



**REPORT TO: ECONOMIC DEVELOPMENT & INFRASTRUCTURE SERVICES
COMMITTEE ON 4 DECEMBER 2018**

SUBJECT: MARINE SAFETY QUARTER 2 2018/19

**BY: CORPORATE DIRECTOR (ECONOMIC DEVELOPMENT,
PLANNING & INFRASTRUCTURE)**

1. REASON FOR REPORT

- 1.1 To inform the Committee with regard to matters of Marine Safety and compliance with the Port Marine Safety Code (PMSC) for the second quarter of 2018
- 1.2 This report is submitted to Committee in terms of Section III (F) (25) of the Council's Scheme of Administration relating to the functions of Council as Statutory Harbour Authority (SHA).

2. RECOMMENDATION

- 2.1 **Committee is asked to consider and note the safety performance, fulfilling their function as Duty Holder under the Port Marine Safety Code.**

3. BACKGROUND

- 3.1 A report was submitted to the meeting of this committee on the 20 March 2018, with the subject Port Marine Safety Code (PMSC).
- 3.2 Paragraph 6 of the minute of that meeting instructs officers to report quarterly to this Committee, as the Duty Holder, on matters of marine safety.

4. COMMITMENT TO THE PMSC

- 4.1 Moray Council, in its capacity as a Statutory Harbour Authority, is committed to undertaking and regulating marine operations to safeguard all its harbour areas, the users, the public and the environment.
- 4.2 The aim of the harbour team is to manage operations safely, efficiently, sustainably and as a benefit to all of the users and wider communities.
- 4.3 The team are committed to:
 - a) full compliance with all legal requirements in harbour operations while seeking to meet the changing needs of all harbour users

- b) ensuring that all personnel are well trained, engaged and committed to improving safety in all processes. Competent skilled personnel backed by an active safety culture are key to a positive safety record.
 - c) undertaking hazard identification and risk assessments when required and implementing improvement measures where necessary.
- 4.4 The team expect that all harbour users recognise the effect that they can have on the harbours operation and reputation and must work to our standards as a minimum. A Permit to Work system is in place to maintain control over hazardous work. The team will ensure that any contractors or others management systems fully support the same commitment to health, safety and environmental performance.

5. VESSEL MOVEMENTS

- 5.1 In the second quarter of 2018 there were 24 cargo movements (arrival and departure) at Buckie. This included 16 acts of pilotage. We also had our first Offshore Supply vessel in the harbour for quite some time and now we know this can safely be achieved hopefully others will follow.
- 5.2 At the peak of the squid season there were 28 fishing vessels working from Buckie, with an average of 15-20 depending on weather conditions.
- 5.3 All vessel movements including fishing, leisure and others are recorded and work is currently underway to enable more detail to be captured and made available.

6. CONSERVANCY

- 6.1 All harbours are regularly surveyed to check the depths and identify areas of shoaling, particularly in the entrances. When the dredger is available we have a list of priorities that we work to depending on the commercial nature of that harbour. Generally any high spot reported is actioned promptly depending on commitments of the dredger elsewhere.
- 6.2 The priority areas of current concern are:
- Buckie: entrance channel
 - Burghead: sand bank outside entrance
 - Hopeman: large bank of silt at the end of the pontoon system and another bank in the outer basin limiting access and egress during the season
 - Cullen: removal of sand from the beach side rather than the entrance
 - Findochty: lack of depth between the pontoons and entrance
 - Portknockie: no major issues at this time

