appendix F)	SECTION TITLE	PLAN SECTION NUMBER
<b>1.1</b>	<b>Emergency Response Action Plan 112.20 (h)(1)</b>	<b>Section 1.1; Tables 1-1A and 1-1B</b>
1.1.1	Qualified Individual Information	EPA Information Summary; Section 1.2.3; Table 1-2
1.1.2	Emergency Notification Phone List	Section 1.2; Table 1-2
1.1.3	Spill Response Notification Form	Section 1.2; Figure 1-3
1.1.4	Response Equipment List and Location	Section 3.6; Table 3-11
1.1.5	Response Equipment Testing and Deployment	Sections 1.5 and 3.6.2
1.1.6	Facility Response Team	Sections 1.1 and 1.2
1.1.7	Evacuation Plan	Maintained on-site at facility
1.1.8	Immediate Actions	Sections 1.1 and 1.2
1.1.9	Facility Diagram	Section 1.8
<b>1.2</b>	<b>Facility Information 112.20 (h)(2)</b>	<b>EPA Response Plan Cover Sheet; Section 3.1</b>
1.2.1	Facility Name and Location	EPA Response Plan Cover Sheet and Information Form; Section 3.1
1.2.2	Latitude and Longitude	EPA Response Plan Cover Sheet; <i>ACS Technical Manual, Volume 2, Map Atlas</i>
1.2.3	Wellhead Protection Area	Not Applicable
1.2.4	Owner/Operator	Section 3.1
1.2.5	Qualified Individual	EPA Information Summary; Section 1.2.3; Table 1-2
1.2.6	Date of Oil Storage Start-up	Section 3.1.2
1.2.7	Current Operation	Section 3.1.4
1.2.8	Dates and Type of Substantial Expansion	Not Applicable
<b>1.3</b>	<b>Emergency Response Information 112.20 (h)(3)</b>	<b>Sections 1.1, 1.2, 3.3, 3.8, and 3.9</b>
1.3.1	Notification	Sections 1.1, 1.2, and 3.3
1.3.2	Response Equipment List	Section 3.6; Table 3-11
1.3.3	Response Equipment Testing/Deployment	Sections 1.5 and 3.6

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**CROSS REFERENCE TO  
U.S. ENVIRONMENTAL PROTECTION AGENCY  
[40 CFR 112, APPENDIX F] (CONTINUED)**

REGULATION SECTION (Appendix F)	SECTION TITLE	PLAN SECTION NUMBER
1.3.4	Personnel	Sections 1.5.2, 3.3, 3.8, and 3.9
1.3.5	Evacuation Plans	Maintained on-site at facility
1.3.6	Qualified Individual's Duties	Sections 1.2.3
<b>1.4</b>	<b>Hazard Evaluation 112.20 (h)(4)</b>	
1.4.1	Hazard Identification	Sections 2.3 and 2.4
1.4.2	Vulnerability Analysis	Section 3.10
1.4.3	Analysis of the Potential for an Oil Spill	Section 2.3
1.4.4	Facility Reportable Oil Spill History	Section 2.2
<b>1.5</b>	<b>Discharge Scenarios 112.20 (h)(5)</b>	<b>Section 1.6.14</b>
1.5.1	Small and Medium Discharges	Section 1.6.14
1.5.2	Worst-Case Discharge	EPA Response Plan Facility Cover Sheet and Information Form; Section 1.6.14
<b>1.6</b>	<b>Discharge Detection Systems 112.20 (h)(6)</b>	<b>Section 2.5</b>
1.6.1	Discharge Detection by Personnel	Section 2.5
1.6.2	Automated Discharge Detection	Section 2.5
<b>1.7</b>	<b>Plan Implementation 112.20 (h)(7)</b>	<b>Introduction</b>
1.7.1	Response Resources for Small, Medium, and Worst-Case Spills	Sections 1.6, 3.3, 3.5, 3.6, and 3.9
1.7.2	Disposal Plans	Sections 1.6.10 and 1.6.14
1.7.3	Containment and Drainage Planning	Sections 1.6.6, 1.6.14, and 3.2
<b>1.8</b>	<b>Self-Inspection, Training, Meeting Logs 112.20 (h)(8)</b>	<b>Section 3.9</b>
1.8.1	Facility Self-Inspection	Section 2.5.5
1.8.1.1	Tank Inspection	Section 2.5.5
1.8.1.2	Response Equipment Inspection	Section 3.6.2
1.8.1.3	Secondary Containment Inspection	Sections 2.1.11 and 2.5.5
1.8.2	Facility Drills/Exercises	Section 3.9
1.8.2.1	Qualified Individual Notification Drill Logs	Section 3.9
1.8.2.2	Spill Management Team Tabletop Exercise Logs	Section 3.9
1.8.3	Response Training	Section 3.9
<b>1.9</b>	<b>Diagrams 112.20 (h)(9)</b>	<b>Section 1.8</b>
<b>1.10</b>	<b>Security 112.20 (h)(10)</b>	<b>Section 2.1.4</b>

**U.S. ENVIRONMENTAL PROTECTION AGENCY  
RESPONSE PLAN COVER SHEET**

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**GENERAL INFORMATION**

Owner/Operator of Facility: Exxon/Mobil Corporation

Facility Name: Point Thomson Gas Cycling Project

Facility Address (street address or route): 3301 C Street, Suite 400

The Point Thomson Unit is located on the North Slope of Alaska.

