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**NNL Lease of the Flask Handling Unit**

**Supplemental Lease Agreement (of Part of the Flask Handling Unit) Relating to East Rear Court, East Forecourt and East Access Garage, Plenum Fan Room and East Air Duct**

Project Assessment Report ONR-SDFW-PAR-16-017  
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### EXECUTIVE SUMMARY

This Project Assessment Report has been written to document the basis of ONR's regulatory decision to issue an 'agreement' in the form of a Licence Instrument to a lease request for part of the Windscale licenced site.

#### Permission Requested

In accordance with its arrangements made under Licence Condition 3(1), Sellafield Limited (the licensee) has requested ONR's 'agreement' to a supplemental lease (of part of the Flask Handling Unit) relating to East Rear Court, East Forecourt and East Access Garage, Plenum Fan Room and East Air Duct areas of the Windscale licensed site.

#### Background

Elements of the Flask Handling Unit are currently leased by Sellafield Limited to the National Nuclear Laboratory for use as a radioactive handling facility, for storage and flasking facilities and associated ancillary welfare / office facilities. Previous ONR Consent to underlease these elements of the Flask Handling Unit was granted via Licence Instrument 533, which was issued on 23 December 2013.

Sellafield Limited now wishes to enact a supplemental underlease that would see further areas of the Flask Handling Unit leased to the National Nuclear Laboratory on the same basis as the original underlease. Sellafield Limited has therefore submitted a suite of documents in support of its request.

#### Assessment and inspection work carried out by ONR in consideration of this request

No specialist assessment has been conducted in consideration of this request, since the areas identified in the supplemental underlease (i.e. forecourts and garage areas) have minimal direct nuclear safety significance. As explained below, the only matter driving SL's 'high' categorisation is the term (18 year duration) of the supplemental underlease

I also undertook a walkdown of the areas proposed to be leased and performed an assessment of Sellafield Limited's submitted documentation. I have judged the adequacy of the submission against two relevant principles in ONR's Technical Assessment Guide entitled 'Control of Property Transactions on Licensed Sites'.

Sellafield's submission identifies two areas that would, without mitigation, drive the impact category of the property transaction to 'medium'. I have examined these areas and I have found them to be appropriately mitigated such that their post-mitigation impact category is 'low'.

Nevertheless, Sellafield Limited has categorised the overall impact category of this property transaction to be 'high' (thus requiring ONR permission) as a result of the length (term) of the proposed lease (to November 2034). Though I judge the length of the term to be appropriate, I consider it has no direct nuclear safety implications.

Finally, I have determined the two relevant principles identified in ONR's Technical Assessment Guide to have been met by virtue of the wording of the original underlease, which is referenced from the supplemental underlease now being proposed.

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### **Matters arising from ONR's work**

None

### **Conclusions**

Having reviewed the submission provided by Sellafield Limited, as well as having undertaken a walkdown of the areas proposed to be leased, I am content that the proposal has no direct nuclear safety relevance and meets ONR guidance requirements.

### **Recommendation**

I recommend that Licence Instrument number 540 is issued to agree to the licensee granting a supplemental lease, as described in the document titled "Supplemental Underlease (of Part of the Flask Handling Unit) relating to East Rear Court, East Forecourt and East Access Garage, Plenum Fan Room and East Air Duct, Windscale, Sellafield, Seascale".

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### LIST OF ABBREVIATIONS

CNS	(Office for Nuclear Regulation) Civil Nuclear Security
FHU	Flask Handling Unit
HOW2	(Office for Nuclear Regulation) Business Management System
LI	Licence Instrument
NNL	National Nuclear Laboratory
OIA	Occupation Impact Assessment
ONR	Office for Nuclear Regulation
PAR	Project Assessment Report
SL	Sellafield Limited
SQEP	Suitably Qualified and Experienced Person
TAG	Technical Assessment Guide
ZnBr	Zinc Bromide

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### 1 PERMISSION REQUESTED

1. In accordance with its arrangements made under Licence Condition 3(1)<sup>a</sup>, Sellafield Ltd (SL) (the licensee) has requested <sup>[1]</sup> the Office for Nuclear Regulation's (ONR) 'agreement' <sup>b</sup> to a supplemental lease (of part of the Flask Handling Unit) relating to East Rear Court, East Forecourt and East Access Garage, Plenum Fan Room and East Air Duct areas of the Windscale licenced site.
2. This Project Assessment Report (PAR) has been written to document the basis of ONR's regulatory decision to issue an 'agreement' <sup>b</sup> in the form of a Licence Instrument (LI) <sup>[2]</sup>.

