



In Confidence

Bold Business Centre, Bold Lane
St. Helens, Merseyside WA9 4TX, UK

Tel: 01925 290006
Fax: 01925 229315

Email: askiras@iras.ltd.uk
Web: www.iras.ltd.uk

Your Reference:
Our Reference: ENV/E04003/LET/046(1)

Mr G Wilkinson
Minor Works Team Manager
Design Services Unit
The University of Manchester
Oxford Road
Manchester
M13 9PL



02 July 2008

Dear Gary

SUMMARY OF WORK DONE IN COUPLAND 1 AND ADJACENT BUILDINGS

Further to my meeting with Trevor Humphreys and Paul Williams on 16 April 2008, we prepared a plan of those areas within Coupland 1 ("the project area", referring to your project 3639), which were fully surveyed and decontaminated during 2004/2005 prior to refurbishment. We reported this by attaching marked plans to our project letter (ENV/E04003/LET/039) which confirms that radiological restrictions are removed from the project area.

The remaining action was to review information on previous survey and decontamination work which had been undertaken in Coupland 1 and adjacent buildings, by NNC Limited, in the period from 1999-2002. Whilst we have reviewed available reports and related information, this review has been complicated by the following difficulties:

- the work was undertaken by two groups within NNC (Harwell and NIRAS)
- work was undertaken for both the University and Manchester Museum, and certain work involved both
- One project was managed as a separate entity, as it was funded via a University Contractor (Hayvern Limited)
- NNC documentation used three referencing systems
- There is some confusion on building terminology and room references.

This letter reports our findings in relation to identifying areas which have been surveyed and decontaminated.

1. Identified Projects

Table 1 summarises, to the best of our knowledge, the radiological and decontamination projects which have been undertaken by external contractors employed by either the University or the Manchester Museum, in relation to Coupland 1 and associated buildings.

Company No: 2306753 Registered in England and Wales
Registered Office: 241a St. Helens Road, Leigh, Lancs. WN7 3UB

VAT Registration No: 519 5606 32

In Confidence

Table 1 Radiological projects related to Coupland 1 and associated buildings

Project Ref	Project Description	Service Provider	Scope of Project
(not known)	Decontamination of Rutherford's Lab etc.	NNC(Harwell)	Decontamination of Coupland 1 Rm 10 and conditioning of waste for disposal
E2000002	Manchester Museum	NNC(NIRAS)	Svy of Coupland 1, Annex, Old Dental Hospital, Drainage System, Removal of contam
E2000009	Coupland 1	NNC(NIRAS)	Decon of C1 2.62 & 2.63 extended to Drigg Disposal from earlier waste
E02010	Manchester Museum (Hayvern)	NNC(NIRAS)	Decon in Coupland 1 Basement, Room CB.09
E04003	Coupland 1 Refurbishment	IRAS Limited	Survey and Decontamination of Coupland 1 Refurbishment Area

2. Key Points

2.1 Initial Decontamination of Coupland 1 Room 10

NNC Harwell Office undertook the decommissioning of Rutherford's Lab, Room 10, which had been identified as being most contaminated by surveys presumably undertaken by The University. The waste was put into steel drums, with the intention of disposing of the Low Level Waste to the LLW Repository at Drigg. However, the waste was not categorised and packed in accordance with the LLWR requirements.

The University RPS put Estates in touch with IRAS (who had recently been acquired by NNC, and formed a group called NIRAS), to resolve this (see project E2000009).

2.2 E2000002

NNC (NIRAS) undertook the survey of Coupland 1, including basement areas, the Annexe and the Old Dental Hospital. Table 2 summarises the key reports from this work.

Table 2 Reports

Document Ref	Date	Authors	Subject	Key points
MTC/2000/051 Issue 1		S Adams	Contam Survey of Coupland 1, Annexe and Old Dental Hospital	Identified contam in areas of the listed buildings, rooms shown in appended plans
MTC/2000/051 Issue 2	25/09/2000	S Adams	as above	Addendum updates report with data for Museum Psychology escape stair well and toilets
MTC/2000/058 Issue 1	30/06/2000	S Adams	Residual contamination survey of marked area in Coupland 1	Survey of specific locations where Hayverns would disrupt building fabric
MTC/2000/115 Issue 1	26/10/2000	S Adams	Contamination survey of drains and sumps surrounding Annex	confirmed absence of contam at locations monitor (plan of locations missing)
MTC/2001/005 Issue 1	30/01/2001	B Frith	Final Rpt for the Decommissioning of Coupland 1, Manchester University	Gives radiological conditions after decon of areas identified in MTC/2000/051 - restrictions remain

In Confidence

It is noted that report MTC/2000/051 Issue 2 (attached) contains plans which indicate which areas were surveyed.

