UNITED STATES DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE
GULF OF MEXICO OCS REGION

NTL No. 2009-G30

Effective Date: September 1, 2009
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NOTICE TO LESSEES AND OPERATORS OF FEDERAL OIL AND GAS LEASES AND PIPELINE RIGHT-OF-WAY HOLDERS
OUTER CONTINENTAL SHELF, GULF OF MEXICO OCS REGION

Post-Hurricane Inspection and Reporting

The Minerals Management Service (MMS) Gulf of Mexico OCS Region (GOMR) is issuing this Notice to Lessees and Operators and Pipeline Right-of-way Holders (NTL) pursuant to 30 CFR 250.106(b) and (c) to elaborate on the inspections you need to conduct and the plans and reports you need to prepare because of known and potential damage to OCS facilities caused by hurricanes in the Gulf of Mexico.

Authority

In accordance with 30 CFR 250.901(a)(7), you must conform to the provisions of American Petroleum Institute Recommended Practice 2A-WSD, Twenty-first Edition (API RP 2A-WSD).

Pursuant to 30 CFR 250.919(b), if any of your structures have been exposed to a natural occurrence (e.g., hurricane, earthquake, or tropical storm), the Regional Supervisor may require you to submit an initial report of all structural damage, followed by subsequent updates, which include the following:

1. A list of affected structures;
2. A timetable for conducting the inspections described in section 14.4.3 of API RP 2A-WSD; and
3. An inspection plan for each structure that describes the work you will perform to determine the condition of the structure.

Pursuant to 30 CFR 250.919(c), the Regional Supervisor may also require you to submit the results of the inspections referred to in 30 CFR 250.919(b)(2), including a description of any detected damage that may adversely affect structural integrity, an assessment of the structure's ability to withstand any anticipated environmental conditions, and any remediation plans.

Affected Area of a Hurricane

The affected area will be defined in a future NTL, which will be issued after the passage of a hurricane. For initial planning purposes, you should at a minimum, include in your inspection plans

any offshore OCS facility that experiences hurricane force winds as defined by the National Hurricane Center as maximum sustained 1-minute surface winds greater than or equal to 74 mph (64 knots). Surface winds are those observed to occur at the standard meteorological height of 10 meters (33 feet) in an unobstructed exposure. That NTL will also specify time frames for conducting inspections and surveys, submitting reports, and completing work to correct any damage.

All Fixed OCS Platforms and Structures

The MMS GOMR has established the following minimum requirements for all fixed OCS platforms located in the affected area of a hurricane:

1. Perform a Level I survey on all platforms in the affected area

A Level I survey consists of an above-water general visual inspection (GVI) that focuses on obvious damage to the primary structure. Perform a GVI by conducting a walk-through of the structure with the goal of visually indentifying specific areas of damage and potential concern. If damage is detected, use nondestructive testing when visual inspection cannot fully determine the extent of damage.

You should use post-hurricane flyovers or a close approach by boat to establish the general condition of the structure and to determine if the structure has obvious damage. Access to the structure by normal means may be unsafe and may require special planning for the initial boarding party. Examples of potentially unsafe conditions include a leaning structure; structural damage to the helideck; and damaged or missing boat landings, walkways, and stairways.

In performing a GVI of the topside deck structure, inspect the structure from the lowest deck to the highest deck. Include inspection of:

- deck framing in areas such as the drilling, process, production, and utility
- tie-downs and main deck connections for drilling rigs, flare booms, quarters buildings, etc.
- helideck

In performing a GVI of the primary jacket structural members in the splash zone and above water, concentrate on the condition of the more critical areas such as deck legs, deck leg to pile connections, pile to jacket connections, and above-water jacket members. Typical structural damage to investigate includes:

- bent, missing, or damaged structural members
- visual indications of overloading (i.e., bent or bowed members, severed members, cracks at pile to jacket connections)
- dents on outboard members caused by impact from floating or fallen objects
- distorted or twisted beams and columns

In performing a GVI of the cellar (or lowest) deck, look for beams that may be buckled or out of square due to wave impact. If beams exhibit indications of wave impact induced buckling or yielding, trace structural members back to the deck leg to check for connection integrity and perform a Level III underwater structural inspection on that platform.

