

OHS IMPROVEMENT NOTICE

To: INPEX Operations Australia Pty Ltd (“INPEX”)

In conducting an OHS inspection in relation to the CPF Ichthys Explorer facility, I, [REDACTED], a NOPSEMA inspector appointed under section 602 of the Offshore Petroleum and Greenhouse Gas Storage Act 2006 (the Act), am satisfied on reasonable grounds that the person named above as the responsible person is contravening, or has contravened and is likely to contravene again the clause 9(2)(c) of Schedule 3 to the Act at the CPF Ichthys Explorer.

The reasons for my opinion are:

Two workers received non-fatal electric shocks whilst working on an isolated 33kV high voltage interconnector cable installed between the CPF Ichthys Explorer facility and the Ichthys Venturer FPSO facility. Through my OHS inspection, interviews conducted with the two injured parties, a visit to the incident site and information provided by the facility operator (INPEX), it has been established that the earthing system associated with the 33kV high voltage interconnector cable had not been installed or tested in accordance with the Australian Standard requirements.

In particular, the cable screen of the recently modified high voltage interconnector cable was not connected to earth as identified in the operator’s Technical Query/Deviation documentation (TQD-800068-E1-80119) and warning labels were not placed on the single earth connection in accordance with the Australian Standard for high voltage installations AS 2067:2016. Noting the specifics:

- Section B1.4 Cable Sheaths: *‘All HV cable screens shall be connected to earth. If this connection is broken the cable acts as a capacitive diverter and a hazardous voltage appears on the sheath or screen which may exceed personnel safety limits.’*, and, *‘It is recommended that warning labels be placed on single point bonded cable screen to earth connection.’*

And in addition:

The testing processes conducted have not demonstrated that they are safe or comply with Australian Standard AS 2067, noting the following requirements:

- Section 4.1.2 Equipment safety: *‘All electrical equipment shall be safe when properly installed and not cause a danger from electric shock’.*
- Section 4.1.3 Personnel safety: *‘Particular attention shall be given to the safety of personnel during the installation, operation and maintenance of equipment’.*
- Section 8.2.2 Safety of people: *‘Under all reasonable foreseeable conditions the earthing system shall not impose on any person or group of people an unreasonable risk’.*
- Section 8.8 Testing: *‘Testing is essential as a validation step for installation of earthing systems. Earthing system testing normally consists of the following six core activities. a) Visual inspection, b) Continuity testing, c) Earth resistivity testing’* etc.

As a result of this contravention I am satisfied that there is, or may be, the following risk to the health or safety of any person:

The incorrectly installed and tested high voltage cable earthing system could result in potential serious injury to personnel as a result of electric shock that can include, voltages induced into the

unearthed cable screen as a result of capacitive or inductive coupling.

You are required to take action within **30** days of the date of this notice to prevent or reduce the risk.

The following action must be taken by the responsible person within the period specified above:

- Ensure the modified 33kV high voltage interconnector cable is installed and tested in accordance with Australian Standard 2067:2016; or
- Implement such other controls to comply with clause 9(2)(c) of Schedule 3 to the Act and reduce risk to health and safety to a level that is as low as reasonably practicable.

Signed: 

NOPSEMA Inspector

Dated: 12 July 2018

NOTES: (Please see back of notice)

The following section is to be completed if serving the notice to the responsible person by giving it to the operator's representative or titleholder's representative at the facility, or the identified responsible person onshore.

This notice was delivered to: _____
(insert name)

in the office or position of _____
(insert office or position)

at: _____ am/pm on _____
(insert time) (insert date)

When the required improvement has been completed, return this part of the notice to the following person at the address below:

Name: [REDACTED]

Position: OHS Inspector

Address: Send in electronic format via email to:
submissions@nopsema.gov.au

Telephone number: +61 8 6188 8700

Specify the action that has been taken to comply with this notice in the space below.

Improvement Notice No. **707** has been complied with by:

Signed: _____ Date: _____

NOTES:

1. Under clause 78 of Schedule 3 to the Act, a person who fails to ensure that this notice is complied with, to the extent that it relates to a matter over which the person has control, may be liable to a penalty of 300 penalty units or a civil penalty of 400 units.
2. This notice must be displayed in a prominent place at or near each workplace at which work affected by the notice is being performed and, must not be tampered with or removed before the notice has ceased to have effect.
3. If the notice is not issued by being given to the operator's representative at the facility, the responsible person (unless the responsible person is the titleholder) must cause a copy of the notice to be given to the operator's representative.
4. If the responsible person is the operator or an employer (other than the operator) of members of the workforce, the operator's representative at the facility must give a copy of the notice to each health and safety representative for a designated work group having group members performing work that is affected by the notice.
5. If the responsible person is the titleholder, as soon as practicable after issuing the notice, the NOPSEMA inspector will take reasonable steps to give a copy of the notice to the operator and, if the NOPSEMA inspector is at the facility when the notice issued, the operator's representative at the facility.
6. If the responsible person is the titleholder, but the inspector is not at the facility when the notice is issued, the operator must give a copy of the notice to the operator's representative at the facility.
7. As soon as practicable after issuing the notice, the NOPSEMA inspector will take reasonable steps to give a copy of the notice to, where applicable:
 - (a) the employer of an employee who is a member of the workforce if the notice is issued to the employee, and in connection with work performed by the employee, and
 - (b) the owner of any workplace plant, substance or thing that the notice relates to, unless the owner is the responsible person or an employer referred to in (a), and
 - (c) if the responsible person is the owner of any workplace, plant, substance or thing because of which the contravention has occurred, or is likely to occur: the operator of the facility, and if the employer of employees who work in that workplace or who use that plant, substance or thing is a person other than the operator—that employer; and
 - (d) the titleholder, if the responsible person is the operator, and the contravention relates, or is likely to relate to, the titleholders' well related obligations.
8. Under item 8 of subclause 80A(1) of Schedule 3 to the Act, any of the following persons may in writing request the reviewing authority to review the NOPSEMA inspector's decision:
 - the operator of the facility
 - the titleholder, if the notice is issued to a titleholder;
 - any other person to whom the notice has been issued;
 - an employer, if affected by the decision;
 - a relevant health and safety representative;
 - a relevant workforce representative, if requested by a member of the workforce affected by the decision;
 - a person who owns any workplace plant, substance or thing to which the NOPSEMA inspector's decision relates.
9. An improvement notice ceases to have effect when the responsible person takes the action specified in the notice.