

From: servicedesk@ansto.gov.au
Sent: Tuesday, 28 September 2010 8:52 AM
To: OHSS
Subject: Event Notification - Event Number 27342

10/388

Event Notification Email

~~An event has been lodged. Please review and track.~~

Event Number: 27342

Raised By: [REDACTED]

Date and Time of the Event:: 27/09/2010 8:30:00 AM

1. What did or could have occurred? (Event description - what, where, when, how, did SOSS attend, etc? - please write as a story/narrative) : While [REDACTED] was dispensing the final 2 production customer order vials yesterday for Yttrium batch 123945; Operator [REDACTED] hit the end of the pipette against the neck of one of the 10 ml vials and a few drops of the final product was spilt on the glovebox floor in the vicinity of the Pipette dispensing station.

2. Describe action taken immediately as a result of the event?: I was immediately notified and in the presence of Health Physics, I proceeded with the assistance of Operator [REDACTED] to transfer a lint free cloth containing ethanol and cleaned up the glovebox cell floor where required with no traces remaining anywhere as it was contained immediately within the confined area it existed in originally. The remaining volume of the final product was measured and it was determined that the volume remaining was not altered.

3. Other information you think is important for us to assess the Incident and reduce the risk of re-occurrence: The glovebox was monitored as well as specific EPD's issued to the Yttrium operators yesterday as part of the ALARA principle carried out on the Yttrium manufacturing process and all results were recorded as per normal without any discrepancies.

Names of People Involved: [REDACTED], [REDACTED], [REDACTED] and [REDACTED].

Location of Event: Room 0099 at the Yttrium Production area.

Contact Telephone Number (If known ie: mobile of contractor): [REDACTED]

Radiological Facility: False

Offsite Medical Treatment: False

OHS: True

Plant & Equipment:

Abnormal Occurrence: False

Environmental Issue: False

Supervisor: [REDACTED] **Nominated Individual:**

Request 27342 Details

Take Over Request No. 27342		Take Action
Request Title		Ref
Event Notification Form		
Customer Details		
Customer	Organization	
	ANSTO Health	
Location	Telephone	
Event Details		
Date and Time of the Event:		
27/09/2010 8:30 AM		
1. What did or could have occurred? (Event description - what, where, when, how, did SOSS attend, etc? - please write as a story/narrative)		
full view		
<p>While [REDACTED] was dispensing the final 2 production customer order vials yesterday for Yttrium batch 123945; Operator [REDACTED] hit the end of the pipette against the neck of one of the 10 ml vials and a few drops of the final product was spilt on the glovebox floor in the vicinity of the Pipette dispensing station.</p>		
2. Describe action taken immediately as a result of the event?		
full view		
<p>I was immediately notified and in the presence of Health Physics, I proceeded with the assistance of Operator [REDACTED] to transfer a lint free cloth containing ethanol and cleaned up the glovebox cell floor where required with no traces remaining anywhere as it was contained immediately within the confined area it existed in originally. The remaining volume of the final product was measured and it was determined that the volume remaining was not altered.</p>		
3. Other information you think is important for us to assess the Incident and reduce the risk of re-occurrence		
full view		
<p>The glovebox was monitored as well as specific EPD's issued to the Yttrium operators yesterday as part of the ALARA principle carried out on the Yttrium manufacturing process and all results were recorded as per normal without any discrepancies.</p>		
Who was involved, affected or present?		
Names of People Involved (list if multiple)		

full view

Contact Telephone Number of affected person, etc (if known ie: mobile of contractor)

Location of Event

Room 0099 at the Yttrium Production area.

Did the event involve any of the following:

☒ Radiological Event - Personal Contamination, Unplanned Personal Exposure, Unplanned Environmental Exposure, Abnormal Dose Rates in an Area

☒ Offsite Medical Treatment - Paramedical Services, NSW Ambulance Services

☒ OHS - Injury/Illness, Near Miss, Hazard, Exposure - Chemical/Biological

☒ Plant & Equipment

☒ Abnormal Occurrence

☒ Environmental Issue

Supervisor

Actions & Solutions

Tasks Manage CMDB Transactions Budgets Dates Text

Request Tasks

Task No	Task Title	Authoriz	Order	A
372893	GM Notification	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
372889	Supervisors Investigation	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
372894	OHSS Notification Task	<input checked="" type="checkbox"/>		<input type="checkbox"/>
372884	OHSS Messaging Task	<input checked="" type="checkbox"/>		<input type="checkbox"/>
372885	QSERP GM Notification Email	<input checked="" type="checkbox"/>		<input type="checkbox"/>
372892	Environmental Officer Notification	<input checked="" type="checkbox"/>		<input type="checkbox"/>
372891	Radiological Event Notification	<input checked="" type="checkbox"/>		<input type="checkbox"/>