2. Perform a Level II underwater survey for any platform
   a. that experienced severe accidental loading as defined in API RP 2A-WSD, Section 14;
   b. that experienced an event that exceeded the platform's original design or latest assessment criteria; and
   c. where Level I survey results indicate that a Level II survey is necessary.

3. Perform a Level III underwater survey for any platform
   a. that experienced wave induced buckling or yielding of structural members; and
   b. where Level II survey results indicate a Level III survey is necessary.

4. Perform a Level IV survey for any platform
   a. if a Level III survey detects significant structural damage; or
   b. if visual inspection alone cannot determine the extent of the damage.

The flowchart in Attachment No. 1 of this NTL depicts these post-hurricane survey requirements.

5. Manning and resumption of production

Do not quarter personnel overnight or have them working on the platform 24 hours a day without prior MMS GOMR approval if the Level I survey indicates structural damage or if an engineering assessment determines that the latest assessment criteria have been exceeded. If it is operationally impractical for you to wait to complete the inspections or engineering assessment before you quarter personnel on a platform, obtain MMS GOMR approval before you do. At a minimum, make sure that you:

   a. Develop a detailed, comprehensive around-the-clock weather monitoring plan;
   b. Comply with U.S. Coast Guard regulations contained in 33 CFR, Subchapter C (Aids to Navigation), and Subchapter N (Outer Continental Shelf Activities); and
   c. Provide 24-hour full radio communications between a "field" boat and the platform.

Before you quarter personnel on any platform, ensure that all firefighting equipment; flame, smoke, or heat detectors; gas detection equipment; and personnel safety and lifesaving equipment are maintained, inspected, and operational. Note: The appropriate MMS GOMR District Office may grant you a 30-day approval to utilize an adequate dry chemical fire-fighting system in lieu of a pre-existing firewater fire-fighting system.

If Level I, II, or III surveys find structural damage, do not man the platform until you complete a structural analysis and perform any necessary repairs.

You may resume production after you complete a Level 1 survey that indicates no major structural damage, and after you successfully perform the tasks outlined in the section below titled "Safety Device Testing Departures and Returning to Production."

6. Notifications, reports, and repairs

Within 60 days of the passage of the hurricane, submit the information listed below by e-mail to structures@mms.gov:

a. A list of all your OCS platforms in the affected area;

b. For each listed structure, an initial inspection plan that generally describes the work you will perform to determine the condition of the structure; and

c. A timetable that shows how you will complete all inspections within 180 days after passage of the hurricane.

The MMS GOMR will review the inspection plans. You may submit amendments to your list and inspection plans for our consideration. Further, submit an amendment to your inspection plan whenever the results of a Level II survey require you to conduct a Level III survey.

Make sure that you complete all surveys within 180 days after passage of the hurricane. On a case-by-case basis, the MMS GOMR may request that you submit the results of these surveys. Complete all work to correct any damage you find during a platform survey before the beginning of the next hurricane season.

In accordance with 30 CFR 250.900(c), under emergency conditions, you may make repairs to primary structural elements to restore an existing permitted condition without submitting an application or receiving prior MMS GOMR approval for ***up to 120-calendar days following an event***. Notify the MMS GOMR within 24 hours of the discovery of the damage and provide a follow up written report to the MMS GOMR within 30 days after you complete the repairs.

Make the required 24-hour damage notification concurrent with your e-mail or electronic hurricane reports as outlined in NTL No. 2009-G12, effective June 1, 2009. Make the required 24-hour repair notification by e-mail to structures@mms.gov. Make sure that the subject line of the e-mail begins with the phrase "EMERGENCY REPAIR" and includes the Lessee/Operator Name, Area and Block, Platform Name, and Complex ID. In the e-mail message, provide sufficient information for the MMS GOMR to ensure that the structure has been repaired to its existing permitted condition.

In accordance with 30 CFR 250.919(a), you must submit a comprehensive in-service inspection report annually by November 1 to the MMS GOMR of the platforms you inspected during the preceding 12 months. For any surveys you conduct in response to this NTL, provide the information described in the Attachment No. 2 of this NTL in your annual report, using the standard OSTS inspection report format.