City, State, and U.S. Zip Code Anchorage, AK 99519-6601 (Mailing address)

Facility Phone No.: (907) 561-5331

Latitude (Degrees: North): 70° 08' to 70° 11'

Longitude (Degrees: West): 146° 04' to 146° 32'

Dun & Bradstreet Number: 00-121-3214

Standard Industrial Classification (SIC) Code: 1330

Largest Aboveground Oil Storage Tank Capacity (Gallons): 525,000

Maximum Oil Storage Capacity (Gallons): total volume of tanks

Number of Aboveground Oil Storage Tanks: 24

Worst-Case Oil Discharge Amount (Gallons):

525,000 gallon tank +42,697,410 gallons from blowout = 43,222,410 gallons

Facility Distance to Navigable Water. Mark the appropriate line.

0-1/4 mile X 1/4-1/2 mile      1/2-1 mile      >1 mile

**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
**RESPONSE PLAN COVER SHEET**  
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**APPLICABILITY OF SUBSTANTIAL HARM CRITERIA**

Facility Name: Point Thomson

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   X    
No           

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   X  

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 (as calculated using the appropriate formula in Appendix C or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

Yes   X    
No           

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 (as calculated using the appropriate formula in Appendix C or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?

Yes             
No   X  

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   X

**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
**RESPONSE PLAN COVER SHEET**  
**Page 3 of 3**

**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 information, I believe that the submitted information is true, accurate, and complete.

Signature: \_\_\_\_\_

Name (Please type or print): Randy F. Buckley

Title: Project Manager

Date: \_\_\_\_\_

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## U.S. EPA INFORMATION SUMMARY

### Name and Address of Operator

ExxonMobil	P.O. Box 196601
3301 C Street, Suite 400	Anchorage, AK 99519
Anchorage, AK 99503	(907) 561-5331

### Name and Telephone Number of Qualified Individual

The Qualified Individuals information will be updated prior to construction activities.

#### Primary

Chris Faulk  
Production Field Superintendent  
800 Bell Street  
Houston, TX 77002  
(713) 656-3986

#### Alternate

Chuck McClain  
Production Operations Superintendent  
800 Bell Street  
Houston, TX 77002  
(713) 656-3703

### Worst-Case Discharge

The worst-case discharge (WCD) for a well is calculated using the method outlined in 40 CFR 112, Appendix D, Attachment D-1, Method B2, for wells deeper than 10,000 feet. The well blowout discharge is estimated at 27,000 barrels per day (bpd) of gas condensate for the first 2 hours when the well is ignited. After Hour 2 (0.083 day), the well is ignited, removing 26,973 bpd (99.9 %) of the oil. Mechanical response actions commence 6 hours (0.25 day) after the blowout, resulting in an additional 5,332 bpd of recovery capacity. The equation for calculating the WCD for the well is:

$$\text{WCD Well} = \text{Discharge Volume 1} + \text{Discharge Volume 2}$$

Where:

$$\begin{aligned} \text{Discharge Volume 1} &= (\text{days unattended} + \text{days to respond}) \times (\text{rate of well}) \\ &= (0 \text{ day} + 0.25 \text{ day}) \times (27,000 \text{ bpd}) \\ &= 0.25 \text{ day} \times 27,000 \text{ bpd} = 6,750 \text{ bbl} \end{aligned}$$

$$\begin{aligned} \text{Discharge Volume 2} &= [45 \text{ days} - (\text{days unattended} + \text{days to respond})] \times (\text{rate of well}) \\ &\quad \times (\text{rate of well}/\text{rate of recovery}) \\ &= [45 \text{ days} - (0 \text{ day} + 0.25 \text{ day})] \times (27,000 \text{ bpd}) \\ &\quad \times (27,000 \text{ bpd}/32,305 \text{ bpd}) \\ &= (44.75 \text{ days} \times 27,000 \text{ bpd} \times 0.8358) = 1,009,855 \text{ bbl} \end{aligned}$$

$$\text{WCD Well} = 6,750 \text{ barrels} + 1,009,855 \text{ barrels} = 1,016,605 \text{ barrels or } 42,697,410 \text{ gallons}$$

The rate of recovery includes the oil recovery capacities identified in Table 1-44 (5,332 bpd) and the volume of oil removed by ignition (26,973 bpd).

The WCD for the largest tank is 525,000 gallons (12,500 bbl) of diesel.

Combining the two WCDs results in a volume of 43,222,410 gallons of hydrocarbon material.

## **Basis for Determination of Significant and Substantial Harm**

Point Thomson operations will have the potential to spill hydrocarbon material on tundra (wetlands) and into navigable waters of the United States. As such, it is determined to pose significant and substantial harm should a spill occur.

The Alaska Clean Seas (ACS) *Technical Manual* presents a summary of major spill response equipment which will be available to ExxonMobil on the North Slope through ExxonMobil's contract with ACS. In addition, other spill response equipment will be available through a mutual aid agreement with other North Slope operators.