This work was then extended to the decontamination of certain areas, and the assessment of areas where the Museum contractor (Hayvern) wished to disrupt the building fabric.

In addition, the work involved the monitoring of demolition rubble generated during the demolition of the Annex. It is not clear exactly what was demolished.

The radiological conditions after decontamination are reported in MTC/2001/005, which concludes that whilst these areas were radiologically acceptable for occupation, as the surveys were limited in nature, there was the potential for any work which disrupted the fabric of the building to result in significant exposure, due to undetected contamination. As such radiological restrictions on any intrusive work were put in place in all these areas.

2.3 E2000009

This project involved NNC (NIRAS) undertaking the decontamination of Coupland 1 Rooms 2.62 and 2.63, and was subsequently extended to cover arrangements to assess the original waste from Room 10 in accordance with LLWR requirements, and the shipment and disposal of that waste to LLWR.

A number of reports were issued in relation to this project, and are summarised in Table 3.

Table 3 Project Reports and Letters.

Document Ref	Date	Authors	Subject	Key points
E2000009/LET/01	26/01/2001	G.W. Willets	Proposal for decontamination of Coupland 1 rooms 2.62 & 2.63	
C5952/0013 MTC/01/024	05/04/2001	S.M. Adams	Final Report for the Decommissioning of Rms 2.62 and 2.63, Coupland 1	Identified contamination removed. Potential for residual contamination noted, and radiological restrictions remain for intrusive work
E2000009/LET/05	11/04/2001	S.M. Adams	Waste Drum Inventory	
C5952/0013 MTC/01/026	09/04/2001	S.M. Adams	Estimation of Drum Inventory	Quantified waste from G54, G55, CB05, CB10, CB09, 2.52, 2.53, C.1.10, and 2.62, 2.63
JHD/VM	05/09/2002	J. Duffy (Estates)	Coupland 1 - Decontamination	Requests clarification by NNC on areas of concern
E2000009/LET/26	08/10/2002	S.M. Adams	Coupland 1 - Decontamination	NNC response to letter from John Duffy

2.4 E02010

This project involved the decontamination of Coupland 1 basement room CB.09. We have been unable to identify any report resulting from this, but project letters confirm the work was undertaken between July 2002 and March 2003.

In Confidence

3. Conclusions and Recommendations

In conclusion, any intrusive work can proceed without any radiological restriction in the project area of Coupland 1 (ENV/E04003/LET/039), where full survey and decontamination has been undertaken.

In the remaining areas of Coupland 1 (i.e. those outside the refurbishment areas), the Old Dental Hospital, and whatever part of the Annex that still stands, radiological restrictions remain in place on any work which disrupts the fabric of the building. This was agreed with the Health & Safety Executive, during correspondence in the period September / October 2000.

The work which has been undertaken and summarised in this letter, shows there are reasonable grounds to suspect that residual contamination is present in areas in Coupland 1 basement, the Annex and the Old Dental Hospital.

As a result, it is recommended that in those areas where the restrictions apply, any intrusive work the University wishes to undertake is accompanied by a radiation protection technician, who will monitor the required areas prior to sampling. You should, in the first instance, contact the University Radiation Services Unit (formerly RPS), to arrange this support. If they are unable to resource this work, we would be pleased to assist.

The above is largely consistent with that which I reported to the meeting; that several areas in Coupland 1 etc. had been surveyed and where contamination was identified this had been decontamination. The fact that the buildings were either occupied, fully furnished or used as a store, meant that these surveys can in no way be considered complete, and the need for restrictions on intrusive work was identified. These restrictions were only lifted in the recent Coupland 1 refurbishment, in that specific area, where IRAS had undertaken a complete stripping of that area, monitored and decontaminated.

The only inconsistency between my findings and what I reported to the meeting is that during the meeting I referred to monitoring and removal of contamination in Coupland 3. I have found no evidence that this took place, or any suggestion that this building may be contaminated.

Yours sincerely



Andrew J. Frith BSc(Hons), MInstP, CPhys
Principal Consultant Physicist

Email: andrew.frith@iras.ltd.uk

Enc. Copy of Report MTC/2000/051 Issue 2