Surveys you conduct in response to this NTL may omit requirements regarding the inspection of corrosion protection systems-marine growth, and the cathodic protection systems. However, in order for any inspection to be acceptable under the survey interval requirements indicated in subsection 14.4.2 of API RP 2A-WSD, you must perform a survey that includes all of the elements specified in Section 14.3 of API RP 2A-WSD.

Floating OCS Structures

The United States Coast Guard (USCG) is the lead regulatory authority over floating OCS structures, as outlined in the Memorandum of Agreement between the MMS and the USCG (MMS/USCG MOA: OCS-04, Subject: Floating Offshore Facilities). The MMS GOMR and the USCG intend to work in close cooperation with regard to the material condition, operational status, and any necessary repairs to any floating facility subject to this NTL. The MMS GOMR has established the following minimum requirements for all floating OCS structures located in the affected area of a hurricane. However, they are not intended to supersede or otherwise conflict with any USCG regulatory requirements or any orders you may receive from authorized USCG personnel.

1. Above-water Inspections for Floating Structures

For all floating structures in the affected area, conduct an above-water general visual inspection. Carefully inspect the critical connections of the deck to the hull. Visually inspect the hull from the structure and, if needed, by boat, looking for dents or other damage. Examine the underside of the topside deck for beams that may be buckled or out of square due to wave impact. For a tension leg platform (TLP) in particular, evidence of wave impact to the cellar deck can indicate that design criteria have been exceeded and/or the possibility of damage to the tendon system.

Visually inspect structural appurtenances that are vulnerable to damage from motion, such as the base of flare towers, crane pedestals, and drilling rig connections to the deck. Inspect hatches, doors, and other openings to the hull to confirm that they remained watertight throughout the storm and that no water entered the hull. Visually inspect mooring jacks and chain stoppers for indications of extreme stress or failure. Verify the operation of critical marine systems, including emergency power, ballast, bilge, firewater, and the marine monitoring system. If available, retrieve information from the marine monitoring system and review it for indications of hurricane severity and floating structure performance during the storm.

2. Underwater Inspections for Floating Structures

Conduct a general underwater visual inspection by divers or remotely operated vehicle (ROV) of the structure when the above-water inspection indicates that underwater damage may have occurred. In addition, conduct a general underwater visual inspection of the structure after severe accidental loading, such as a large object being knocked loose and potentially causing structural damage to the structure as it fell to the seafloor, or after an event exceeding the platform's latest design/assessment criteria.

Conduct a general visual inspection of the mooring system if there is any unexpected offset after the hurricane or if the mooring line tensions exceeded 70 percent of the minimum breaking load (MBL) during the hurricane (or, for a TLP, any negative tendon tensions or unexpected changes in tendon tensions). You may determine the mooring tensions either from measured tension data or by using hindcast data to model the tensions that were on the mooring lines. Conduct this inspection on all mooring lines, fairleads, and their foundations and piles. For a TLP, inspect the tendon porches, tendon top connections, tendons, tendon load measurement units, fairings or strakes (if so equipped), tendon couplings, and tendon bottom connector for any signs of damage or unexpected tendon movement. You may use flooded member detection to help identify leaks

in buoyant tendons. Inspect tendon fairings for damage and for loss of free rotation. Inspect tendon bottom connectors for indications of vertical or rotational movement at the pile and intrusion of debris into the tendon receptacle.

3. Manning and Resumption of Production

The USCG has the lead regulatory authority over approval to man (personnel on board more than 12 hours in successive 24-hour periods) a floating structure. Once the USCG has approved the manning of the floating structure and is otherwise satisfied with the condition of the facility, you may resume production after you complete the required surveys that indicate no major structural damage, and after you successfully perform the tasks outlined in the section below titled "Safety Device Testing Departures and Returning to Production."

4. Notifications, Reports, and Repairs

Make sure that you begin all inspections immediately upon boarding the floating facility. Report all findings of these inspections and coordinate the repairs with the MMS GOMR. The time frame required for the completion of these repairs will be determined on a case-by-case basis.