7. GENERAL SAFETY IMPROVEMENTS

- 7.1 In response to the formal advice letter of 8 May from the HSE following a visit to Buckie harbour, a number of actions have been taken and further actions are in progress.
- 7.2 We have produced a 'Mooring Manual' which sets out the importance of safe working practices, and highlights the risks in undertaking mooring operations. It then sets out a safe system of work, and notes key hazards. We have also put in place a training and competency record to be completed for each member of staff.
- 7.3 Bollards, Life Saving Equipment and Harbour Ladders will be subject to a visual inspection on a monthly basis with immediate effect, the details of which will be recorded and stored, and used to inform repair and maintenance work.
- 7.4 Bollards and ladders will also be inspected annually by competent engineers to give a more detailed assessment of their condition. Records of these inspections (including names and qualifications) will be kept by the Council, and again the results will inform repair and maintenance work. These inspections may include non-destructive testing where this is necessary.
- 7.5 The HSE Inspector noted that the quay edge protection had been used by a vessel for mooring. The Council has made it clear that this is not acceptable, and the Harbourmaster (and his team) will ensure that this practice no longer takes place. The Mooring Manual referred to above clearly states in Section 4 that all mooring ropes must be attached to a bollard and not to any other structure.
- 7.6 In response to the concerns regarding Workplace Transport Arrangements on Pier 1 we have agreed to create a safe 'holding' area for pedestrians, marked with paint, on the pier surface close to the main gate at the corner of Basin 1. Appropriate signage will be positioned in this area and at the gate to explain the procedure. Any pedestrian entering the area must wait at this location for an instruction from the person in overall charge of the cargo operation at the time.
- 7.7 After developing several in-house training packages for the team including a Harbour Induction, Mooring Operations, Pilotage and Coxwains and Port Security we have since been delivering them as opportunities arise. There are still more to develop and deliver. We also have some external training planned in the near future covering manual handling, first aid at sea and basic sea survival.
- 7.8 There are plans to create further in-house training packages e.g. general housekeeping, safe use of chemicals, pollution response, inspection of lifesaving appliances, ladders and bollards.
- 7.9 Significant work has been carried out on the pilot boat to extend the working life of the vessel and improve safety on board including overhaul of the engines, new navigation lights, safety rail service, instrument gauges repaired, and Man Overboard Board equipment serviced.

- 7.10 Work continues to upgrade the harbour office including a full rewire, new heating and lighting, and a new fire detection system. Further work to replace windows and flooring will continue before the end of the year. When complete the building will be a safer and more comfortable place to work and meetings can be held with clients and customers in a more professional setting.
- 7.11 A risk assessment has been completed for the navigation light changes required at Portknockie and Cullen, and we are working closely with the Northern Lighthouse Board for their statutory sanction to allow this work to take place.

8. INCIDENT STATISTICS

- 8.1 There were no injuries to our personnel in the 2nd quarter at any of the harbours.
- 8.2 General: Unfortunately there were 2 incidents on the North quay at Buckie which involved members of the public who were engaged in angling from the quayside.
- 8.3 On 3 August 2018 at approximately 2300 a man was angling from the parapet on the North Quay, opposite the end of Pier 4. It is understood that he lost his balance and fell back onto the quay. The Police and Ambulance services were called but no further details of the incident were shared.
- 8.4 On 6 August 2018 at 1900 the supply vessel 'FS Arendal' was in the process of departing the harbour aft first. With a beam of 17.5m this vessel is a tight fit through the entrance. As the aft end of the vessel approached approximately 20m away from the end of the North Quay breakwater, shouts were heard from the pier where there was a group of anglers. The vessel came to a stop and it became apparent that someone had fallen into the water off the end of the pier. The Coastguard were called and due to the brave efforts of members of their team, along with members of the harbour team and the public, they were able to keep hold of the lady in the water. Unfortunately she passed away later that night as a result of her injuries.
- 8.5 Following these incidents the decision was taken to restrict access to the end of the pier. Underwater engineering works are underway to install sheet pile protection in that area which prohibits access anyway. When this work is complete the team will assess the situation again, in recognition of the fact that angling from the pier has taken place for generations.
- 8.6 Both incidents have been fully reported and investigated internally, but to date there has been no additional contact from other agencies in regard to these incidents. These were not reportable to the HSE.
- 8.7 Near Miss Reports – Reporting of near misses is an important tool when looking for ways to improve safety, as this highlight potential issues before they become a major issue and can be used to indicate trends. Until this year the reporting of near misses was not undertaken on a routine basis. All harbour staff have been instructed to notify the Harbourmaster of any unplanned event that has the potential to cause, but does not actually result in

injury, environmental or equipment damage or an interruption to normal safe operations.

9. **KEY PERFORMANCE INDICATORS**

9.1 Pilotage

Pilotage is not compulsory at Buckie harbour, and therefore not all cargo movements require the services of a pilot. The number of pilotage acts carried out in the second quarter of 2018/19 was 16, in relation to 24 vessel movements in and out of the harbour.

9.2 Aids to Navigation

As a Local Lighthouse Authority, Moray Council is required to report the availability of all its navigational lights to the Northern Lighthouse Board in January of each year. The following table gives the detail that is reported on an annual basis.