ACS  
Tactics L-4  
and L-8

**POINT THOMSON DEVELOPMENT AREA  
OIL DISCHARGE PREVENTION AND CONTINGENCY PLAN**

**CROSS REFERENCE TO  
U.S. ENVIRONMENTAL PROTECTION AGENCY  
SPILL PREVENTION, CONTROL AND COUNTERMEASURE REGULATIONS  
[40 CFR 112.7 to 40 CFR 112.10]**

REGULATION SECTION	SECTION TITLE	PLAN SECTION NUMBER
<b>112.7</b>	<b>General Requirements for Spill Prevention, Control and Countermeasure (SPCC) Plans</b>	
112.7(a)(3)	Describe layout of facility and include facility diagram showing location of and contents of each container.	Sections 1.8 and 3.1
112.7(a)(3)(i)	List the type of oil in each container and its capacity.	Appendix B
112.7(a)(3)(ii)	Discharge prevention measures including procedure for routine handling of products.	Sections 2.1.5, 2.1.6, 2.1.8, and 2.5; Appendix A
112.7(a)(3)(iii)	Discharge, procedures or drainage controls such as secondary containment around containers and other structures.	Sections 2.5, 2.1.10, 2.1.11 and this section
112.7(a)(3)(iv)	Countermeasures for discharge discovery, response, and cleanup.	Sections 2.5 and 1.6.14
112.7(a)(3)(v)	Methods of disposal of recovered materials in accordance with applicable legal requirements	Sections 1.6.10 and 1.6.14
112.7(a)(3)(vi)	Contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors and all appropriate federal, state and local agencies.	Sections 1.1 and 1.2; Tables 1-1B 1-2, and 1-3
112.7(b)	Prediction of the direction, rate of flow, and total quantity of oil which could be discharged.	Sections 1.6.13, 1.6.14, and 1.8; <i>ACS Technical Manual, Volume 2, Map Atlas</i>
112.7(c) and (d)	Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge, OR explain why this is not practicable.	This section and Sections 2.1.5, 2.1.6, 2.1.10, and 2.1.11
112.7(d)(2)	A written commitment of manpower, equipment and materials required to expeditiously control and remove any quantity of oil discharged.	Management Approval and Manpower Authorization Form (p. i); Sections 3.5 and 3.6
112.7(e)	Conduct inspection and tests required by this part in accordance with written procedures.	Sections 2.5.5, and 3.6.2; Table 2-2
112.7(f)(1)	Train oil-handling personnel in the operation and procedures, pollution control laws, facility operations, SPCC plan and maintenance of equipment to prevent discharges.	Section 2.1
112.7(f)(2)	Designate a person who is accountable for discharge prevention.	Section 1.1
112.7(f)(3)	Conduct discharge prevention briefings for oil-handling personnel at least once a year.	Section 2.1
112.7(g)(1)	Fully fence each facility handling, processing, or storing oil, and lock and guard entrance gates.	Section 2.1.4

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SPILL PREVENTION, CONTROL AND COUNTERMEASURE REGULATIONS  
[40 CFR 112.7 to 40 CFR 112.10] (CONTINUED)**

REGULATION SECTION	SECTION TITLE	PLAN SECTION NUMBER
112.7(g)(2)	Ensure that the master flow and drain valves and any other valves have security measures so that they remain in the closed position when not operating.	None; see table entry to the left
112.7(g)(3)	Lock the starter control on each oil pump in the "off" position and locate it at a site accessible only to authorized personnel when not operating.	None; see table entry to the left
112.7(g)(4)	Securely cap the blank-flange of the loading/unloading connections of oil pipelines or facility piping when not in service.	Section 2.1.9
112.7(g)(5)(i) and (ii)	Provide facility lighting commensurate with the type and location of the facility that will assist in the discovery of discharges occurring during darkness hours and prevent discharges occurring from acts of vandalism.	See Section 2.1.4 and Section 3.1 for equivalent environmental protection
112.7(h)(1)	Use quick drainage system for tank car or tank truck loading/unloading areas, designed to hold the maximum capacity of any single compartment of a tank car or tank truck.	Sections 2.1.5 and 2.5; Appendix A
112.7(h)(2)	Provide interlocked warning light or physical barrier system, warning signs, wheel chocks or vehicle brake interlock system in loading/unloading areas to prevent movement.	This section and Section 2.1.5; Appendix A
112.7(h)(3)	Prior to filling or departure of any tank car or tank truck, inspect for discharges on all outlets of vehicles and ensure they are tightened.	Section 2.1.5; Appendix A
112.7(i)	If a field-constructed, aboveground container is repaired or changes service that might affect the risk of a discharge due to brittle fracture, or has discharged due to brittle fracture, evaluate the container for risk of discharge and take appropriate action.	None; see table entry to the left
112.7(j)	Include a complete discussion on conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in this part or any more stringent state rules, regulations and guidelines.	This section

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**CROSS REFERENCE TO  
U.S. ENVIRONMENTAL PROTECTION AGENCY  
SPILL PREVENTION, CONTROL AND COUNTERMEASURE REGULATIONS  
[40 CFR 112.7 to 40 CFR 112.10] (CONTINUED)**