Under emergency conditions, you may make repairs to primary structural elements to restore an existing permitted condition without submitting an application or receiving prior MMS GOMR approval for ***up to 120-calendar days following an event***. Notify the MMS GOMR within 24 hours of the discovery of the damage and provide a follow up written report to the MMS GOMR within one week after you complete the repairs.

Note: The USCG has different requirements regarding repairs on floating structures; any temporary or permanent repairs are subject to USCG approval. You must submit the results of damage surveys and subsequent repair proposals to the cognizant Officer in Charge, Marine Inspection (OCMI) for approval. If you make emergency repairs on a floating platform, you must also notify the USCG.

Make the required 24-hour damage notification concurrent with your e-mail or electronic hurricane reports as outlined in NTL No. 2009-G12, effective June 1, 2009. Make the required 24-hour repair notification by e-mail to structures@mms.gov. Make sure that the subject line of the e-mail begins with the phrase "EMERGENCY REPAIR" and includes the Lessee/Operator Name, Area and Block, Platform Name, and Complex ID. In the e-mail message, provide sufficient information for the MMS GOMR to ensure that the structure has been repaired to its existing permitted condition.

Moored Mobile Offshore Drilling Units

Pursuant to 30 CFR 250.417(a), you must demonstrate that a drilling unit is capable of performing at the proposed drilling location. Under this authority, the MMS GOMR hereby directs you to conduct the following inspections for a moored mobile offshore drilling unit (MODU) in the affected area:

1. If the moored MODU did not experience any obvious mooring system damage and all of the mooring line tensions were less than 70 percent of the MBL, conduct a general visual

inspection of the mooring system during the next rig move. You may determine the mooring tensions either from measured tension data or by using hindcast data to model the tensions that were on the mooring lines.

2. If the moored MODU did not experience any obvious mooring system damage but mooring line tensions exceeded 70 percent of the MBL, conduct a detailed inspection (see footnote below) of the mooring lines that experienced tensions greater than 70 percent of the MBL during the next rig move. The mooring tensions may be determined either from measured tension data or by using hindcast data to model the tensions that were on the mooring lines.

3. If the moored MODU experiences a single mooring line failure, conduct a detailed inspection (see footnote below) of the failed mooring line for reuse before you resume operations. Conduct a visual ROV inspection for the two lines adjacent to the failed line. You may inspect the remaining mooring lines during the next rig move, if it can be demonstrated that their tensions did not exceed 70 percent of their MBL.

4. If the moored MODU experiences multiple mooring line failures, conduct a detailed inspection (see footnote below) of all of the mooring line components before you resume operations. This inspection applies to all mooring components, including the lines that did not fail. Remove from service all components that do not pass inspection.

* A detailed inspection of the mooring system components consists of the following:

- Chain – inspection using a go-no-go gauge on links every 100 feet
- Wire – detailed visual following API RP 2I inspection criteria on broken wires within strands; focus attention to the area just behind the socket and conduct a detailed visual inspection on the socket itself
- Polyester – detailed visual inspection focusing on any jacket (sheath) abnormalities or diameter changes; if barrier is compromised, swap out section
- Connecting hardware (connecting links, kenters, shackles, swivels, etc.) – exchange and conduct a magnetic particle inspection (MPI) to ensure suitability to return to service
- Subsea Connectors – exchange and inspect as per manufacturer guidelines
- Anchors – after retrieval, a detailed visual, looking for potential structural cracks and noticeable deformations such as bending of the anchor shank or fluke

Submit the results of these inspections by email to either jane.powers@mms.gov or lance.labiche@mms.gov. If the mooring system sustained any damage, submit these inspection results for reuse approval before you resume operations. Based upon the results of these inspections, the MMS GOMR may require you to replace any or all of the mooring components. If no damage was sustained to any of the mooring components, submit the inspection results before you commence operations at the next location.

Any United States and foreign flag MODU is subject to USCG inspection. You are therefore reminded that for any MODU subject to this NTL you must contact the cognizant OCMI before you man and operate the MODU.

Pipelines

Pursuant to 30 CFR 250.1005(a), you must conduct inspections of pipeline routes at intervals and using methods prescribed by MMS. Under this authority, the MMS GOMR hereby directs you to conduct the following inspections for pipelines in the affected area.

