



Chief Safety Officer Decision (Regulatory Equivalence)

Date: January 15, 2014

C-NLOPB Reference: 2013-RQ-0032

Applicant: Suncor Energy Inc.

Applicant Reference: RQF 258

Installation Name: Terra Nova FPSO

Authority: *Canada-Newfoundland Atlantic Accord Implementation Act, subsection 151(1)*

Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act, subsection 146(1)

Regulation: *Subsection 8(2) of the Newfoundland Offshore Petroleum Installation Regulations*

Decision:

The Chief Safety Officer concurs with the Applicant's proposal to conduct hot work operations onboard the Terra Nova FPSO in interior and exterior non-hazardous areas. Hot work means welding, burning, rivetting, drilling, grinding, chipping or any other work where a flame is used or sparks are produced. The Application has been approved subject to the following conditions:

1. Only the following interior and exterior non-hazardous areas have been approved. Hot work in any other non-hazardous or hazardous area is not included under this approval.

Interior Non-Hazardous Areas include:

- Forward/Aft Machinery Spaces
- LER's, LIR's, HVAC Rooms, Hydraulic Power Pack Enclosures
- Inside Accommodations and Aft TSR
- MPG Control Cab, Crane Control Cab
- Workshops

- Welding Shop

Exterior Non-Hazardous Areas include:

- Forward of the blast wall (Helideck, Antenna Farm, Forward Accommodations Outside areas)
2. Hot work outside the designated welding and workshop should be deferred to periods of shutdown. Where this is not practical or is not the lowest risk approach, hot work may only proceed subject to a risk assessment process with appropriate mitigations/precautions in place.
 3. Hot work in interior non-hazardous locations (including welding shops and workshops) is only permitted if the following measures are fully functional:
 - positive pressure control and DCS alarms to the control room in the event of loss of pressure,
 - sealed fire/blast protected doors,
 - fire/gas detection located within the space and within the air intakes to each space, and
 - fire suppression systems.
 4. Hot work in the exterior non-hazardous areas (i.e. Helideck, Antenna Farm, Forward Accommodations Outside areas), which cannot be deferred and where gas may migrate must include the use of pressurized enclosures to reduce the risk of ignition.



Chief Safety Officer