REGULATION SECTION	SECTION TITLE	PLAN SECTION NUMBER
112.8	<b>Spill Prevention, Control and Countermeasure Plan requirements for onshore facilities (excluding production facilities)</b>	
112.8(b)(3) and (4)	Design facility drainage systems from undiked areas (such as where piping is located outside containment walls or where tank truck discharges may occur outside the loading area) to flow into ponds, lagoon or catchment basins. If drainage is not engineered as above, equip the final discharge of all ditches inside the facility with a diversion system.	Sections 1.8 and 3.1
112.8(c)(1)	Do not use a container for storage unless it is compatible with the material stored.	Sections 2.1.10
112.8(c)(2)	Construct all bulk storage container installation so secondary containment is provided for the entire capacity of the largest single container with sufficient freeboard for precipitation and is impervious	This section and Sections 2.1.10 and 2.1.11; Appendix B
112.8(c)(6)	Test each aboveground container for integrity on a regular schedule.	Section 2.1.10
112.8(c)(8)(i) through (v)	Engineer or update each container installation with good engineering practices and provide one of the following: high-liquid level alarms, high-liquid level pump cutoff device, direct audible or code communication, fast response system for determining the liquid level of each bulk storage container, or regularly test liquid-level devices.	Sections 2.1.10 and 4.8; Appendix B
112.8(c)(10)	Promptly correct visible discharges which result in loss of oil from a container and promptly remove any accumulations of oil in diked areas.	Sections 2.1.5 and 2.1.6
112.8(d)(1)	Provide buried piping installed or replaced after August 16, 2002 with protective wrapping and coating.	Sections 2.1.9 and 4.9
112.8(d)(2)	Cap or blank-flange terminal connection at the transfer point and mark it as to origin when piping is not in service.	Sections 2.1.6 and 2.1.9
112.8(d)(3)	Properly design pipe supports to minimize abrasion and corrosion and allow expansion and contraction.	Section 2.1.9
112.8(d)(4)	Regularly inspect all aboveground valves, piping, and appurtenances.	Section 2.1.9; Table 2-2
112.8(d)(5)	Warn vehicles entering the facility so that vehicles will not endanger aboveground piping	Section 2.1.9

**POINT THOMSON DEVELOPMENT AREA  
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U.S. ENVIRONMENTAL PROTECTION AGENCY  
SPILL PREVENTION, CONTROL AND COUNTERMEASURE REGULATIONS  
[40 CFR 112.7 to 40 CFR 112.10] (CONTINUED)**

REGULATION SECTION	SECTION TITLE	PLAN SECTION NUMBER
112.9	<b>Spill Prevention, Control and Countermeasure Plan requirements for onshore oil production facilities</b>	
112.9(c)(1)	Do not use a container for the storage of oil unless material and construction are compatible.	Section 2.1.10; Appendix B
112.9(c)(2)	Provide secondary containment for entire capacity of largest single container and sufficient freeboard.	Section 2.1.11; Appendix B
112.9(c)(3)	Periodically, and upon regular schedule, visually inspect each container for deterioration and maintenance needs.	Section 2.1.10; Table 2-2; Appendix B
112.9(c)(4)(i)	Container capacity is adequate to assure container will not overflow if pumper/gauger is delayed in making regularly scheduled rounds.	Section 4.8; Appendix A; this table entry
112.9(c)(4)(ii)	Overflow equalizing lines between containers so that full container can overflow into adjacent container.	Not Applicable
112.9(c)(4)(iii)	Vacuum protection is adequate to prevent container collapse during a pipeline run or other transfer of oil from the container.	This table entry
112.9(c)(4)(iv)	High-level sensors generate and transmit an alarm signal to the computer where facility is subject to computer production control system.	Appendix B
112.9(d)(1)	Periodically, and upon regular schedule, inspect all aboveground valves and piping associated with transfer operations.	Table 2-2
112.9(d)(3)	Point Thomson has a program of flowline maintenance to prevent discharges.	Sections 2.1.8 and 2.1.9

## SPCC Conformance Discussion

**General Conformance.** The facility's general conformance with the Title 40, Code of Federal Regulations Part 112 requirements is discussed in this section. A complete discussion of conformance with the applicable federal and state regulations for oil spill prevention and containment as required by 40 CFR 112.7(j) is provided in the Oil Discharge Prevention and Contingency Plan (plan). For prevention procedures, see Sections 2 and 4 in particular, including documents incorporated by reference into the plan. For spill containment tactics, see Sections 1, 2, 3, and 4 of the plan. The plan shows how the generally more stringent state oil spill prevention and containment regulations are met.

The facility will conform with the requirements of Parts 112.3 to 112.9 that apply to it as an onshore, non-transportation-related, oil production and non-production facility.

**Spill Trajectories.** The oil spill trajectory of each type of potential major spill has been anticipated, as required by 40 CFR 112.7(b). The quantities of the potential spills are equal to capacities of the containers. See the simulated oil spill volume calculations for federal worst-case discharges in the OPA 90 sections and for state Response Planning Standards in Section 1.6.13. Also see the discharge analysis table in Section 2 of the plan. The pad diagrams in Section 1.8 of the plan and ACS *Technical Manual, Volume 2*, Map Atlas provide surface drainage diagrams that illustrate potential spill paths. The atlas is incorporated into the SPCC plan by reference.

Spills from most fixed tanks will be confined by facility module floors and their spill drainage systems or by outdoor, lined-and-diked areas. At loading areas, spills will move across gravel pads toward dikes.

Oil pipelines can spill oil to gravel pads, tundra, or streams. The trajectories would spread from the pipeline rupture, moving down-slope or taking the form of aerial spray. Large ruptures could spill the quantity of oil from between valves minus the oil retained in the piping by terrain effects.

**Fueling Areas.** At tank truck loading/unloading areas, transfers of fuel will follow Slope-wide standard operating procedures (see Appendix A of the plan). The procedures have been found very effective in reducing spills at loading racks under conditions and with the equipment characteristic of the Alaska North Slope. The result of the fuel transfer procedures is spill prevention protection equivalent to the vehicle departure cautions described in 40 CFR 112.7(h)(2). For more details, see the discussions of fuel loading/unloading areas in Section 2.

