# **Focused Facility Review Program**

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### Abstract

This paper discusses the evolution, development, and objectives of the Focused Facility Review (FFR) program.

The FFR program was initiated in 1996 by the Pacific Outer Continental Shelf Region (POCSR) of the Minerals Management Service (MMS). This enhanced focus program is based on a systemic approach with increased emphasis on the Safety and Environmental Management Program (SEMP) concept. The FFR program is designed to complement the present offshore platform inspection program by integrating engineers and other specialists with inspectors to form teams with technical expertise in drilling, production, and other "specialty" areas of offshore operations. The critical roles of human, organizational, and management influences on safety and environmental protection are emphasized in the FFR program.

# The FFR Program

MMS has long recognized that human, organizational, and management influences play a critical role in performance relative to safety and environmental protection during oil and gas operations on the Outer Continental Shelf (OCS). However, MMS inspection programs have traditionally concentrated on the functional testing of various safety and environmental protection devices with limited emphasis on the human, organizational, and management factors mentioned above.

In 1993, the American Petroleum Institute (API) published their Recommended Practice 75 (RP75) entitled "Recommended Practices for Development of a Safety and Environmental Management Program for Outer Continental Shelf (OCS) Operations and Facilities."

In response to that API publication, MMS encouraged operators to voluntarily develop their own SEMP programs. What was then the Camarillo District of the POCSR of MMS developed an enhanced focus program based on a systems approach with increased emphasis on the SEMP concept. This inspection process was originally named the "Focused Facility Inspection" (FFI) program. The program was subsequently renamed "Focused Facility Review" to more accurately reflect the goals and principles of the SEMP review process.

Based on the principles presented in API RP75, eight major inspection focus areas were originally identified for evaluation under the FFR. In response to a downsizing in the Pacific Region of MMS, the elements in the focus area of Hazardous Materials were redistributed among the remaining seven focus areas.

### These focus areas are:

- 1) Facility Condition
- 2) Safety Systems
- 3) Documents
- 4) Training
- 5) Environmental
- 6) Electrical
- 7) Policies/Performance

These focus areas were further divided into discreet elements that the FFR team could use to provide a qualitative basis for analysis. The Focused Facility Review Matrix at the end of this paper summarizes the elements for each major focus area. Some elements are common to more than one focus area.

Because of their critical importance to operations and industry infrastructure, MMS added a "pipelines" component to the FFR in 2003. While no "pipelines" focus area appears as an FFR matrix element, the component is reviewed using criteria developed by MMS to ensure that best practices are utilized to manage and maintain this critical link in the supply chain.

The FFR program is designed to complement the traditional OCS facility inspection strategy for each platform, which consists of comprehensive annual inspections supplemented by monthly, unannounced partial inspections.

Where the traditional inspection program is performed by MMS inspectors exclusively, the FFR promotes an integrated, collaborative approach by combining inspectors with engineers and other specialists with technical expertise in drilling, well completion, well workover, production, electrical, and environmental issues. Representatives from the United States Coast Guard (USCG), from MMS Headquarters in Herndon, Virginia, from MMS's Gulf of Mexico Region, from the California State Lands Commission, and from Santa Barbara County's Energy Division have also participated in FFR efforts. FFR team members are selected based on their expertise in one or more of the focus topic areas. The POCSR of MMS is fortunate to have a diverse staff of individuals with the requisite knowledge needed to make a comprehensive assessment of operator performance as it relates to the captioned focus areas. A team leader is designated for every FFR. The team leader position is alternated between team members to sharpen leadership skills. The team leader also takes responsibility for at least one of the focus areas. The other team members assume responsibility for the remaining focus areas. Team members are encouraged to rotate to different focus areas to develop expertise in different categories. Team members often share the responsibilities of field inspection and report preparation, which provides the opportunity for mentoring among colleagues. A report coordinator is designated by the team to compile and serve as chief editor for the FFR report. Perhaps one of the most important features of the FFR team is the inclusion, as team members, of operators and specialists that work at the OCS facility being inspected. This promotes the collaborative team approach that is at the core of a successful FFR effort.