Table 1: Availability of Navigation Lights

| IALA Category | No Of Aids | Total Hours | No Of Failures | OOS Hours | MTTR | MTBF | Availability | Target Availability |
|----------------------|------------|-------------|----------------|-----------|---------|-----------|--------------|---------------------|
| Moray Council | | | | | | | | |
| CAT 1 | 1 | 26,304 | 0 | 0:00 | 0:00 | 0:00 | 100.00 % | 99.80 % |
| CAT 2 | 15 | 394,560 | 7 | 8730:32 | 1247:13 | 55118:30 | 97.79 % | 99.00 % |
| CAT 3 | 4 | 105,216 | 1 | 2208:00 | 2208:00 | 103008:00 | 97.90 % | 97.00 % |
| No Category | 0 | 0 | 0 | 0:00 | 0:00 | 0:00 | 0.00 % | 0.00 % |
| Totals | 20 | | | | | | | |

Key to headings:

| | |
|-----------|---|
| IALA | International Association of Marine Aids to the Navigation and Lighthouse Authorities |
| OOS hours | Out of service |
| MTTR | Mean Time To Repair |
| MTBF | Mean Time Between Failures |

Table 2 lists all the navigation aids currently managed by the Council. There is only one Category 1 light, which is located on the West Mucks at Buckie harbour, principally to aid cargo vessel movements. There are eleven Category 2 lights and four Category 3 lights.

| Table 2: Moray Council - Aids to Navigation | | | | | | |
|--|-----------------|---|------------------|------------------|--------------|-----------------|
| ALLFS No. | AtoN No. | Aton Name | Aton Type | Character | Range | IALA Cat |
| A3396.1 | 3396.1 | Buckie Harbour. Cliff Terrace. | Sector Light | Iso WG 2s | 16 | CAT 2 |
| A3394 | 3394 | Buckie Harbour. N Pier. Lts in line 096. Rear. 60m from front | Leading Light | Oc R 10s | 15 | CAT 2 |
| A3392 | 3392 | Buckie Harbour. North Pier Lts in Line 096. Front | Leading Light | 2 F R(vert) | 9 | CAT 2 |
| A3396 | 3396 | Buckie Harbour. W Pier. Elbow | Light | 2 F G(vert) | 4 | CAT 2 |
| A3391 | 3391 | Buckie Harbour. West Muck | Light | Q R | 7 | CAT 1 |

| | | | | | | |
|---------|--------|--|---------------|---------|---|-------|
| A3429. | 3429. | Burghead Harbour. Entrance Groyne | Light | Fl G 5s | 1 | CAT 2 |
| A3428.5 | | Burghead Harbour. Fishing Transit Light | Light | FG | 1 | CAT 3 |
| A3424 | 3424 | Burghead Harbour. N Pier. Head | Light | Oc W 8s | 5 | CAT 2 |
| A3428 | 3428 | Burghead Harbour. S Pier. Head | Light | Q G | 5 | CAT 2 |
| A3426 | 3426 | Burghead Harbour. Spur. Head | Light | Q R | 5 | CAT 2 |
| | 3383U | Cullen Harbour. North Pier. | Unlit Beacon | | | CAT 3 |
| A3372 | 3372 | Cullen Harbour. Outer Basin. | Light | FG | 1 | CAT 3 |
| A3385 | 3385 | Findochty. Ldg Lts 166deg. Front. | Leading Light | F R | 3 | CAT 2 |
| A3385.1 | 3385.1 | Findochty. Ldg Lts. Rear. Harbour Road. 30m from front | Leading Light | F R | 3 | CAT 2 |
| | 3386U | Findochty. West Pier | Unlit Beacon | | | CAT 3 |
| A3418.1 | 3418.1 | Hopeman Harbour. Ldg Lts 081deg. Rear. 10m from Front | Leading Light | F R | 4 | CAT 2 |
| A3418 | 3418 | Hopeman Harbour. N Quay. Elbow. Ldg Lts 081deg.Front | Leading Light | F R | 4 | CAT 2 |
| A3416 | 3416 | Hopeman Harbour. W Pier. Head | Light | Oc G 4s | 4 | CAT 2 |
| A3382.1 | 3382.1 | Portknockie Harbour. Ldg Lts 150 30' (Rear) | Leading Light | F W | 2 | CAT 2 |
| A3382. | 3382. | Portknockie Harbour. Ldg Lts. 150 30' (Front) | Leading Light | F W | 2 | CAT 2 |