**Mobile Tanks Less than 660 Gallons.** Fixed surface dikes and curbing for small, mobile oil tanks that are frequently moved among sites near water will not be provided because they are not practicable. For example, bleed trailers, light plants and heaters will be pulled from well to well as part of well-servicing operations. Short-term dikes, berms, and walls are generally not feasible because of the limited time the tank would be on location and the limited available space on the gravel pad. Furthermore, surface structures, including drainage systems and barriers, would pose hazards to other traffic.

However, most small mobile tanks will have built-in curbing or trays to contain spills. The curbing will meet the containment requirement in Part 112.7. The tanks will be visually inspected for deterioration and maintenance needs as required by Part 112.9(c)(3). The tanks will not be required by SPCC regulations to undergo integrity tests, although they will undergo testing, or to have secondary containment such as fixed surface dikes and curbing with capacity equal to the container.

Spills from drums and small tanks that are set back from the pad edge are expected to be retained in gravel pads and not reach water. Small tanks with neither built-in nor ground curbing, e.g., Tioga heaters, will be placed on gravel pads well away from the edge. The gravel provides sorbency [(Part 112.7(c)(vii))] and catchment [Parts 112.8(c)(2) and 112.9(c)(2)] and retains the spill before it reaches water. For example, spills of 660 gallons will be expected to spread over approximately 1,320 square feet at the rate of up to one-half gallon per square foot. That rate assumes 3 foot gravel depth and 5% available porosity, reduced by half to account for ice and water [(27 cubic feet per cubic yard x 0.05 void space x 7.5 gallons

per cubic foot / 9 square feet surface per cubic yard) x 0.5 for water and ice = 0.56 gallon per square foot]. Twenty feet is the radius of such a spill if it spreads as a circle.

**Deviation from Secondary Containment.** Oil spill prevention is provided for pipelines and some small tanks as described in Part 112.7(d) rather than by secondary containment methods described in Part 112.7(c)(2).

**Pipelines.** Secondary containment systems described in Part 112.7(c)(2) are not practicable for oil pipelines outside of modules. Oil pipelines form networks of hundreds of miles on the North Slope. The pipelines are elevated above tundra, ponds and streams. The surfaces beneath the pipelines are not suitable for secondary containment systems. Accumulations of ice and snow, and the effects of high winds and seasonal flooding, generally preclude the long-term use of surface structures other than gravel pads or metal pilings. Secondary containment structures for pipelines above gravel pads would be subject to similar ice, snow, and wind effects as well.

Pipelines will be inspected and maintained to prevent oil spills to tundra and water as described in Sections 2 and 4 of the plan.

**Mobile Tanks.** Those mobile bulk storage containers that might spill from the pad edge to water, and will not have the prevention systems described in Part 112.7(c) instead will receive periodic integrity testing. Their associated piping and valves will receive periodic testing of integrity and leaks in accordance with Part 112.7(d). The tanks will be managed under a comprehensive integrity management program carried out by ExxonMobil's corrosion engineers group. The testing will follow standard operating procedures developed and implemented by the facility's corrosion inspectors and field surveillance teams. The inspections, tests, and records will follow Part 112.7(e) requirements. Furthermore, the facility will have an oil spill contingency plan and a written commitment for spill response as described in Parts 112.7(d)(1) and (2). The inspection alternative that will be applied to mobile tanks, as well as to pipelines as described above, complies with the deviation requirements of Parts 112.7, 112.8 and 112.9 for preventing spills from reaching water.

**Liquid Level Determination.** Liquid level determination for mobile tanks at non-production facilities, required by Part 112.8(c)(8), will be conducted by the voice and signal method described in Part 112.8(c)(8)(iii). See the liquid level determination best available technology discussion in Section 4 of the plan. At production facilities, small tank overflow protection will be provided by adequate container capacity relative to the pumper's schedule as described in Part 112.9(c)(4)(i). For more details, see the overflow protections list in the plan appendices.

# **U.S. DEPARTMENT OF TRANSPORTATION**

**POINT THOMSON  
OIL DISCHARGE PREVENTION AND CONTINGENCY PLAN**

**CROSS REFERENCE TO  
U.S. DEPARTMENT OF TRANSPORTATION RESPONSE PLAN REQUIREMENTS  
[49 CFR 194, Subpart B]**

REGULATION SECTION (49 CFR)	SECTION TITLE	PLAN SECTION
<b>194.103</b>	<b>Significant and Substantial Harm; Operator's Statement</b>	
(a)	Identification of line sections that might cause significant and substantial harm to the environment in the event of a discharge	DOT Information Summary
<b>194.105</b>	<b>Worst-Case Discharge</b>	
(a)	The worst-case discharge and the methodology, including calculations, used to arrive at the volume	DOT Information Summary
<b>194.107</b>	<b>General Response Plan Requirements</b>	
(a)	Resources for responding, to the maximum extent practicable, to a worst-case discharge and to the substantial threat of such a discharge	Sections 1.6 and 3.5 through 3.10
(c)	Certification that the response plan is consistent with the National Contingency Plan (NCP)	Page DOT-3
(d)(1)(i)	Information summary as required by 194.113	DOT Consistency Certification and DOT Information Summary
(d)(1)(ii)	Immediate notification procedures	Sections 1.1, 1.2, and 3.3
(d)(1)(iii)	Spill detection and mitigation procedures	Section 2.5
(d)(1)(iv)	Name, address, and telephone number of oil spill response organization	Table 1-2
(d)(1)(v)	Response activities and response resources	Sections 1.1, 1.2, 1.5, 1.6, 3.3, and 3.6
(d)(1)(vi)	Names and telephone numbers of federal, state, and local agencies with pollution control responsibilities or support	Section 1.2; Table 1-3
(d)(1)(vii)	Training procedures	Sections 2.1.1 and 3.9
(d)(1)(viii)	Equipment testing	Section 3.6.2
(d)(1)(ix)	Drill types, schedules, and procedures	Section 3.9
(d)(1)(x)	Plan review and update procedures	Introduction
(d)(2)	Response zone appendices	Not Applicable

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# U.S. DOT CERTIFICATION OF PREPAREDNESS

## CERTIFICATE OF RESPONSE PREPAREDNESS FOR POINT THOMSON

EXXONMOBIL  
POINT THOMSON CONDENSATE EXPORT PIPELINE

Pipeline Response Plans Officer  
Research and Special Programs Administration  
U.S. Department of Transportation  
Room 2335  
400 Seventh Street, SW  
Washington, DC 20590

ExxonMobil hereby certifies to the Research and Special Programs Administration of the DOT that it has identified, and ensured by contract, or other means to be approved by the Research and Special Programs Administration, the availability of private personnel and equipment to respond, to the maximum extent practicable, to a worst-case discharge or a substantial threat of such a discharge.

\_\_\_\_\_  
Randy F. Buckley  
Project Manager  
ExxonMobil Development Company, on behalf of Exxon Mobil Corporation

\_\_\_\_\_  
Date

This Certification of Response Preparedness was acknowledged before me on \_\_\_\_\_, by  
\_\_\_\_\_ on behalf of said corporation.

\_\_\_\_\_  
My commission expires \_\_\_\_\_

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# ACP/NCP CONSISTENCY CERTIFICATION FOR POINT THOMSON

EXXONMOBIL  
POINT THOMSON CONDENSATE EXPORT PIPELINE

ExxonMobil hereby certifies to the Research and Special Programs Administration of the DOT that it has reviewed the National Contingency Plan (NCP) and applicable Area Contingency Plans (ACPs) and found the Point Thomson ODPCP to be consistent with them. The NCP/ACPs reviewed include the NCP as set forth in 40 CFR 300 as published in Federal Register Volume 59, No. 178, Final Rule, September 15, 1994, and the Alaska Federal/State Unified Preparedness Plan ACP (The Unified Plan), Volume I and Volume II (North Slope Borough), dated September 1999.

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Randy F. Buckley  
Project Manager  
ExxonMobil Development Company,  
on behalf of Exxon Mobil Corporation

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Date

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# U.S. DOT INFORMATION SUMMARY

## Name and Address of Operator

ExxonMobil  
P.O. Box 196601  
Anchorage, AK 99519  
(907) 561-5331

Street Address:  
3301 C Street, Suite 400  
Anchorage, AK 99503  
Fax: (907) 564-3789

## Response Zone Description

Point Thomson consists of a single response zone containing the Point Thomson condensate export pipeline that runs from the Point Thomson Central Processing Facility (CPF) to the Badami pipeline, located in the North Slope Borough of Alaska.

## Name and Telephone Number of Qualified Individual

The Qualified Individuals information will be updated prior to construction activities.

### Primary

Chris Faulk  
Production Field Superintendent  
800 Bell Street  
Houston, TX 77002  
(713) 656-3986

### Alternate

Chuck McClain  
Production Operations Superintendent  
800 Bell Street  
Houston, TX 77002  
(713) 656-3703

## Worst-Case Discharge

In accordance with 49 CFR 194.105(b)(1), the worst-case discharge (WCD) for the pipeline is equal to the pipeline's maximum release time ( $RT_{max}$ ) in hours plus the maximum shutdown response time ( $ST_{max}$ ) in hours multiplied by the maximum flow rate ( $F_{max}$ ) expressed in barrels per hour (bph) (based on maximum daily capacity of the pipeline) plus the largest pipeline drainage volume ( $PV_{max}$ ) after shutdown of the line section(s) in the response zone expressed in barrels or:

$$WCD = [(RT_{max} + ST_{max}) * F_{max}] + PV_{max}$$

$$WCD = 16,899 \text{ bbl condensate}$$

Where:

$$RT_{max} = 0.05 \text{ hours (3minutes)}$$

$$ST_{max} = 0.083 \text{ hours (5 minutes)}$$

$$F_{max} = 4167 \text{ bph (100,000 barrels of oil per day [bopd] / 24 hours per day [hpd])}$$

$$PV_{max} = 16,345 \text{ bbl condensate} = [((12.75\text{-inch outside diameter} - 2 \times 0.28\text{-inch (wall thickness) / 2})^2 \times 3.14) / 144 \text{ square inches per square foot}] / (5.6 \text{ cubic foot / bbl}) \times (21.4 \text{ miles}) \times (5280 \text{ ft/mile}) = 16,345 \text{ bbl}$$

Therefore:

$$WCD = [(0.05 + 0.083) * 4167] + 16,345 = 16,899 \text{ bbl of condensate}$$

Time to detect a leak and to shut in the pipeline is not affected by adverse weather.

### **Description of the Line Sections**

The condensate export pipeline will be 22 miles in length running between valves at the CPF and Badami Development Area.

### **Basis for Determination of Significant and Substantial Harm**

The condensate export pipeline will run across several streams and over wetlands. As such, it is determined to pose significant and substantial harm should a spill occur.

