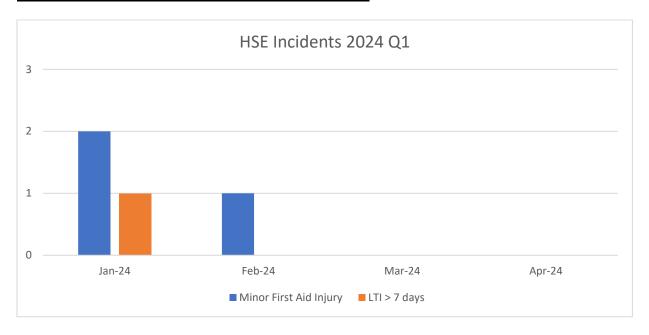
# **VULCAN NRTE Report to the DSG – April 2024**



# **Health and Safety**

There has been one Lost Time Injury (LTI) and three minor injuries since my last report to the Sub-Group in January 2024.

The LTI, which as it was more than 7 days was reported as a RIDDOR to the HSE, was an individual hurting their back while lifting a container. Whilst they reported to colleagues that they were in some discomfort they did not require any first aid, and they completed their shift. It was a few days later (they were not at work during this period due to shift patterns) when still in discomfort that they visited their GP who then signed them off work.

The minor injuries were two trip and fall events, and one cut in a controlled area with no contamination.

### **Environment**

As reported to the DSG there has been a breach of the conventional discharge consent relating to the site boiler effluent discharge during this period. A valve associated with the cooling water supply for the blowdown vessel (part of the effluent treatment system) failed to shut correctly after an automatic blowdown evolution. This resulted in the daily limit of 7m³ being exceeded with a total of 12.04 m³ discharged. Using the data from the boiler control system we are able to demonstrate that the excess discharge volume was clean water and not boiler effluent. This was reported to SEPA and they have not requested any further action.

As briefed the flowmeter that measures and records the discharge from the sewage plant has on occasions over the past 18 months failed to record the actual discharges; these failures, whilst subtly different have always been such that 'believable readings' were still being displayed and thus the failure was generally only obvious on interrogation of the data. In this period, Site reported to SEPA a further occurrence and thus breach of our sewage effluent discharge consent (due to again not maintaining accurate records). I must emphasise like before we can prove we did not discharge more than the permitted quantity through other information. With no cause of the failures being identified, nor the manufacturer being able to provide any insight into what might be causing the issue, we have (even before the latest occurrence) decided to replace the flowmeter with a different design from another manufacturer. Whilst this modification is being progressed, we have implemented additional measures to ensure accurate records can be maintained.

We have recently written to SEPA to inform them of progress against the reported events outlined above and to provide an update on events previously reported to SEPA and briefed to the DSG.

# **Radioactive Waste Disposal**

There have been no challenges to the Approval of Arrangements (AoA) limits during this period.

At the end of February 2024, the annual rolling discharge (expressed as a percentage against the maximum detailed in the SEPA letter of agreement) was:

	Туре	Percentage
	Noble Gases	0%
Gaseous	Other radionuclides not specifically listed, taken together.	16.4%
	Cobalt 60	0.07%
Liquid	All other radionuclides not specifically listed, taken together.	0.05%
	Tritium	0.000%
Solid	No waste sent off site	N/A

As briefed at the DSG, whilst the last SEPA inspection provided an overall positive rating, two non-conformances were raised. Both were related to the periodicity of reporting; historically we have reported either 4-week or 5-week periods for a month. SEPA identified that our AoA requires the reporting to be on a calendar month basis. We have now completed the work to address the non-conformances.

Considering the information gained from the last SEPA inspection, we decided to undertake additional assurance activities on our regular SEPA returns. Subsequently, we identified that we had over-reported discharge figures. In March we sent a letter to SEPA with further information on the errors found and the actions we have taken to resolve them. We will provide a further update to SEPA once all actions have been completed. I must emphasise that the problems relate to data presentation and the actual discharges remain well within limits.

## **Site Programme**

Operations have been continuing, notwithstanding some disruption to the challenging weather conditions experienced at the beginning of the year.

We successful completed one phase of operations in February, the results of which have been sent to the submarine enterprise; these provide the data required to support future submarine operations. Our main objective now is the commissioning, revalidation and training associated with the equipment that will be required for the next phase of operations.

#### **Events**

Since the last meeting no nuclear safety events have occurred that required reporting to DNSR or ONR in accordance with their **mandatory** reporting criteria.

As highlighted a RIDDOR report was made due to an individual suffering and LTI greater than 7 days.

### **Emergency Arrangements**

Exercise LONESTAR, the site's annual nuclear emergency response demonstration, was due to be held in November 2023 but due to severe weather conditions on the day, and with the consent of DNSR, the demonstration was not conducted as planned. It has been rescheduled for June 2024, and planning is progressing well.

Our annual security arrangements demonstration exercise is also scheduled for June, the planning of which is also progressing well.

# **Regulatory Inspections / Audits**

On Tuesday 19 March ONR conducted an electrical safety inspection. Two Regulatory Issues (RI) will be raised, relating to exposed terminals and electrical switching. We have received the formal report and are actively progressing activities for closure of both issues; this was actually commenced prior to the formal report being issued.

On Wednesday 20 March DNSR carried out an inspection of the arrangements for AC36 – Organisational Capability. Some recommendations for improvements were briefed at the closing meeting. We are waiting for the formal report.

For the planned ONR inspection that occurred on Tuesday 19 September 2023, the RI that was raised has now been formally closed.

Regarding the two SEPA non-conformances mentioned in the Radioactive Waste Disposal section, a request for closure of the non-conformances was sent on 31 January 2024, following completion of the proposed remedial activities. We are waiting for a response.

# **Vulcan Decommissioning Programme**

Having announced the intention for the responsibility for decommissioning of Vulcan to be transferred to the NDA, the Joint Project Team has formally launched the transitional workstreams to work up a full plan. A number of very positive meetings were held in February and March, building on the early work that had been undertaken.

The current focus is developing the submissions required for the applications for the Nuclear Site License and SEPA permits.

### Other

On Wednesday 27 March 2024, the Committee on Radioactive Waste Management (CoRWM), chaired by Sir Nigel Thrift visited the site. The purpose of the visit was familiarisation of the Vulcan site and to gain an understanding of the higher activity waste types and volumes which will be generated at Vulcan during decommissioning. The visit was very successful with Sir Nigel providing a note of thanks to the Site for the very informative visit.

I Walker Commander Royal Navy Naval Superintendent Vulcan