Because the FFR focuses on systems rather than devices, the emphasis is on continual improvement of technical and human factors as they relate to environmental protection and operational safety concerns. FFRs result in "Observations" instead of Incidences of Noncompliance (INCs) being identified and documented during the inspection, (unless the observation item constitutes an immediate and significant threat to safety or the environment, in which case an INC is issued). Similarly, the USCG may issue a citation depending on the severity of the finding. Timeframes for rectifying observation items are determined on a case-by-case basis, but the majority of the items are attended to by the operators immediately.

The first FFR was conducted in January 1996. As of this writing, FFRs have been completed on 22 out of the 23 OCS platforms in the California District and have involved all POCSR operators. The only platform in the jurisdiction of the California District that has not been inspected under the FFR program is Platform Grace, where production is shut-in and the platform was thought to be a poor FFR candidate. Plans to resume production operations at Platform Grace later this year have been approved, and MMS anticipates that an FFR at the facility will occur in the near future. A table at the end of this paper displays the history of completed FFRs. The POCSR intends to continue to conduct FFRs on all platforms under its jurisdiction at the rate of at least three per year.

MMS considers many factors when deciding which platform would make the highest priority candidate for an FFR, including:

- 1) Safety and compliance record at the facility
- 2) Presence of simultaneous operations/level of present or planned operations
- 3) Input from MMS inspectors regarding observed operations and facility condition
- 4) Presence of safety hazards such as high concentrations of H<sub>2</sub>S and SO<sub>2</sub>, high pressures, etc.
- 5) Time of year and anticipated weather conditions
- 6) Frequency of past FFR activity on a given operator's platform

Operators are contacted by MMS well in advance of planned FFR activity. MMS makes every effort to accommodate operators' scheduling preferences. A timeline is established based on when the FFR is to be performed. The field portion of the FFR is normally accomplished in two days. Once the field portion of the FFR is completed, the team strives to meet each suspense date on the timeline. A typical FFR timeline is presented at the end of this paper.

Each FFR is kicked-off with a daily morning meeting at the subject facility. All participants are introduced and their areas of responsibility are defined. Plans for the day's inspection are coordinated. The purpose of the FFR is restated; it is a collaborative effort between industry and regulators in support of SEMP and concentrating on the system as a whole, with emphasis on continual improvement with respect to human and technical factors as they relate to operations at the facility. A daily close-out meeting is held where observations are discussed. The operator's representatives provide feedback to MMS on the observations and overall effectiveness of the FFR.

The FFR report presents narrative statements regarding the team's findings in each of the seven major inspection focus areas. Opportunities for improvement in each area are discussed. Positive findings are emphasized as well. Identified observations are listed at the end of the report. Photographs taken during the FFR, including pictures of select observation items, are an integral part of the report.

Operators are appreciative of the opportunity to participate in the FFRs conducted at their facilities. Improved communication and a closer partnership between the operators and MMS have been observed and is attributed to the FFR. Many observations have been identified and addressed through the FFR process that went undetected through the conventional facility inspection program.

Additional information about the FFR program may be obtained by contacting the California District Office at (805) 389-7775. The mailing address is 770 Paseo Camarillo, Camarillo CA 93010.