### **Certification of Response Personnel and Equipment**

Sufficient response personnel and equipment will be available to respond to a WCD or threat of such a discharge. Information is provided in Sections 1.6.14, Response Scenarios; 3.5, Logistical Support; 3.6, Response Equipment; and 3.8, Response Contractor Information.

### **Substantial Threat**

Events and conditions that can pose a substantial threat of a WCD and procedures to eliminate or mitigate threat of a discharge are identified in ExxonMobil's "Point Thomson USDOT Operations Manual", Part III, Abnormal Operations. The Point Thomson condensate export pipeline will cross several small streams and wetlands to the Badami Development Area pipeline tie-in. According to the requirements of 49 CFR 194.103, and the definitions in 49 CFR 194.103(c)(5) this line section can be expected to cause significant and substantial harm to the environment in the event of a discharge of condensate.

# **U.S. COAST GUARD**

**POINT THOMSON  
OIL DISCHARGE PREVENTION AND CONTINGENCY PLAN**

**CROSS REFERENCE TO  
U.S. COAST GUARD RESPONSE PLAN REQUIREMENTS  
[33 CFR 154.1035]**

REGULATION SECTION (33 CFR 154.1035)	SECTION TITLE	PLAN SECTION
<b>(a)</b>	<b>Introduction and Plan Content</b>	
(a)(1)	Facility name, address, telephone and fax numbers, mailing address	Introduction; Section 1.1
(a)(2)	Facility's geographic location	Sections 1.8 and 3.1
(a)(3)	24-hour procedure for contacting facility owner or operation	Sections 1.1 and 1.2
(a)(4)	Table of contents	Table of Contents
(a)(5)	Cross-index	This section
(a)(6)	Record of changes	Page iii
<b>(b)</b>	<b>Emergency Response Action Plan</b>	
(b)(1)	Notification procedures	Sections 1.1 and 1.2
(b)(1)(i)(A)	Facility response personnel, the spill management team, Oil Spill Removal Organization (OSRO), and the qualified individual(s) and the designated alternate(s)	Sections 1.1, 1.2, and 1.5; Table 1-2
(b)(1)(i)(B)	Government agencies	Table 1-3; Section 1.2.2
(b)(1)(ii)	Notification form	Section 1.2; Figure 1-3
(b)(2)	Facility's Spill Mitigation Procedures	This section; Sections 1.6, 2.1 and 2.5; Appendix A
(b)(2)(i)(A)	Average most probable discharge	This section
(b)(2)(i)(B)	Maximum most probable discharge	This section
(b)(2)(i)(C)	Worst-case discharge	This section
(b)(2)(i)(D)	Worst-case discharge from non-MTR portion of facility	This section and Section 1.6.14
(b)(2)(ii)	Mitigation or prevention procedures for discharges or threat of discharge	Sections 1.6, 2.1, 2.3, and 2.5; Appendix A
(b)(2)(ii)(A)	Failure of manifold, loading arm, hoses, other	Appendix A
(b)(2)(ii)(B)	Tank overfill	Sections 2.1.10 and 2.5
(b)(2)(ii)(C)	Tank failure	Sections 1.6.14 and 2.5
(b)(2)(ii)(D)	Piping rupture	Sections 1.6.14, 2.5 and 2.1.8
(b)(2)(ii)(E)	Piping leak	Sections 1.6.1, 2.1.8, and 2.5
(b)(2)(ii)(F)	Explosion or fire	Section 1.6.2
(b)(2)(ii)(G)	Equipment failure	Section 1.6.1

**CROSS REFERENCE TO  
U.S. COAST GUARD RESPONSE PLAN REQUIREMENTS  
[33 CFR 154.1035] (CONTINUED)**

REGULATION SECTION (33 CFR 154.1035)	SECTION TITLE	PLAN SECTION
(b)(2)(iii)	List of equipment and responsibilities for mitigation of average most probable discharge	Sections 1.1, 2.1.5, and 3.6; Appendix A
(b)(3)	Facility Response Activities	Sections 1.1 and 1.2
(b)(3)(i)	Facility personnel's responsibilities to initiate and supervise response pending arrival of Qualified Individual	Sections 1.1, 1.2, and 3.3
(b)(3)(ii)	Qualified Individual's responsibility and authorities	Sections 1.1 and 1.2
(b)(3)(iii)	Organizational structure to manage response actions	Sections 1.1, 1.2, and 3.3
(b)(3)(iv)	Oil spill removal organization(s) and spill management team capabilities	Tables 1-1B and 1-2; Sections 3.8 and 3.9
(b)(3)(iv)(A)(1)	Provide equipment and supplies for average most probable discharge	Section 3.6
(b)(3)(iv)(A)(2)	Trained personnel for 7 days	Sections 3.5 and 3.9
(b)(3)(iv)(B)	Job descriptions for each spill management team member within the organization structure	Sections 1.1 and 1.2
(b)(4)	Fish and wildlife and sensitive environments	Sections 1.6.5, 1.6.11, 1.6.14, and 3.2
(b)(4)(i)	Identification of environmentally sensitive areas potentially impacted by a worst-case discharge	Sections 1.6.5 and 1.6.14
(b)(4)(ii)(A)	List of sensitive areas potentially impacted by a worst-case discharge	Sections 1.6.14 and 3.2
(b)(4)(ii)(B)	Procedures to protect sensitive areas	Sections 1.6.14 and 3.2
(b)(4)(ii)(C)	Depict response actions on map	Section 1.6.14
(b)(4)(iii)(A)	Personnel and equipment to protect sensitive areas for distance and days per Table 2, Appendix C, 33 CFR 154	Section 1.6.14
(b)(4)(iii)(B)(1)(i)	For persistent oil and non-petroleum oils discharged into non-tidal waters, the distance from the facility traveled in 48 hours at maximum current	Not Applicable
(b)(4)(iii)(B)(1)(ii)	For persistent oil and non-petroleum oils discharged into tidal waters, 15 miles from the facility down current during ebb tide and to the point of maximum tidal influence or 15 miles, whichever is less, during flood tide.	5 miles on east and west of barge mooring location
(b)(4)(iii)(B)(1)(iii)	For non-persistent oil discharged into non-tidal waters, the distance from the facility traveled in 24 hours at maximum current	Section 3.1; <i>ACS Technical Manual, Volume 2</i>
(b)(4)(iii)(B)(1)(iv)	For non-persistent oil discharged into tidal waters, 5 miles from the facility down current during ebb tide and to the point of maximum tidal influence or 5 miles, whichever is less, during flood tide.	5 miles on east and west of barge mooring location
(b)(4)(iii)(B)(2)	Trajectory model (substitute for distance calculation required by [b][4][iii][B][1])	Section 1.6.4
(b)(5)	Disposal plan	Section 1.6.10
<b>(c)</b>	<b>Training and Exercises</b>	
(c)(1)	Training procedures	Sections 2.1.1 and 3.9
(c)(2)	Exercise procedures	Section 3.9