### 2 BACKGROUND

3. The Flask Handling Unit (FHU) is current leased by SL to the National Nuclear Laboratory (NNL) for use as:
  - A radioactive handling facility;
  - Storage and flasking facilities; and
  - Associated ancillary welfare / office facilities.
4. Consent to SL to underlease the FHU (via lease ONR/12/10930/02-B <sup>[3]</sup>) was granted by LI 533 <sup>[4]</sup>, which was issued on 23 December 2013. The FHU was not leased in its entirety to NNL however; in addition to the leased areas, certain specified areas were designated as 'access and use'; that is, NNL is not the tenant in these areas but is allowed to transit through these areas in undertaking operations in the leased facility.
5. SL now wishes to enact a 'Supplemental Underlease' <sup>[5]</sup> that would see these areas of the FHU leased to NNL (i.e. the East Rear Court, East Forecourt and East Access Garage, Plenum Fan Room and East Air Duct) on the same basis as the original underlease.
6. For that purpose, SL has submitted the following documents in support of its request:
  - Draft Supplemental Lease (of part of the Flask Handling Unit) relating to Underlease East Rear Court, East Forecourt and East Access Garage, Plenum Fan Room and East Air Duct, Windscale, Sellafield, Seascale – SLC0027 <sup>[5]</sup>
  - Draft Supplemental Leased Areas Plan - BE2916193A <sup>[6]</sup>
  - Occupation Impact Assessment – OIA/08/14/Decom/SR&DP/001 <sup>[7]</sup>
  - Tenant Safety Requirements – LOF/R/0060 Issue 3 <sup>[8]</sup>
  - Photographic Schedule – B\*\* East Side June 2015 <sup>[9]</sup>
  - Schedule of Contamination – B\*\* Leased Areas June 2015 <sup>[10]</sup>
  - Underlease of Part – The Flask Handling Facility – ONR/12/10930/02-B <sup>[3]</sup>
7. This report has been written in accordance with the requirements of the relevant guides in HOW2 <sup>[11]</sup>.

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<sup>a</sup> SL's arrangements for LC3 have not been 'Approved' by ONR; that is, ONR has not frozen them. SL's LC3 arrangements were last examined in March 2016 and found to be adequate <sup>[12]</sup>.

<sup>b</sup> In this instance, 'agreement' is a use of a derived power (i.e. one given to ONR through the licensee's arrangements), rather than a primary power (i.e. one given to ONR through law).

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### 3 ASSESSMENT AND INSPECTION WORK CARRIED OUT BY ONR IN CONSIDERATION OF THIS REQUEST

8. ONR's assessment and inspection work was agreed with the ONR Delivery Lead early in this project. My subsequent project inspection was undertaken in accordance with the associated Decision Record <sup>[13]</sup>.
9. No specialist assessment has been conducted in consideration of this request, since the areas identified in the supplemental underlease (i.e. forecourts and garage areas) have minimal direct nuclear safety significance. As explained below, the only matter driving SL's 'high' categorisation is the term (18 year duration) of the supplemental underlease.
10. To inform my recommendations, I undertook a walkdown of the areas to be leased. I also assessed the submitted documentation (listed above), particularly the Occupation Impact Assessment (OIA), which records SL's safety categorisation of this proposal as 'High'.
11. ONR has a Technical Assessment Guide (TAG) titled 'Control of Property Transactions on Licensed Sites' <sup>[15]</sup>, which provides guidance to inspectors on the inspection and assessment of LC3 matters. The TAG sets out four principles to guide inspectors in making balanced judgements. The first two principles<sup>c</sup> are relevant to this submission and are listed below. As part of my assessment of the submission, I sought to ensure that these principles (and their associated guidance) have been met by SL's proposal.
  - Principle 1: The licensee shall remain in control of the licensed site at all times and of all activities that could impact on nuclear safety.
  - Principle 2: The licensee shall ensure rights of access are preserved.
12. The OIA identifies two areas where the pre-mitigation impact category is considered to be 'medium', I am content that all other items are appropriately considered and are correctly marked as 'low'. The two 'medium' impact items are:
  - Potential for radiological effects,
  - Potential for conventional and/or environmental events
13. The OIA explains that the potential for radiological effects stems from operations where flasks containing nuclear material are lifted prior to import into (or export from) the Active Handling Facility, which is connected to the FHU. The mitigation items listed in the OIA are that flasks are lifted within their substantiated drop height, a 'nuclear rated' crane is used, a good maintenance regime is in force and lifts are carried out by Suitably Qualified and Experienced (SQEP) operators. At the present time, the only crane in the area covered by this lease proposal is the 'Wharton Hoist', which is currently embargoed for use and is in the process of being refurbished. The refurbishment work is listed on SL's Hold Point Control Plan and as such, I consider that ONR has sufficient visibility of the safety case arguments that will be made prior to bringing this crane back into use.
14. The potential for conventional and/or environmental effects stems from the amount of Zinc Bromide (ZnBr) solution that is required to be stored within the FHU from time to time. The mitigation items listed in the OIA are that the ZnBr is stored in bunded areas, the quantities are maintained as low as reasonably practicable, there is dedicated handling equipment and operations are conducted by SQEP operators.