Local Lighthouse Authorities are required to manage their Aids to Navigation within international guidelines as determined by the IALA. Aids to Navigation (AtoN) are categorised according to their navigational importance with their 'availability' requirements reflecting this:

| Availability | Objective | Definition |
|--------------|-----------|--|
| Category 1 | 99.8% | AtoN considered to be of primary navigational significance |
| Category 2 | 99.0% | AtoN considered to be of navigational significance |
| Category 3 | 97.0% | AtoN considered to be of less navigational significance |

The 'Availability Objective' is calculated over a rolling 3-year period. This means that over this period a Cat 1 AtoN needs to be functional for 99.8% of the time.

10. **GENERAL COMMENTARY**

10.1 The safety performance at the harbours is improving all the time and now starts from a high level. There have been no injuries to harbour staff. There were two public incidents as reported above. Although we were only aware of the first incident (fall from parapet) after the fact, we were on site for the

second incident. The harbours team responded quickly and efficiently with the Pilot Boat, with one member of staff taking the decision to jump in and support the lady in the water until further assistance was available. Exemplary boat handling skills aboard the Pilot Boat enabled the vessel to be in the right place at the right time to offer assistance.

- 10.2 The summer season is our busiest time of year, and this year was no exception. Although landings were down slightly on this time last year, on the whole the evenings and nights were still very busy at Buckie. It is at these times that the health and safety of our personnel is directly affected by the actions of the boats landing their catch. Well established methods of unloading catches and teamwork between the crews and our staff is vital to ensure safe procedures are followed.
- 10.3 We continue to look for ways to improve the service we provide for our customers in Burghead. The local fishermen recently took delivery of a fuel tank which will change the way many of them can fish by maximising their days at sea. Working closely with representatives of the Scottish White Fish Producers Association (SWFPA) we are in the process of establishing a full risk assessment for fuel transfers and procedures for actions that will be required in the event of an uncontrolled release. The Oil Spill Contingency Plan, which covers Buckie and Burghead harbours, is in the process of being amended to reflect the addition of this new facility. This Plan is audited by the Maritime and Coastguard Agency and is valid until August 2022.

11. FUTURE OBJECTIVES AND PLANS

11.1 Objectives identified for 2018 and beyond include the following:

- Monitor consistent incident reporting, including potential incidents
- Implement new KPIs
- Undertake further reviews of Marine Policy, SMS and training requirements Maintain momentum of Pilot training and accreditation

11.2 Some discussions have already been held with the team regarding incident reporting, particularly looking at the near miss incidents and how we can use them to look for trends and ways to improve our operations. Sharepoint is now used by all those with access.

11.3 A review of the training requirements for all staff has been held and a new training matrix is under development which includes a mix of internal and external training courses. Many of the internal courses are yet to be developed and we are in the process of booking the external trainers. Pilot and Coxswain training continues with training opportunities being taken when possible.

12. SUMMARY OF IMPLICATIONS

(a) Corporate Plan and 10 Year Plan (Local Outcomes Improvement Plan (LOIP))

Sustainable harbours maintained to operate safely and efficiently contribute to the economic development of Moray

(b) Policy and Legal

Non-compliance with the Code will have legal implications

(c) Financial implications

Non-compliance of the Code may have financial implications

(d) Risk Implications

Prosecution of the authority may result from the failure to comply with the Port Marine Safety Code.

(e) Staffing Implications

Key personnel are to be trained, qualified and experienced.

(f) Property

There are no property implications arising from this report.

(g) Equalities/Socio Economic Impact

There are no specific equalities matters, however, the Equalities Officer has been consulted and comments incorporated into this report.

(h) Consultations

The Legal Services Manager (Property & Contracts), Principal Accountant, Committee Services Officer (L Rowan), and Equalities Officer have all been consulted and their comments incorporated into this report.

13. CONCLUSION

13.1 The council is currently deemed to be compliant with the PMSC, however, there is still work to be done to stabilise our position in relation to marine safety. This will be evidenced through future reports to this Committee, and scrutinised by this Committee as Duty Holder.

Author of Report: Duncan Brown, Development & Operations Manager,
Harbours

Background Papers:

Ref: