



# Office for Nuclear Regulation (ONR) Quarterly Site Report for Devonshire Dock Complex, Barrow

Report for period 01 October - 31 December 2015

## Foreword

This report is issued as part of ONR's commitment to make information about inspection and regulatory activities relating to the above site available to the public. Reports are distributed quarterly to members for the BAE Systems Marine Limited Local Liaison Committee (LLC) and are also available on the ONR website (<http://www.onr.org.uk/lc/>).

Site inspectors from ONR usually attend BAE Systems Marine Limited LLC meetings and will respond to any questions raised there. Any person wishing to inquire about matters covered by this report should contact ONR.

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## 1 INSPECTIONS

### 1.1 Dates of inspection

The ONR nominated site nuclear safety inspector made inspections on the following dates during the quarter:

5, 6, 7, 8 October  
4, 5, 17, 18, 19 November  
9, 10 December

A team of ONR and Health and Safety Executive (HSE) conventional health and safety inspectors made inspections on the following dates during the quarter:

5, 6, 7, 8 October      Conventional health and safety intervention - confined spaces

The ONR nominated site nuclear safety inspector, together with Defence Nuclear Safety Regulator (DNSR) inspectors, made inspections on the following dates during the quarter:

6, 7 October              System based inspection – nuclear lifting and handling

The current and previous ONR nominated site nuclear safety inspectors, together with DNSR inspectors, made inspections on the following dates during the quarter:

4, 5 November              Licence Condition 11 emergency arrangements - Level 1<sup>1</sup> emergency exercise "INDIGO 15"

An ONR civil engineering specialist inspector made inspections on the following dates during the quarter:

18 November              Barrow site redevelopment programme

An ONR superintending inspector and the ONR nominated site nuclear safety inspector, together with DNSR inspectors, made inspections on the following dates during the quarter:

19 November              Annual review of safety

An ONR civil engineering specialist inspector, an ONR electrical, control & instrumentation specialist inspector, an ONR fault analysis specialist inspector, an ONR mechanical engineering specialist inspector, an ONR project inspector, and an ONR nuclear graduate made inspections on the following dates during the quarter:

15 December              Periodic Review of Safety

## 2 ROUTINE MATTERS

### 2.1 Inspections

Inspections are undertaken as part of the process for monitoring compliance with:

- the conditions attached by ONR to the nuclear site licence granted under the Nuclear Installations Act 1965 (NIA65) (as amended);
- the Energy Act 2013;
- the Health and Safety at Work etc. Act 1974 (HSWA74); and

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<sup>1</sup> A Level 1 emergency exercise tests the on-site emergency plan.

- regulations made under HSWA74, for example the Ionising Radiations Regulations 1999 (IRR99) and the Management of Health and Safety at Work Regulations 1999 (MHSWR99).

The inspections entail monitoring licensee's actions on the site in relation to incidents, operations, maintenance, projects, modifications, safety case changes and any other matters that may affect safety. The licensee is required to make and implement adequate arrangements under the Licence Conditions (LCs) attached to the licence in order to ensure legal compliance. Inspections seek to judge both the adequacy of these arrangements and their implementation.

In this period, routine inspections of Devonshire Dock Complex covered the following:

- System based inspection - nuclear lifting and handling;
- LC11 emergency arrangements - Level 1 emergency exercise "INDIGO 15";
- LC36 organisational capability;
- Conventional health and safety intervention - confined spaces.

In general, ONR judged the arrangements made and implemented by the site in response to safety requirements to be adequate in the areas inspected. However, where improvements were considered necessary, the licensee made satisfactory commitments to address the issues, and the site inspector will monitor progress during future visits. Where necessary, ONR will take formal regulatory enforcement action to ensure that appropriate remedial measures are implemented to reasonably practicable timescales.

#### System Based Inspection - Nuclear Lifting and Handling

System based inspections (SBIs) are an essential element of ONR's overall intervention at Barrow and consist of a series of inspections which are intended to establish that the basic elements of the site safety case as implemented in safety systems and structures are fit for purpose and that they will fulfil their safety functional requirements. During a SBI, ONR checks implementation of LC arrangements for LCs: 10 "training"; 23 "operating rules"; 24 "operating instructions"; 27 "safety mechanisms, devices and circuits"; 28 "examination, inspection, maintenance and testing"; and 34 "leakage and escape of radioactive material and radioactive waste".

A SBI programme for Barrow has been developed by DNSR and ONR that will ensure that all the key systems/ structures for site safety (ONR's authority) and for through life safety (DNSR's authority) will be inspected over a 5 year period. This SBI programme includes SBIs that the two regulators will undertake separately and jointly.

During this quarter one system was inspected jointly with DNSR: 'nuclear lifting and handling'. Based on interviews, review of documentary evidence and walking down the system the DNSR/ ONR team confirmed that the safety case claims sampled were met. ONR identified two matters that were generic in that they applied to several safety functional requirements and/ or several LCs. Although both matters cover several LCs, their most significant safety impact related to LC23. This was taken into account in ONR's discussion and rating of each LC and an improvement issue was raised relating to LC23. ONR's LC ratings were: LC10 "adequate"; LC23 "below standard"; LC24 "adequate"; and, LC28 "good standard". ONR concluded that LC27 and LC34 were not applicable to this SBI. Further information is provided in the executive summary of ONR's BAE Systems Marine Limited (BAESML), Barrow Intervention Report 15-059 (see <http://www.onr.org.uk/intervention-records/1516/barrow-15-059.htm>).

### LC11 Emergency Arrangements - Level 1 Emergency Exercise “INDIGO 15”

A joint DNSR/ ONR team assessed the annual Level 1 emergency exercise “INDIGO 15” which took place on 4 November 2015. This emergency exercise was intended to demonstrate BAESML’s arrangements, under LC11 “emergency arrangements”, for dealing with any accident or emergency arising on the site and their effects.

