

Date: July 10, 2015
To: Crowley Vendors
From: Crowley Petroleum Services
Regarding: Safety Management System Vendor Requirements

### 1.0 Responsibility

- 1.1 All Vendors shall:
  - 1.1.1 Comply with all applicable safety and environmental regulations, and Crowley safety, security and environmental requirements.
  - 1.1.2 Ensure that all vendor personnel are qualified, trained and equipped to perform the contracted services.
  - 1.1.3 Ensure that all operations are conducted in a safe and pollution free manner.
  - 1.1.4 Promptly correct and report to Crowley all unsafe conditions, suspected hazards or release of products that may be a safety or pollution concern.
  - 1.1.5 Comply with all personal protective equipment (PPE) required by regulation, Crowley procedure, or as identified by a JSA.
  - 1.1.6 Utilize the STOP Work Authority program. Vendors are empowered to stop work when they see a potentially unsafe situation for themselves or for others.
  - 1.1.7 Perform a risk assessment (JSA, JHA, etc.) prior to commencing work as required by procedure. The risk assessment will be reviewed by the Operations/Engineering representative for additional hazards or controls that are vessel specific.
  - 1.1.8 Provide asbestos-free certification for components listed in IMO Resolution MEPC 197 (62), Appendix 5, Section 2.2.2.1

#### 2.0 Procedures

- 2.1 Reporting Aboard
  - 2.1.1 Vendors shall report to the Crowley onsite supervisor upon arrival to the vessel or location.
- 2.2 Pre-Job Meeting
  - 2.2.1 Vendors will be required to attend a pre-job safety meeting to discuss safety and environmental requirements, site safety hazards identified in the JSAs and emergency procedures.
- 2.3 Hazard Communication

- 2.3.1 Crowley shall provide, upon request, an appropriate Safety Data Sheet (SDS) for chemicals or materials maintained at each location. SDSs are required for hazardous chemicals / materials in bulk. SDSs are not required for materials used during the normal maintenance or repair of vessel equipment.
- 2.3.2 Vendors shall maintain an SDS onsite for any hazardous material or chemical in bulk they bring onto the vessel.
- 2.3.3 Hazardous materials or chemicals shall be properly stored and labeled in accordance with hazardous communications requirements.
- 2.4 Stop Work Authority
  - 2.4.1 Vendors are expected to follow the Stop Unsafe Work Authority policy.
  - 2.4.2 Vendors attending Crowley vessels have the authority and responsibility to stop work when they believe an imminent hazard exists:
    - 2.4.2.1 Conditions are unsafe;
    - 2.4.2.2 A known violation of policy or protocol is recognized;
    - 2.4.2.3 A potential hazard is identified or believed to exist.
  - 2.4.3 The reason for stopping the work should be investigated by reviewing the Job Safety Analysis (JSA) or Personal Safety Check (PSC). When the concerns are resolved and agreed upon, work may continue. If there is any question about continuing the work, immediately contact a supervisor.
- 2.5 Incident, Injury and Illness and Spill Reporting
  - 2.5.1 All work related incidents, injuries and illnesses and spills shall be reported immediately or as soon as safely possible to the vessel master or their designee.

# 2.6 Smoking

- 2.6.1 Smoking is prohibited at all times on Crowley Petroleum Services vessels. NO EXCEPTIONS
- 2.6.2 Cigarette lighters and non-safety matches are prohibited on the vessel.
- 2.7 Signs
  - 2.7.1 Vendors shall comply with all signs posted throughout the vessel.
- 2.8 Cell Phone Policy
  - 2.8.1 Cell phone use is prohibited on exterior decks of the vessel, except where a marine chemist has issued a gas free certificate stating safe for cell phone use.

## 3.0 Minimum Personal Protective Equipment (PPE) Requirements

- 3.1 Head Protection
  - 3.1.1 A non-conductive hard hat that meets ANSI requirements shall be worn at all times while performing work on Crowley vessels.
- 3.2 Foot Protection
  - 3.2.1 Footwear meeting the ANSI or equivalent standard shall be worn while on the vessel.
- 3.3 Eye/Face Protection
  - 3.3.1 Eye protection shall be worn at all times while on the weather decks of the vessel, in machinery spaces, in areas where requirement is posted, or where required by a JSA. A face shield and goggles or safety glasses will be used during grinding and chipping activities.
- 3.4 Hearing Protection
  - 3.4.1 Hearing protection devices that meet the standards of OSHA 1910.95 shall be worn in all posted high noise areas and all known or suspected areas with noise levels of 85 dBA or higher.
- 3.5 Protective Clothing
  - 3.5.1 Coveralls or pants and long sleeve shirt shall be worn while on the vessel.
- 3.6 Hand Protection
  - 3.6.1 Appropriate protective gloves shall be worn where there is risk of exposure to high temperatures, sharp edges, chemicals or any other conditions or materials which may cause injury to the hands.
- 3.7 Fall Protection
  - 3.7.1 Fall protection shall be used when fall hazard of six feet or more exists. Where portable ladders are used, a second person shall be available to steady the base of the ladder and assist as required.
- 3.8 Respiratory Protection Equipment
  - 3.8.1 Personal respiratory protection equipment shall be selected, inspected, maintained and used in accordance with the Respiratory Protection Standard.
- 3.9 Personal Flotation Devices
  - 3.9.1 Personnel shall wear a Coast Guard approved Type III or Type V PFD when:
    - 3.9.1.1 Working within 6' of an unguarded edge