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<sup>c</sup> Principles 3 & 4 relate to the licensee's arrangements for controlling property transactions, including provision of adequate documentation to ONR and ensuring a proportionate approach is taken reflecting any potential to impact nuclear safety and/or licensee control. The licensee's arrangements are not assessed here.



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ZnBr windows are used extensively within the AHF and have been for many years. I am therefore content that the mitigation elements appear adequate. Use of dedicated bunds (and banded pallets) is commonplace within the chemical industry. At the time of my walkdown, there were no bulk quantities of ZnBr stored in the FHU.

15. Given that SL's post-mitigation impact assessment of the above items is 'low', the only item remaining that has resulted in the OIA receiving a 'high' categorisation is the proposed length of time of the lease. SL has confirmed (and I have confirmed via both the underlease and the draft supplemental underlease) that the length of the supplemental underlease is to be linked to the length of time remaining on the underlease itself (both of which expire on 30 November 2034). I am content that this is the only reason that SL is required (by its own arrangements) to seek permission from ONR prior to signing the lease. I am also content that the length of the term on the supplemental underlease is appropriately aligned with the original underlease and has minimal (if any) impact on nuclear safety. Nevertheless, I sought to determine that the two applicable principles from the TAG 'Control of Property Transactions on Licensed Sites' have been met by the submission.
16. The guidance associated with Principle 1 (remaining in control of the licensed site) presents several items for inspectors to consider when the licensee seeks to grant a lease of the licensed site (or part of it) to a tenant, for example:
  - The tenant does not do anything, or allow anything to be done, which would cause a breach of any of the licence conditions.
    - [addressed in Clause 3.6 of the original underlease]
  - The licensee will have rights of access to ensure its continued compliance with the site licence; such access right must also extend to ONR inspectors.
    - [Clause 3.13 of the original underlease]
  - Structural alterations are controlled where appropriate.
    - [Clause 3.10 of the original underlease prohibits structural alterations]
  - The permitted use is clearly defined.
    - [Clause 3.15 of the original underlease]
  - Any alteration to the lease or further property transaction would require assessment and permission from the licensee to the tenant and, if required, permissioning from ONR to the licensee.
    - [Clause 3.22 of the original underlease]
17. The OIA provides (albeit on an old template) signposting to all but one (bullet 2) of these items. All items are addressed appropriately in the underlease; the linkage being shown above in square brackets. The supplemental underlease clearly refers to the original underlease (the 'Main Lease') and section 4 of the supplemental underlease defines the terms of the supplemental underlease, which is stated explicitly to be made 'under the same conditions as the Main Lease...' Though there are some exceptions to this approach, these are related solely to contractual/financial elements and unrelated to nuclear safety. Thus, on the basis of my sample, I am content that Principle 1 has been met.
18. Principle 2 is directly addressed by bullet 2 above: Clause 3.13 of the original underlease and Sub Clause 3.13.2 both refer to 'unrestricted access to carry out works or duties' by the Facility Team (i.e. SL) and also ONR where those works or duties relate to the leased premises. Thus, I am content that Principle 2 is also met.
19. Finally, having reviewed the photographic schedule and the Leased Areas Plan, I am content that the area to be leased is as was explained to me during my walkdown of the FHU.

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20. I have informally consulted ONR Civil Nuclear Security (CNS) regarding the supplemental lease from a standpoint of keeping CNS informed concerning future projects that would be enabled through this lease being granted. As these will be permissioned on a case-by-case basis, and the present proposal has no direct nuclear safety implications, I have not formally sought ONR CNS advice at this stage.
21. Similarly, given the entirely contractual nature of this permission, I have judged there to be no benefit from consulting other departments and agencies, such as the Environment Agency, ONR Transport or ONR Safeguards.

