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| ONR Project Assessment Report  **PR-01420: GB/343/S, GB/408/S, GB/420/S Renewal**  Assessment of REVISS Services (UK) Ltd Special Form Radioactive Material Designs |



ONR Project Assessment Report

**Project Name**: PR-01420: GB/343/S, GB/408/S, GB/420/S Renewal

**Report Title**: Assessment of REVISS Services (UK) Ltd Special Form Radioactive Material Designs

**Dutyholder/ Applicant**: REVISS Services (UK) Ltd

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# Executive Summary

REVISS Services (UK) Ltd has applied to the Office for Nuclear Regulation (ONR) for approval of a five-year renewal of special form designs: GB/343/S; GB/408/S; and, GB/420/S. The designs are special form radioactive material capsules. ONR last approved package designs GB/343/S, GB/408/S in 2018 and GB/420/S in 2019.

ONR carried out a proportionate assessment of the transport safety case contained in the application. There have been no changes to the design of the special form radioactive material.Engineering aspects of the safety submission were sampled, targeting changes to regulatory requirements since the last ONR approval.

Following the programme of assessment it was concluded that the safety submission from the applicant is adequate and meets applicable regulatory requirements.

It is recommended that the transport competent authority approve the special form designs by renewing the certificates to: GB/343/S (Rev. 6); GB/408/S (Rev.9); and, GB/420/S (Rev.5).

Table : List of abbreviations

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| Term/Acronym | Description |
| HOW2 | (Office for Nuclear Regulation) Business Management System |
| ONR | The Office for Nuclear Regulation |
| SCR | Safety Case Requirements (Assessment) |
| UK | United Kingdom |

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# Permission Requested

1. REVISS services (UK) Ltd (the applicant) has applied for approval of a five-year renewal of special form radioactive material designs:

* [GB/343/S](https://prodonrgov.sharepoint.com/can_permissioning/PR-01420_Internal_Only/FW_%20ApplicationforCAapproval.msg) [1]
* [GB/408/S](https://prodonrgov.sharepoint.com/can_permissioning/PR-01420_Internal_Only/FW_%20ApplicationforCAapproval.msg) [1]
* [GB/420/S](https://prodonrgov.sharepoint.com/can_permissioning/PR-01420_Internal_Only/ApplicationforCAapproval.msg) [2]

1. This report presents the basis of the regulatory decision by ONR, as Great Britain competent authority for the transport of Class 7 (radioactive material) dangerous goods, to approve the design renewal.

# Background

1. In the case of each application the material design is a sealed capsule containing cobalt-60. GB/343/S Rev.5) (capsule reference: R2089) and GB/408/S (Rev.8) (capsule reference: R2010) were issued in November 2018 and expire at the end of November 2023. GB/420/S (Rev.4) (capsule reference; R18500) was issued in March 2019 and expires in March 2024.

# Assessment and Inspection Work Carried out by ONR in Consideration of this Request

1. There are no changes to the designs. The application contains minor updates to supporting documentation.
2. This is a non-fissile renewal and there are no dose rate requirements for special form radioactive material. Therefore, criticality and radiation shielding assessments were not required.
3. We conducted an inspection of the REVISS Services (UK) Ltd management system in March 2023 [3] ([IR-52369](https://wired.crm11.dynamics.com/main.aspx?appid=58b7bb57-c806-ec11-b6e5-00224841dad4&pagetype=entityrecord&etn=can_inspection&id=6246d868-f83c-43dd-8d34-610e7ddad3e6)), which did not identify any areas of concern. On this basis, no inspections were required to support these approvals.
4. Our previous safety case requirements assessments in 2018 and 2019 did not identify any areas of concern. As there are no changes to the safety case and the above inspection sampled the management system, a safety case requirements assessment was not conducted.
5. We carried out a proportionate assessment of the transport safety case contained in the application. Engineering aspects of the safety submission were sampled. This targeted changes to regulatory requirements since the last ONR approval.
6. Our assessment was undertaken in accordance with the requirements of ONR How2 Business Management System and its associated guidance.

## Engineering Assessment [4] ([AR-01281](https://prodonrgov.sharepoint.com/can_assessment/AR-01281_150E4356AFE04BD98C9538F432FEB09A/GB%20420%20S-96%2c%20GB%20343%20S-96%20and%20GB%20408-%20Revvis%20Sevices%20%28UK%29%20Ltd%20-%20Engineering%20Assessment%20Note.docx))

1. I reviewed the supporting documentation for the application. No significant changes were identified since the previous ONR approval. I also considered the changes in certain external factors (such as regulations, engineering standards etc.).
2. I reviewed the standards adopted to underpin the performance requirements of special form radioactive material. The standards utilised identify expectations for beyond design life substantiation. This includes a requirement for re analysis to determine the impact of degradation mechanisms. No regulatory queries were raised.
3. I was satisfied that the applicant has adequately addressed ageing management and concluded that the special form radioactive material designs continue to meet the safety requirements specified in the transport regulations.
4. I recommend, from an engineering perspective, the transport competent authority approve the special form radioactive material designs by revising the certificates.

# Matters Arising from ONRs Work

1. No matters were raised.

# Conclusions

1. Based on the work we carried out, I am satisfied that the safety submission from the applicant is adequate and meets applicable regulatory requirements.

# Recommendations

1. I recommend the transport competent authority approve the special form radioactive material designs by revising the certificates to:
   * + GB/343/S (Rev.6)
     + GB/408/S (Rev.9)
     + GB/420/S (Rev.5)

# References

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| --- | --- |
| [1] | REVISS Services (UK) Ltd, “Application for Approval ( GB/343/S & GB/480/S) - REF: ONRW-2019369590-4098”. |
| [2] | REVISS services (UK) Ltd, “Application for Approval (GB/420/S) REF: ONRW-2019369590-4096”. |
| [3] | ONR, “Transport Compliance Inspection - REVISS services (UK) Ltd - REF:IR-52369”. |
| [4] | ONR, “Engineering Assessment Note - Special Form Design Approval - GB/343/S-96, GB/408/S & GB/420/S”. |
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