We considered that BAESML’s aims and objectives for the emergency exercise were appropriate and that a suitably challenging scenario had been defined. During its assessment of the emergency exercise, the team identified a number of good points and a number of points for improvement. These will be included in a joint DNSR/ ONR emergency exercise assessment letter to BAESML. Taking into account the exercise scenario and all the team’s exercise assessments we considered the exercise to be an adequate demonstration of the site’s emergency arrangements. Taking all these factors into account ONR rated the LC11 emergency exercise as adequate. Further information is provided in the executive summary of ONR’s BAESML, Barrow Intervention Report 15-069 (<http://www.onr.org.uk/intervention-records/1516/barrow-15-069.htm>).

### LC36 Organisational Capability

ONR inspected LC36 “organisational capability”, focussing on those aspects relating to changes to organisational structure. Several shortfalls were identified relating to both LC36 arrangements and their implementation. A single ONR compliance issue was raised to cover all these shortfalls. This issue is to be completed before BAESML implements the second stage of a change to its build organisation. Taking these factors into account I judged the arrangements inspected under LC36 to be below standard. Further information will be provided in the executive summary of ONR’s BAESML, Barrow Intervention Report 15-082 (see <http://www.onr.org.uk/intervention-records/1516/>).

### Conventional Health and Safety Intervention - Confined Spaces

During construction of a boat in the Devonshire Dock Complex a large number of confined spaces need to be created, so this matter is important for conventional health and safety. The ONR/ HSE confined spaces intervention identified a number of areas of good or best practice and also a number of areas where action was required to improve the site’s management of and work within confined spaces. ONR wrote to BAESML following the intervention providing detailed feedback and requesting a response relating to BAESML’s improvement programme. The letter was copied to BAESML’s safety representatives. ONR is monitoring BAESML’s progress relating to its improvement programme via its issues database.

During the confined spaces intervention an unrelated issue was discussed: dock safety. ONR’s confined spaces letter included a section related to dock safety. This requested that BAESML reviews whether the existing dockside protection meets the appropriate standard.

## **2.2 Other work**

### Annual Review of Safety

DNSR and ONR attended the BAESML Annual Review of Safety (ARoS) on 19 November 2015. These reviews are one of the elements supporting continuous improvement at a nuclear licensed site. The purpose of the ARoS includes reviewing safety since the last ARoS and looking forward to the plans to improve safety in the next year and in the longer term. During the ARoS, DNSR focussed on through life safety matters whilst ONR focussed on site safety matters. ONR considered the ARoS process to have been effective. Based on the ARoS ONR concluded that declining safety performance at the Devonshire Dock Complex had been arrested, but that significant work remains to secure continuous improvement. ONR highlighted several areas for BAESML to address to secure continuous improvement. Further information is provided in the executive summary of ONR’s BAESML, Barrow Intervention Report 15-075 (<http://www.onr.org.uk/intervention-records/1516/barrow-15-075.htm>).

### Review ONR Issues With BAESML

ONR reviewed BAESML's progress with issues from the ONR issues database and concluded that adequate progress is being made.

### Periodic Review of Safety

BAESML submitted its Periodic Review of Safety (PRS) on 8 October 2015. ONR and DNSR specialist inspectors, led by an ONR project inspector, have commenced their assessment of the submission. ONR's Decision Date for the PRS is 2 August 2016.

## **3 NON-ROUTINE MATTERS**

Licensees are required to have arrangements to respond to non-routine matters and events. ONR inspectors judge the adequacy of the licensee's response, including actions taken to implement any necessary improvements.

ONR were notified of three events during the quarter. One of the events, an electrical fire in an electrical substation on 6 November 2015, required Cumbria Fire and Rescue Service to attend site. None of the events required any action to be taken by ONR. The incidents have or will be followed up during routine interventions with the licensee, normally once their own investigations have been completed.

## **4 REGULATORY ACTIVITY**

ONR may issue formal documents to ensure compliance with regulatory requirements. Under nuclear site licence conditions, ONR issues regulatory documents, which either permit an activity or require some form of action to be taken; these are usually collectively termed 'Licence Instruments' (LIs), but can take other forms. In addition, inspectors may issue Enforcement Notices to secure improvements to safety.

- No LIs or Enforcement Notices were issued during the period.

On 8 December 2015, ONR granted a three-month extension (to 31 March 2016) to an Improvement Notice served on BAESML on 3 December 2014 following failure to demonstrate that only suitably qualified and experienced persons perform any duties which may affect the safety of operations on the site or any other duties required under the nuclear site licence conditions. ONR's media release relating to granting of this extension is at (<http://news.onr.org.uk/2015/12/onr-grants-improvement-notice-extension-to-bae-systems-marine-ltd/>). This noted that BAESML has undertaken a fundamental analysis of the issues raised and a significant amount of work to deliver both compliance with the Improvement Notice itself and greater alignment with ONR's regulatory expectations for other relevant licence conditions. ONR also noted that the extension of the Improvement Notice compliance date will enable the licensee to provide ONR with an adequate demonstration of its revised arrangements and ensure that these arrangements align with its wider organisational change programme.

## **5 NEWS FROM ONR**

### **Regulation Matters magazine**

Insight into ONR's work as an independent regulator of the nuclear industry can be found in Regulation Matters. This quarterly online publication (<http://www.onr.org.uk/regulation-matters.htm>) reports on the key themes and developments in each of ONR's regulatory programmes and provides an update about the on-going changes at ONR. For the latest news and updates from ONR, you can also visit the website and sign up for our e-bulletin: <http://www.onr.org.uk/index.htm>.

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