**CROSS REFERENCE TO  
U.S. COAST GUARD RESPONSE PLAN REQUIREMENTS  
[33 CFR 154.1035] (CONTINUED)**

REGULATION SECTION (33 CFR 154.1035)	SECTION TITLE	PLAN SECTION
(d)	<b>Plan Review and Update Procedures</b>	<b>Introduction</b>
(e)	<b>Appendices</b>	
(e)(1)(i)	Physical description of facility	Section 3.1
(e)(1)(ii)	Identify the sizes, types, and number of vessels that the facility can transfer oil to and from simultaneously	Not Applicable
(e)(1)(iii)	Location of First Valve in Secondary Containment	Section 1.8
(e)(1)(iv)	Information on oil handled, stored, or transported at the facility in bulk	MSDS will be available in the <i>Fuel Transfer Operations Manual</i> , maintained at the facility.
(e)(2)	List of contacts	Sections 1.1 and 1.2; Table 1-2
(e)(2)(i)	24-hour contact for Qualified Individual and alternate	Section 1.2.3; Table 1-2
(e)(2)(ii)	24-hour contact for oil spill response organization(s)	Section 1.2; Tables 1-1B and 1-2
(e)(2)(iii)	24-hour contact for agencies	Section 1.2; Table 1-3
(e)(3)(i)	Equipment and Personnel for Response of Average Most Probable Discharge	Sections 1.6.14 and 3.6
(e)(3)(ii)	Equipment list belonging to OSRO to respond to a most probable or worst-case discharge	Section 3.6 and <i>ACS Technical Manual, Volume 1, Tactic L-6</i>
(e)(3)(iii)	If OSRO has been classified by USCG, equipment list is not required but classification must be noted	Section 3.6
(e)(4)	Communications Plan	Section 1.4
(e)(5)	Site-specific Health and Safety Plan	<i>ACS Technical Manual, Volume 2, Tactics S1 to S6.</i>
(e)(6)	List of Acronyms and Definitions	Table of Contents

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## POTENTIAL DISCHARGES

### Average Most Probable Discharge

The average most probable discharge is calculated as approximately 0.6 bbl of diesel fuel, based on the definition contained in 33 CFR 154.1020 (the lesser of 50 bbl or 1% of the volume of the WCD).

### Maximum Most Probable Discharge

The maximum most probable discharge is 5.7 bbl of diesel fuel, based on the definition contained in 33 CFR 154.1020 (the lesser of 1,200 bbl or 10 % of the volume of the WCD).

### Worst-Case Discharge

In accordance with 33 CFR 154.1029(b)(2), the WCD for piping between the marine transfer manifold and the non-transportation-related portion of the facility is equal to the pipeline's maximum release time ( $RT_{max}$ ) in minutes; plus the maximum shutdown response time ( $ST_{max}$ ) in minutes; multiplied by the maximum flow rate ( $F_{max}$ ) expressed in barrels per minute; plus the largest line drainage volume ( $PV_{max}$ ), expressed in barrels, for the pipe or hose between the marine manifold and the non-transportation-related portion of the facility:

$$\begin{aligned} \text{WCD} &= [(RT_{max} + ST_{max}) * F_{max}] + PV_{max} \\ \text{WCD} &= 57.25 \text{ bbl diesel} \end{aligned}$$

Where:

$$\begin{aligned} RT_{max} &= 2 \text{ minutes} \\ ST_{max} &= 0.5 \text{ minutes} \\ F_{max} &= 10.5 \text{ bbl per minute} \\ PV_{max} &= 31 \text{ bbl (based on 2,000 feet of 4-inch diameter hose)} \end{aligned}$$

Therefore, the WCD is:

$$[(2 \text{ min} + 0.5 \text{ min}) * 10.5 \text{ bbl/min}] + 31 \text{ bbl} = 57.25 \text{ bbl of diesel oil}$$