MEMORANDUM

From: J.D. REYNOLDS, CAPT
D8 OCS OCMI

Reply to: CDR D. J. Martyn

Attn of: (ocs)

To: Distribution

Subj: STRUCTURAL INTEGRITY MANAGEMENT (SIM) PROGRAM AS AN ALTERNATIVE HULL INSPECTION FOR FLOATING OUTER CONTINENTAL SHELF (OCS) FACILITIES

Ref: (a) 33 CFR Part 140.15 “Equivalents and Approved Equipment,” paragraph (a)
(b) 33 CFR 140.120, “Floating OCS Facilities,” 46 CFR 107.261 “Drydock or Special Examination”
(d) D8(ocs) Policy Ltr 01-2016, “Interim Guidance on Life Extension (Continued Service) Requirements for Floating OCS Facilities”

1. PURPOSE: This policy letter provides guidance for D8 OCS OCMI approval of a Structural Integrity Management (SIM) program as an alternative procedure under reference (a) to drydocking or ISIP requirements under references (b) or (c) for Floating OCS Facilities in the Eighth District Outer Continental Shelf Marine Inspection Zone defined in 33 CFR 3.40-5.

2. BACKGROUND:

a. The Coast Guard published reference (c), the ISIP program, as an alternative to the drydocking requirements of reference (b). An ISIP is a prescriptive inspection regimen. Reference (d) outlines an option for a risk-based inspection regimen through implementation of a SIM program. Floating OCS facilities with a record of substantial compliance with references (b) and/or (c) within their design life or on continued service are eligible for a SIM program as described in this policy. A SIM program varies inspection scope and frequency of individual spaces/areas/components based on risk. The increased attention to higher risk structural areas and components and less intensive inspection of lower risk areas will simultaneously enhance safety and optimize Coast Guard inspection resources. A floating OCS facility that maintains substantial compliance with an accepted SIM program should receive less Coast Guard oversight and be able to consolidate Coast Guard structural inspections with inspections for certification. For newer floating OCS facilities, a correctly implemented SIM program
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may also provide the analytical basis for a service life extension (or “continued service”) request on aging facilities.

b. This policy letter accounts for the potential of a new API Recommended Practice (RP) similar to API RP 2SIM, Structural Integrity Management of Fixed Offshore Structures, but tailored to floating facilities and with more detail than reference (e). This policy will be revised to reference the new API RP, if published.

3. **POLICY**:

a. SIM programs under this policy must be approved by the D8 OCS OCMI. Any owner or operator wishing to use SIM program as an alternative to drydock or an ISIP for a floating OCS facility shall contact the D8 OCS OCMI to discuss implementation and the facility’s suitability for SIM program. To obtain approval from the D8 OCS OCMI the facility owner or operator may follow one of two options:

(1) **ACP Classification Society.** The facility’s SIM program shall be approved by a classification society authorized to participate in the Alternative Compliance Program (ACP) as described in 46 CFR Part 8 Subpart D. In this event, the Coast Guard may accept SIM program inspections by the ACP authorized classification society in accordance with the approved SIM Program.

(2) **Company Personnel.** Alternatively, an owner or operator wishing to use company personnel for SIM must identify an individual company representative to serve as the SIM program lead. This individual shall be responsible for the SIM program implementation and shall have the authority to bind the operator to the terms of the SIM program. The Coast Guard will attend these inspections for oversight.

b. D8 OCS OCMI will consult with the Coast Guard Marine Safety Center, Bureau of Safety and Environmental Enforcement (BSEE) GOM Region, and classification society (or other Coast Guard accepted third party), before making the final determination if the SIM program will be accepted by the Coast Guard. BSEE GOM Region may require similar assessments/evaluations for mooring systems and risers.

c. Floating OCS production facility owners/operators are responsible for maintaining their facilities in accordance with their approved SIM program.

d. Attendance at all, or any portion of the inspections (scheduled and unscheduled) required under the SIM program by a Coast Guard Marine Inspector will be determined at the discretion of the D8 OCS OCMI. Facility owners/operators shall notify the D8 OCS
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OCMI of all scheduled SIM inspections via email to OCSscheduling@uscg.mil at least
30 days prior to the scheduled SIM inspection.