# Focused Facility Review History

| Month/Year | <u>Platform</u> | <b>Operator</b> |
|------------|-----------------|-----------------|
| 1/96       | Henry           | Unocal          |
| 4/96       | Gail            | Chevron         |
| 7/96       | Habitat         | Texaco          |
| 10/96      | Gina            | Nuevo/Torch     |
| 3/97       | Hondo           | Exxon           |
| 6/97       | Eureka          | Aera            |
| 9/97       | Hogan           | POOI            |
| 11/97      | Edith           | Nuevo/Torch     |
| 2/98       | Hillhouse       | Nuevo/Torch     |
| 5/98       | Gilda           | Nuevo/Torch     |
| 9/98       | Heritage        | Exxon           |
| 12/98      | Hidalgo         | Chevron         |
| 2/99       | Ellen/Elly      | Aera            |
| 5/99       | В               | Nuevo/Torch     |
| 9/99       | Harmony         | Exxon           |
| 2/00       | Irene           | Torch           |
| 2/00       | Houchin         | POOI            |
| 7/00       | A               | Nuevo/Torch     |
| 10/00      | C               | Nuevo/Torch     |
| 3/01       | Gail            | Venoco          |
| 7/01       | Habitat         | Nuevo/Torch     |
| 10/01      | Hondo           | ExxonMobil      |
| 2/02       | Henry           | Nuevo           |
| 7/02       | Hogan           | POOI            |
| 12/02      | Harvest         | Arguello        |
| 4/03       | Hermosa         | Arguello        |
| 7/03       | Gina            | Nuevo           |
| 10/03      | Edith           | Nuevo           |
| 2/04       | Heritage        | ExxonMobil      |
| 6/04       | Gilda           | Nuevo/PXP       |
| 9/04       | Hidalgo         | PXP             |
| 1/05       | Hillhouse       | PXP             |
| 5/05       | Harmony         | ExxonMobil      |
| 10/05      | Ellen/Elly      | Aera            |
| 2/06       | В               | DCOR            |
| 6/06       | Irene           | PXP             |
| 8/06       | Gail            | Venoco          |

# **FFR Timeline**

| Week Ending<br>Number | Week Ending<br>Date | Activity to be Completed  |
|-----------------------|---------------------|---|
| 1                     | 4/24/06             | Team leader notifies operator by phone and coordinates next FFR   |
| 1                     | 4/24/06             | Team leader sends confirmation letter to operator   |
| 5                     | 5/29/06             | Team conducts FFR, records and provides copies of observations to operator and all team members (see asterisks below)   |
| 6                     | 6/05/06             | Team members finalize field notes and distribute copies of same to all team members   |
| 7                     | 6/12/06             | Team members finalize findings/write report sections and distribute copies of same to all team members. Photographs for report are finalized. Operator submits response to observations |
| 8                     | 6/19/06             | Team members conduct follow-up inspection and provide progress report to team leader  |
| 8                     | 6/19/06             | Report editor/coordinator provides copies of draft report to all team members   |
| 9                     | 6/26/06             | Team members review draft report and provide comments to report editor/coordinator  |
| 10                    | 7/03/06             | Report editor/coordinator finalizes report and distributes copies to the operator, all team members, and MMS and USCG offices.  |
| 11                    | 7/10/06             | FFR team meeting to critique last inspection and plan next inspection   |

<sup>\*</sup> Daily observations are handwritten on observation form & given to operator.

<sup>\*</sup> Typewritten final observations on observation form are forwarded to team leader by close of business one day after last day of facility inspection.

<sup>\*</sup> Team leader forwards final typewritten observations to operator via fax or e-mail one day after receipt from team members.