1. Pipeline Tie-in and Crossing Inspections. Conduct an underwater visual inspection using divers or ROV, a scanning sonar processor, a 500-kHz sidescan sonar in combination with a magnetometer, or other equipment acceptable to the MMS GOMR of each of your OCS pipeline tie-ins and crossings in water depths less than 200 feet. Design each inspection to determine whether any valves or fittings became exposed and to determine the extent of any damage, including damage to protective devices, mats, and sandbags. If during the course of inspecting pipeline tie-ins and crossings there are indications of pipeline movement, conduct an underwater pipeline inspection of that section regardless of water depth to determine the extent of movement or damage.

2. Pipeline Riser Inspections. Conduct a visual inspection of the above-water portion of each pipeline riser in all water depth ranges. If applicable, conduct this riser inspection in conjunction with the required Level I platform survey described above. Inspect the riser and riser clamps for damage. If this inspection indicates that damage may have occurred, conduct an underwater riser and pipeline inspection to determine if the pipeline has been displaced or exposed.

3. Pipeline Steel Catenary Riser Inspections. Conduct an inspection using divers and/or ROV of the underwater portions of each of your OCS pipeline steel catenary risers. Inspect the riser, vortex-induced vibration (VIV) suppression devices, and the connection point (flexible element, titanium stress joint, etc.) for damage.

The chart below summarizes and clarifies those portions of a pipeline that require inspections according to the water depth range.

If the water depth range is	**Then inspect all**
0 to 199 feet	subsea tie-ins and pipeline crossings.
All water depths	risers, including steel catenary risers.

4. Drifting MODU's or Structures. If there is any indication that an adrift MODU or other floating structure may have impacted any of your pipelines, conduct an underwater pipeline inspection regardless of water depth to determine whether the MODU or other floating structure caused any damage to the pipeline.

5. Mudslide Areas. For pipelines in the affected area that are also in a known mudslide area and/or are designed to mitigate the effects of mudslides, conduct an underwater visual inspection of pipeline tie-ins and crossings in mudslide areas in accordance with item No. 1 above, regardless of water depth, and conduct a leak test in accordance with the provisions in Item No. 7 below.

6. Reports and Repairs. Submit the results of any pipeline inspections you conduct pursuant to paragraphs Nos. 1 through 5 above and any subsequent updates to pipelines@mms.gov by the

first Friday of each month. Continue to submit these reports until you have completed all repairs and placed the pipeline back into service. In each report, include

a. The MMS-assigned pipeline segment number;
b. The size of the pipeline;
c. If inspected, the date(s) of the inspection;
d. The type of damage found;
e. The location of damage (including damage to risers);
f. The suspected cause of damage;
g. Whether the damage has been repaired;
h. If not inspected, the estimated date(s) of inspection;
i. Whether the pipeline is "in service" or "out of service;" and
j. If returned to service, the date.

Please be reminded that before you conduct any repairs, you are to submit a repair procedure for review and acceptance to the MMS GOMR Pipeline Section.

7. Leak Testing. Perform a leak test before you return any pipeline located in the affected area to service. Make sure that the leak test successfully tests the integrity of the pipeline. When you conduct the leak test, make sure that you use a stabilized pressure that is capable of detecting all leaks, use pressure gauges and recorders that are sufficiently accurate to determine whether the pipeline is leaking during the test, and conduct the test for at least two hours. For major oil pipelines (those 10 inches in diameter or greater), perform the leak test only during daylight hours and provide aerial surveillance of the pipeline route while you perform the test.

Safety Device Testing Departures and Returning to Production

Pursuant to 30 CFR 250.804, you must successfully test and inspect safety system devices at specified intervals in accordance API RP 14C, Appendix D. Since facility damage may prevent you from performing the required tests and inspections, the MMS GOMR has received departure requests to either extend time frames or to waive the tests and inspections until such time that they can be performed safely. To curtail written requests for departures with respect to safety device testing and inspections, adhere to the following the guidelines:

- If your platform is not safe to board, you need to record, in the platform records when the platform is safe to board, that you have temporary suspended safety device testing, and inspections you conducted due to hurricane damage. Your weekly, monthly, or quarterly test can be suspended until you are ready to resume production. If you are unable to perform the required test or inspection within 45 days after passage of the hurricane, contact the appropriate MMS GOMR District Office for a further possible extension.

- Before you resume production, verify the integrity and operability of the platform's surface safety system, including the emergency support system and other systems outlined in API RP 14C, and test and document any repairs. On manned platforms, make sure that there are at least two primary means of escape in place. If the platform is unable to provide two primary means of escape, you may propose an alternative arrangement that provides an equivalent degree of safety. Submit any such proposal to the MMS GOMR for review and approval. If you board an unmanned platform that has no primary means of escape,

provide personnel with a secondary means of escape and make sure that you either moor a standby vessel (as defined in 33 CFR 140.10) to the platform or have available a helicopter in the immediate vicinity to transport personnel away from the platform. The MMS GOMR strongly recommends that you repair the primary means of escape quickly, but no later than 90 days following the passage of the hurricane.

Guidance Document Statement

The MMS issues NTL's as guidance documents in accordance with 30 CFR 250.103 to clarify, supplement, and provide more detail about certain MMS regulatory requirements and to outline the information you provide in your various submittals. Under that authority, this NTL sets forth a policy on and an interpretation of a regulatory requirement that provides a clear and consistent approach to complying with that requirement. However, if you wish to use an alternate approach for compliance, you may do so, after you receive approval from the appropriate MMS office under 30 CFR 250.141.

Paperwork Reduction Act of 1995 Statement

The information collections referred to in this NTL are intended to provide clarification, description, or interpretation of requirements contained in 30 CFR 250, subparts A, H, I, and J. The Office of Management and Budget (OMB) has approved the information collection requirements in these regulations under OMB Control Numbers 1010-0114 for subpart A, 1010-0059 for subpart H, 1010-0149 for subpart I, and 1010-0050 for subpart J.

Contacts

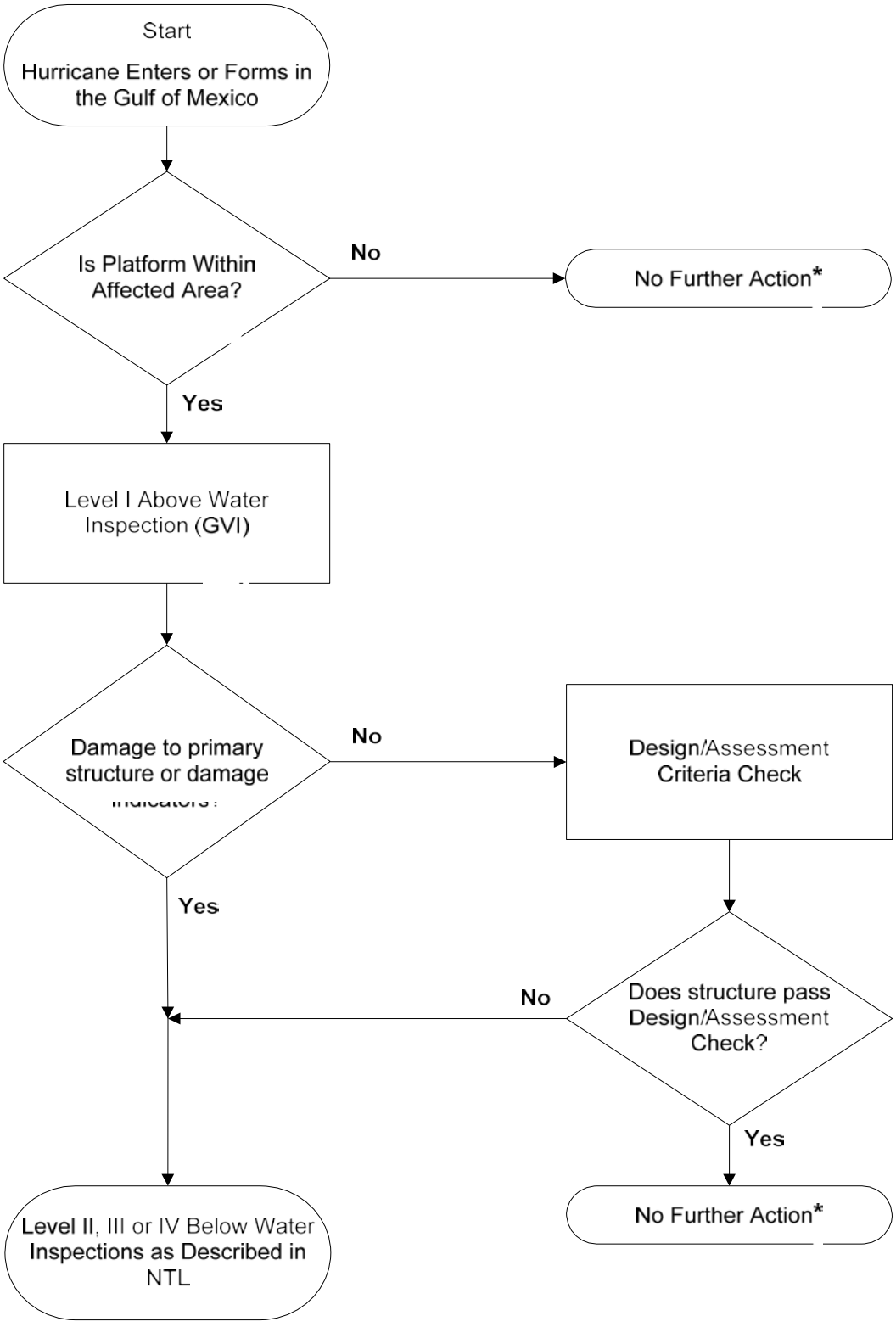
1. Address any questions regarding platform surveys or reports to Mr. B. J. Kruse of the MMS GOMR Office of Technical and Structural Support by telephone at (504) 736-2634 or by e-mail at structures@mms.gov.
2. Address any questions regarding moored rig inspections or issues by e-mail to either jane.powers@mms.gov or lance.labiche@mms.gov.
3. Address any questions regarding pipeline inspections or reports to Mr. Alex Alvarado of the MMS GOMR Pipeline Section by telephone at (504) 736-2547 or (504) 452-3562, or by e-mail at pipelines@mms.gov.
4. Address any questions regarding safety device inspection and testing to the appropriate MMS GOMR District Office.

[original signed]

Lars T. Herbst
Regional Director

Attachments

Attachment No. 1



*Unless structure specific inspections required by owner or regulator.

Attachment No. 2

For each survey you conduct in response to this NTL, provide the following information (in electronic spreadsheet format with each data item presented in the order listed as column headings) in your annual inspection report:

1. General
   - Lessee or Operator Name
   - Platform Name
   - Platform Location (OCS Area and Block and X-Y Coordinates)
   - MMS-assigned Complex ID
   - Water Depth
   - Year Installed
   - Platform Type (Caisson, Tripod, 4-pile, 8-pile, etc.)
   - Platform Use (Quarters/Production/Compressor/ROW Accessory, etc.)
   - Quarters (Y/N) (If yes, the number of beds)
   - Manned or Unmanned
   - Number of Legs and Piles
   - Number of Slots; Number of Unused Slots
   - Number of Conductors
   - Number of Decks
   - Measured Deck Height

2. Survey Information
   - The date of the survey.
   - The extent and area of inspection.
   - The type of inspection employed (Level I, II, III, or IV).
   - Name, company name, and position description of the individual(s) who performed the survey.

3. Structural Damage
   - From the approach (helicopter/boat), were there any visual signs of leaning, twisting, unlevel decks, or other significant structural damage? (Y/N) If yes, describe the damage.
   - Was there any damage that prevented boarding the platform? (Y/N)
   - Were there any visual signs of wave in deck? (Y/N)
   - Were there any signs of visible damage (holes, cracks, tears, bending, twisting, movement, missing, displacement, bulging, etc.) to any of the steel members (legs, piles, cross bracing members, columns, truss members, beams or girders, joints and welds, conductors (including guides and clamps), or any other steel member) of the structure? (Y/N) If yes, specify the location and type of member and describe the damage.

4. Other Damage
   - Was there any damage to pipeline risers or clamps? (Y/N)
   - Was there any damage to J-tubes or clamps? (Y/N)