e. The D8 OCS OCMI shall be notified of any discrepancies, non-conformities, or damage
identified during a SIM survey. Criteria for recordable findings shall be determined as a
part of the SIM program.

f. All SIM program inspection records shall be made available upon request for
examination by the D8 OCS OCMI or attending USCG marine inspector serving on the
D8 OCS OCMI’s behalf.

g. OCMI acceptance of a SIM program is valid up to the original approved regulatory
operating life of the facility, provided the program is continuously maintained. A proper
SIM program provides the technical foundation and data to assess fitness-for-purpose
beyond the original approved regulatory operating life. An assessment and analysis will
be required for a service life extension (or “continued service”), but it is anticipated that
SIM will minimize the effort required for an OCMI determination; see reference (e) for
additional guidance for service life extension requests.

h. The D8 OCS OCMI shall be notified if there is a transfer of ownership for a facility
under a Coast Guard accepted SIM program. All SIM data, records and documentation
required by this policy must be passed to the new owner for the facility to remain on a
Coast Guard accepted SIM program.

i. Nothing in this policy is intended to limit the authority of the D8 OCS OCMI to require
additional actions if deemed necessary. Questions regarding interpretation or application
of this policy should be directed to this office.

4. ACTION: The following items shall be addressed by owners/operators requesting Coast
Guard acceptance of their SIM program:

a. For existing floating OCS facilities with an approved ISIP, companies shall notify the D8
OCS OCMI of their intent to implement SIM as an alternative to the approved ISIP at
least six months before the end of the current ISIP cycle. The D8 OCS OCMI will only
consider acceptance of a SIM program following a complete ISIP cycle or following a
complete baseline structural survey.

b. For new floating OCS facilities, coordination with the D8 OCS OCMI should begin as
soon as practicable. A new facility’s SIM program begins in the design phase, and
continues through the construction and installation phases to the operating phase. If
already beyond the design phase, the D8 OCS OCMI will require documentation to verify SIM program implementation during earlier phases.

c. For existing facilities, the D8 OCS OCMI will require a baseline structural survey of the facility. The SCIPs identified in the ISIP shall be considered “special areas” for the purposes outlined in reference (d). At the discretion of the D8 OCS OCMI, data and results from the ISIP history may be used to narrow the scope of the baseline survey. The facility must provide a comparative breakdown between the minimum criteria listed in section 18.5.2 of reference (d) and what is currently being conducted under the Coast Guard approved ISIP. This is to ensure no duplication of effort and no required inspections are missed during the transition.

d. SIM program documentation submitted to the Coast Guard for acceptance shall, at a minimum, contain the following information:

(1) **ACP Classification Society Option:**
   (a) Documentation of approval of the SIM program by a classification society;
   (b) Qualifications/certification of inspection/survey personnel;
   (c) Survey procedures, including performance criteria;
   (d) Facility component identification;
   (e) Survey schedule (frequency or interval) for each component and tank/void (an inspection matrix is recommended);
   (f) Data and record keeping procedures;
   (g) Planned maintenance procedures;
   (h) Damage assessment and repairs procedures; and
   (i) Drawings and details of “special areas.”

(2) **Company Personnel Option:** The information of sections d.(1)(b) - (i), above, plus the following documentation is required:
   (a) An organization commitment statement;
   (b) A company organization chart that includes the names of designated SIM program personnel responsible for development, implementation, and oversight of the SIM program for each facility;
   (c) Documentation demonstrating that SIM program personnel meet the qualification standards of Section 18.4.1 in reference (d), “Personnel qualifications;”
   (d) A description of the responsibilities and authorities of personnel involved in the examination and maintenance of each facility; and
   (e) A description of the company’s SIM program training infrastructure, the method used to track and record training for SIM personnel, and the training required for designated SIM personnel.
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e. Table 7 of reference (d) is not intended as an absolute maximum inspection interval
schedule. Instead, the SIM program must be shown to provide a level of safety
equivalent to, or greater than, the level implied by this table.

5. POINTS OF CONTACT: Questions regarding this policy may be directed to the Eighth
District OCS staff at (504) 671-2268.