- 3.9.1.2 Accessing a vessel via a ladder (where there is no handrail)
- 3.9.1.3 Riding or working in a small open boat
- 3.9.1.4 Transiting between tug and barge

#### 4.0 Control of Work Processes

- 4.1 The following require additional safety protocols. The JSA and Permit process will be will completed prior to conducting work
- 4.2 Lock Out/Tag Out (LOTO)
  - 4.2.1 The potential sources of hazardous energy shall be identified before performing maintenance or inspection of equipment. Consideration of each of these sources shall be included in the Job Safety Analysis.
  - 4.2.2 Sources of hazardous energy that must be considered include:
    - 4.2.2.1 <u>Electrical</u> Energized circuits, electrical shock, and unexpected activation of equipment.
    - 4.2.2.2 <u>Mechanical</u> Moving machinery components such as gears, levers, shafts, flywheels, fan blades, springs, elevators, etc.
    - 4.2.2.3 <u>Pressure</u> Release of pressurized gas or liquid from tanks, piping, valves, sea chests, etc.
    - 4.2.2.4 <u>Hydraulic</u> Release of pressurized hydraulic fluid or operation of remote control valves or other devices.
    - 4.2.2.5 <u>Thermal</u> Heat contained in furnaces, piping, heat exchangers, etc
    - 4.2.2.6 <u>Chemical</u> Component reactions
    - 4.2.2.7 <u>Stored</u> Batteries, capacitors, tensioned springs, gravity systems
- 4.3 Enclosed Space Entry
  - 4.3.1 An enclosed space is defined as a space:
    - 4.3.1.1 Having limited openings for entry and exit.
    - 4.3.1.2 Unfavorable natural ventilation, and
    - 4.3.1.3 Not designed for continuous worker occupancy.
  - 4.3.2 Enclosed spaces include, but are not limited to:
    - 4.3.2.1 Cargo, fuel and lubricating oil tanks

- 4.3.2.2 Slop and waste oil tanks
- 4.3.2.3 Ballast tanks
- 4.3.2.4 Double bottoms
- 4.3.2.5 Fore peak and after peak tanks
- 4.3.2.6 Fresh water tanks
- 4.3.2.7 Lazarette
- 4.3.2.8 Voids, trunks and cofferdams
- 4.3.2.9 Chain lockers
- 4.3.2.10 Sewage tanks
- 4.3.2.11 Duct Keels
- 4.3.2.12 Pressure vessels
- 4.3.2.13 Pipelines or fittings connected to any of the above
- 4.3.2.14 Spaces not routinely ventilated (e.g. boilers, inert gas scrubbers and water seals)
- 4.3.3 Before entering any enclosed space (except lazarette) not certificated by a Marine Chemist, a Job Safety Analysis and the Enclosed Space Entry Permit shall be completed.

#### 4.4 Hot Work

- 4.4.1 Hot Work is any work involving sources of ignition of temperatures sufficiently high to cause the ignition of a flammable gas mixture. This includes any work requiring the use of welding burning or soldering/brazing equipment, blow torches, power driven tools, portable electrical equipment which is not intrinsically safe or contained within an approved explosion-proof housing, and internal combustion engines.
- 4.4.2 When the vessel is **operational**, the Master or Vessel Based Competent Person (designated in the Hot Work Permit/Procedure as Responsible Officer) must approve the Hot Work Permit before hot work can begin. A marine chemist certificate will be issued as required by procedure.
- 4.4.3 When the vessel is at a shipyard the vessel is in a **non-operational** status, the hot work permitting process is the responsibility of the shipyard.

### 5.0 Training

5.1 Vendor management is responsible for training their employees to perform assigned tasks.

5.2 Training includes the technical aspect of the task and being able to comply with the required safety precautions.

## 6.0 Vendor Waste

- 6.1 Vendor shall notify the Crowley supervisor of any waste generated on the vessel.
- 6.2 Vendor shall place waste in a designated waste storage area.
- 6.3 Vendor shall be responsible for appropriate waste disposal.