

Inspection Record – Dutyholder Report

Site emergency demonstration exercise

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|------------------------|---|---------------------------|--------------------------------|
| Inspection ID | IIS-51092 | Inspection Date(s) | 20/10/2022 For 1 Days |
| Dutyholder | Springfields Works | Site | Springfields Works |
| Inspection Type | Announced Planned | Site Area / Group | |
| ONR Purpose | Nuclear Safety; Nuclear Security; Conventional Health and Safety | Inspection Source | |

Subject (s) of Inspection

| Activity | RAG Rating |
|--------------------------------|------------|
| LC 11 - Emergency arrangements | GREEN |

System (s) – where applicable

Inspector(s) taking part in Inspection

Lead Inspector

Attending

[illegible]

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1. Scope

1.1 Aim of Inspection

Emergency exercise demonstration covering the site response to an incident involving safety and security. This is a planned inspection and addresses the requirements of the site Nuclear Licence Condition 11 Emergency Arrangements as well as the requirement of its COMAH licence and Security plan.

1.2 Inspection Scope

See above. Routine site emergency exercise demonstration as required legally from the site under its permit and licence to operate.

1.3 Relevant Regulatory Guidance

The following regulatory guidance corresponds with this inspection

| Name |
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2. Summary Statement

Springfields Nuclear Fuels undertook a level 1 (site level) emergency exercise on 20 of October 2022 to demonstrate the site emergency arrangements as required by its site licence under the site Licence Condition 11 'Emergency Arrangements'.

The exercise Silverstone scenario proposed by the site encompassed both security (an intruder on site) and safety aspects (suspected explosive device deposited near a building with criticality and radiological contamination risks). The licensee's scenario was realistic and challenging, especially with the emergency response requiring to be managed remotely via Microsoft Teams.

ONR has observed the exercise in several key locations to assess the adequacy of the arrangements, the capability and capacity of the licensee to respond to the emergency effectively and swiftly.

The exercise declared objectives were achieved and the emergency situation was brought under control in a timely manner with the support of the external emergency services.

ONR identified some areas of good practice and made some observations which will be

followed during routine regulatory engagements with the site.

Overall, the licensee demonstrated that adequate arrangements are in place as required to comply with the requirements of its site licence condition 11 and on the basis of the level 1 exercise observed and the evidence seen this intervention was rated 'green'.

3. Record & Judgement

3.1 Staff seen as part of Inspection

The following principal staff were seen as part of this inspection

| Name | Role | Company |
|------------|------------|----------------------------|
| [REDACTED] | [REDACTED] | Springfields Fuels Limited |

3.2 Record

Evidence

Exercise scenario and preparation

Springfields Nuclear Fuels scenario encompassed a security element (an armed intruder on site) and a safety element (suspected explosive packages deposited near a building storing radioactive and fissile material). The scenario had potential for escalation and required for the site emergency response to tackle both aspects at once, gathering information to gain sufficient understanding of the situation and making decisions to balance the risk to workers and members of the public (see reference document – Silverstone emergency exercise). On this basis the proposed scenario was judged adequate to demonstrate the adequacy of the licensee's arrangements for safety and security.

[REDACTED] he emergency response in this context was therefore complicated by the inability to bring all the actors within the same facility.

The emergency response was limited to the site response (Level 1) with some limited attendance of the emergency services i.e., fire and rescue and armed police response teams.

The scenario information are recorded on CM9 (reference 2022/0067323).

Exercise observation

ONR observed the emergency response demonstration from three the key locations i.e.:

[REDACTED] where the Emergency Controller and Deputy were located

Emergency Control Centre
Security forward control point (intruder interception)

The exercise was assessed in line with ONR guidance NS-INSP-GD-011 LC 11 Emergency Arrangements and the intervention covered aspects of LC11 (specifically sections 4,5 and 6) and looked at the interfaces and performance of the licensee with the external emergency services as well as internally within the different entities that form part of its arrangements.

Exercise assessment

The assessment of the exercise and LC11 is complemented by the security assessment (see related intervention report reference ONR-CNSS-IIS-51516 CM9 2022/62719).

During the exercise, the following salient points were observed:

The implementation of the emergency arrangements was swift and executed at the different locations in an orderly and manner. The situational awareness was established at an early stage of the exercise and maintained through time out meeting initiated by the Emergency Controller at regular interval (around 20 minutes). The focused time out meetings enabled to maintain the cohesion of the response in a setup more challenging than the normal Emergency Control Centre where all the actors are represented in a single location.

The use of pre-populated forms on Microsoft Teams was identified as a good practice and enabled to maintain a structure akin to those normally seen in an Emergency Control Centre with situation boards and focus points. The clear separation of the roles between the Emergency Controller and the Shift Manager enabled to effectively and swiftly update the information contained in the proforma and to maintain the focus on the emergency priorities.

The use of laptops presented a challenge to display sufficient information simultaneous on a single screen and may have been the origin of some punctual partial losses of situational awareness within the responders as the information was not immediately visible to all at the same time. The use of additional monitors might be beneficial to the responders and facilitate the information flow.

ONR observation of the Technical Cell found that the function was able to provide sound advice to the emergency response and to inform the decision making for potential route for escalation. The potential for escalation was well communicated together with the consequence and the sequence of actions to take (e.g., risk of criticality and closure of the railway line)

The reliance on Microsoft Teams to manage the incident remotely could impact the resilience of the response unless there is a backup option. At present this eventuality has not been explored and the site expects to carry on the incident response after transferring the information onto a spreadsheet (e.g. Microsoft XL). In a similar vein, the timeline and records are expected to be maintain through Microsoft Teams and there might be an issue with the integrity of the data and the recording of the decision making. It would be advisable to explore further such a scenario to better understand the resilience of the arrangements and integrity of the data in a remote emergency response situation.

The emergency services participating to the exercise have diverse levels of access and knowledge of Microsoft Teams and therefore the interface with the emergency services responding might be challenged. In such a case the information flow and sharing

of the situational awareness would be difficult and the site might want to consider options to ensure that a reliable and resilient interface can be maintained with all the emergency service responding to the event in all circumstances.

It is the opinion of the ONR inspectors observing the demonstration exercise that as a whole Springfields Nuclear Fuels demonstration of its emergency response was effective to bring the situation under control adequately in an acceptable time lap.

Judgement

Overall, the site demonstrated that adequate emergency arrangements are in place as required under Licence Condition 11 and successfully achieved the declared objectives of the emergency exercise. On this basis this intervention is rated 'GREEN'

Observations / Advice

The main observations made from ONR witnessing the site exercise Silverstone is that whilst the site demonstrated some good practice and ability to respond remotely to an emergency, the resilience of the response relying on the use of Microsoft Teams needs to be further explored and understood in several areas:

- Ability to maintain the response in case of loss of MS Teams
- Connectivity and resilience of the interface with external emergency services
- Maintenance of adequate situational awareness and information flow when operating remotely without the assistance of Emergency Control Centre information boards
- Reliability of the recording of the event timeline and the decision making together with the information underpinning it

ONR will follow up these observations during future site engagements.

3.3 Regulatory Issues

The following regulatory issues were raised, reviewed or closed as a result of this inspection.

| Issue | Title |
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