# FOCUSED FACILITY REVIEW MATRIX

| POLICIES/PERFORMANCE               | DOCUMENTS                  | ELECTRICAL   | FACILITY CONDITION       | SAFETY SYSTEMS                      |
|------------------------------------|----------------------------|--|--------------------------|-------------------------------------|
| Management                         | MSDS                       | System Overview                                    | Helideck                 | Flare Systems                       |
| Morale                             | Manifest                   | One Lines  | Crane                    | Fire Systems                        |
| Cooperation                        | Pipelines                  | Area Classification Dwgs                           | Housekeeping             | ESD                                 |
| SEMP                               | Work Practices             | Distribution/Protection                            | Deck/Grating             | Fire/Smoke/Lighting                 |
| Reactive/Proactive                 | OSCP                       | Switching/Ground                                   | Stairs/Walkways          | H2S/Gas                             |
| Lease Stipulations                 | H2S/Gas                    | Staffing/Training                                  | Piping Support/Brackets  | Press/Level/Temp                    |
| Development Plan                   | P&IDs                      | Outages  | Measurement Systems      | Lifeboats                           |
| MOC                                | SAFE Charts                | Spec Contractors                                   | МОС                      | Piping/Instrumentation              |
| Contractor Quals/Oversight/Control | Personnel Safety           | Work Pol/Pract/Control                             | Drilling/Workover Rigs   | Pressure Vessels                    |
| Confined Space Entry               | OSE                        | MOC  | BOP Equipment            | MOC                                 |
| Human Factors                      | Welding/Burning Plans      | Redlines/Documentation                             | Sump Systems             | SCBA                                |
| Corporate Vision/Values            | Welding/Burning Procedures | Elect Safety References                            | Containment Systems      | Cascade                             |
| Simultaneous Operations            | Lockout/Tagout Procedures  | Personal Protective Equip                          | PP & PV Inspect Plan     | BOP Equipment                       |
| Orientation/Sign in                | Work Permit                | Contingencies                                      | PP Ext Inspect Checklist | Lubricator                          |
| Communication                      | Rules and Regulations      | Emergency Power & Loads                            | Hazard Identification    | Containment Systems                 |
| Delegation of Responsibility       | Simultaneous Operations    | Area Inspections                                   | Containers               | Computer Interface                  |
| Crew Changeout                     | Rig Movement               | Div 1 & Div 2 Areas                                | Diesel Fuel Systems      | Security                            |
| Safety Meetings                    | Confined Space Entry       | Forced Ventilation                                 | Labels/Placards/Signs    | Pipelines                           |
| Priorities - Safety/Env/Prod       | Accident Notification      | Purging/Seals/Fire Walls                           | Security                 | Sump Systems                        |
| Hot Work                           | EEP                        | Lighting   | Pipelines                |                                     |
| Lockout/Tagout                     | Crane                      | High Temperature Devices                           | Structure                |                                     |
| PP & PV Inspect Plan               | PP & PV Inspect Plan       | Instrumentation                                    |                          |                                     |
| PP Ext Inspect Checklist           | PP Ext Inspect Checklist   | Security   |                          |                                     |
| Chemical Mgmt                      | Security                   |  |                          |                                     |
| Security                           | Structure                  |  |                          |                                     |
| TRAINING                           | ENVIRONMENTAL              |  |                          |                                     |
| Training Programs                  | Drilling                   | 1  |                          |                                     |
| OSE                                | Produced Water             |  | ٠                        |                                     |
| H2S                                | Other Discharges           |  |                          |                                     |
| TI/TZ/T3                           | Painting                   |  |                          |                                     |
| Work Practices                     | Wildlife                   | Piping & Instrumentation Diagrams (P&IDs)          | ams (P&IDs)              | Oil Spill Contingency Plan (OSCP)   |
| Contractor Quals/Oversight/Control | Wildlife Training          | Production Safety System Training (T2)             | ing (T2)                 | Emergency Evacuation Plan (EEP)     |
| Personnel Safety                   | NORM                       | Safety Analysis Function Evaluation (SAFE) Charts  | ation (SAFE) Charts      | Emergency Shutdown (ESD)            |
| EEP                                | Hazardous Waste Mgmt       | Safety and Environmental Management Program (SEMP) | gement Program (SEMP)    | Management of Change (MOC)          |
| Hazardous Materials                | Pollution Prevention Sys   | Self Contained Breathing Apparatus (SCBA)          | atus (SCBA)              | Drilling Well-Control Training (T1) |
| Crane                              |                            | Well-Completion and Well-Workover                  | kover                    | Pressure Vessel (PV)                |
| Hazwoper                           |                            | Well-Control Training (T3)                         |                          | Oil Spill Exercise (OSE)            |
| Hazcom                             |                            | Material Safety Data Sheets (MSDS)                 | sps)                     | Process Piping (PP)                 |
| Security                           |                            | Naturally Occurring Radioactive Material (NORM)    | e Material (NORM)        | Blow Out Prevention (BOP)           |
| Pipelines                          |                            |  |                          | FFRMatrixUpdate1/1/06               |