#### **4 MATTERS ARISING FROM ONR'S WORK**

22. None

#### **5 CONCLUSIONS**

23. Elements of the Flask Handling Unit (FHU) are currently leased to the National Nuclear Laboratory (NNL) for use as a radioactive handling facility, for storage and flasking facilities and associated ancillary welfare / office facilities. Previous ONR Consent to underlease these elements of the FHU was granted via Licence Instrument 533 which was issued on 23 December 2013. Sellafield Limited (SL) now wishes to enact a supplemental underlease that would see further areas of the FHU leased to NNL on the same basis as the original underlease.
24. Having reviewed the submission provided by SL, as well as having undertaken a walkdown of the areas proposed to be leased, I am content that the proposal has no direct nuclear safety relevance and meets ONR guidance requirements.

#### **6 RECOMMENDATION**

25. I recommend that Licence Instrument number 540 is issued to agree to the licensee granting a supplemental lease, as described in the document titled "Supplemental Underlease (of Part of the Flask Handling Unit) relating to East Rear Court, East Forecourt and East Access Garage, Plenum Fan Room and East Air Duct, Windscale, Sellafield, Seascale".

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### 7 REFERENCES

1. *'Request for ONR LC3(1) Agreement'*,  
ONR/16/11922/8678, 4 July 2016. (2016/387962)
2. *'Agreement to the supplemental lease required (of part of the Flask Handling Unit) relating to East Rear Court, East Forecourt and East Access Garage, Plenum Fan Room and East Air Duct between Sellafield Limited (SL) and NNL'*,  
WNL7758N, 20 October 2016. (2016/387946)
3. *'Underlease of Part; The Flask Handling Facility, Pile at Windscale, Sellafield, Seascale, Cumbria'*,  
ONR/12/10930/02-B, 22 April 2013. (2016/387968)
4. *'CONSENT Granted under Condition 3(1) of Schedule 2 attached to Nuclear Site Licence No. 83'*,  
Licence Instrument No. 533, 23 December 2013. (2013/421462)
5. *'Supplement Underlease (of Part of the Flask Handling Unit) relating to East Rear Court, East Forecourt and East Access Garage, Plenum Fan Room and East Air Duct, Windscale, Sellafield, Seascale'*,  
SLC0027, undated unsigned lease. (2016/387958)
6. *'Leased Areas Plan'*,  
0 BE 2916193 A, 30 June 2016. (2016/387954)
7. *'Occupation Impact Assessment, B\*\* East Forecourt to be used by NNL'*,  
OIA/08/14/Decom/SR&DP/001, 11 September 2014. (2016/387960)
8. *'Tenant Safety Requirements B\*\* Lease'*,  
LOF/R/0060 Issue 3, March 2013. (2016/387967)
9. *'Photographic Schedule, B\*\* East Side, June 2015'*,  
2 September 2015. (2016/387951)
10. *'Schedule of Contamination, B\*\* Leased Areas, June 2015'*,  
2 September 2015. (2016/387953)
11. ONR HOW2 Business Management System Guides:  
NS-PER-GD-001 Rev 1, "Flexible Permissioning including the Use of Derived Powers",  
NS-PER-GD-014 Rev 5, "Purpose and Scope of Permissioning",  
NS-PER-IN-001 Rev 7, "Preparation and Issue of Licence Instruments",  
NS-TAST-GD-084 Rev 9, "Guidance on production of Reports", and  
NS-TAST-GD-085 Rev 6, "Peer Review for Technical Assurance"  
<http://www.onr.org.uk/operational/assessment/index.htm>
12. *'Licence Compliance Arrangements Inspection of Licence Condition 3 at Sellafield Ltd.'s nuclear licensed site in Sellafield, Cumbria'*,  
ONR-SEL-IR-15-097, 8 March 2016. (2016/104987)
13. ONR Decision Record. *'New lease for NNL to occupy additional areas within B\*\* , HPCP line 295'*,  
ONR-SEL-DR-15-053 Rev 0, 18 May 2016. (2016/186036)
14. *'Active Handling Facility & Waste Vitrification Plant Permissioning Engagements'*,  
ONR-SDFW-CR-16-245, 15 July 2016. (2016/285168)

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15. NS-TAST-GD-087 Rev 0, '*Control of Property Transactions on Licensed Sites*', [http://www.onr.org.uk/operational/tech\\_asst\\_guides/index.htm](http://www.onr.org.uk/operational/tech_asst_guides/index.htm)