Review Open Filter Columns

Take Action Internal Defer Save Complete Cancel



OHSE Management - Event Reporting

Event Report Form

Completion Instructions

Minor Event:

Complete Section 1 – 3 (include Section 5 if actions are identified)

Moderate Event:

Complete Section 1 – 5 (Section 6 to be completed by General Manager / Head of Institute)

Major or Severe Event:

Complete Section 1 – 5 in conjunction with QSERP. (Section 6 to be completed by General Manager/ Head of Institute)

Section 1 - Event Number and Personnel Details

Infra Event Number (Generated by the Infra Event Notification Form)	27342
Event Report Number (As supplied by QSERP Admin)	372889

Affected Person Details (if applicable)

Name – Surname:	[REDACTED]
Name – First Name/Given:	[REDACTED]
Division & Section:	ANSTO Health
Line Manager/Supervisor Name:	[REDACTED]
General Manager/Institute Head Name:	[REDACTED]
Health and Safety Representative	[REDACTED]

Others present/involved: (Surname, First Name)

[REDACTED]

Time and Date of the Event

Date of the event:	27 / 09 / 2010
Time of the event:	08 / 30 / 00

Section 2 - Event Location

<input checked="" type="checkbox"/> Building <input type="checkbox"/> Hut <input type="checkbox"/> Substation	<input type="checkbox"/> External (ie outside a building) <input type="checkbox"/> Offsite <input type="checkbox"/> Sport	<input type="checkbox"/> Site-wide <input type="checkbox"/> Not applicable
Location number (eg Building number, car park):	23A	
Room Type (eg office, lab):	Yttrium Glove Box	
Room number etc, if available:	099 Yttrium manufacture	
Other:		

Section 3 - Event Categorisation

Event Summary (short description of event)

While [REDACTED] was dispensing the final 2 production customer order vials yesterday for Yttrium batch 123945; Operator [REDACTED] hit the end of the pipette against the neck of one of the 10 ml vials and a few drops of the final product was split on the glovebox floor in the vicinity of the Pipette dispensing station.

Event Type - Category/(ies) Please select relevant event type(s)

- | | | |
|--|--|---|
| <input type="checkbox"/> Injury/Illness – refer to A | <input type="checkbox"/> Hazard Notification | <input checked="" type="checkbox"/> Plant & Equipment |
| <input type="checkbox"/> Environmental – refer to B | <input checked="" type="checkbox"/> Near Miss | <input checked="" type="checkbox"/> Abnormal Occurrence |
| <input type="checkbox"/> Radiological Event – refer to C | <input type="checkbox"/> Exposure: Chemical & Biological | |

Event Severity - Category Please select relevant category. Confirmed by QSERP in 1 working day. [Link to Event Response Matrix](#)

- | | | |
|---|--|-----------------------------------|
| <input type="checkbox"/> Insignificant – only Infra required | <input type="checkbox"/> Moderate – local event | <input type="checkbox"/> Major * |
| <input checked="" type="checkbox"/> Minor – complete to end section 3 | <input type="checkbox"/> Moderate – cross divisional | <input type="checkbox"/> Severe * |
| Complete to end section 6 | | * Both require QSERP involvement |

A(i) - Injury event details (if applicable)

In the event of an injury/illness, the affected person must report to the ANSTO Health Centre if they have not already done so

1. Nature of Injury or illness (e.g. burn, laceration, sprain etc)

2. Was the injury incurred while travelling to / from work?

☐ Y ☐ N

Details:

A(ii) - Outcome details (if applicable)☐ No Treatment☐ First Aid Injury (FAI)☐ Medical Treatment Injury (MTI)☐ Lost Shift Injury (LSI) (ie incompleteness of a shift by injured party following an injury)☐ Fatality**B - Environmental event details (if applicable)**

1. Nature of Impact

2. Aspect Affected

3. Impacting Agent

4. Quantity (how much?)

5. Area (how big?)

6. Duration (how long?)

7. Licence Non-Compliance

8. Licence Reference

9. Further Details

Please select item from list

Please select item from list

Please select item from list

☐ Y ☒ N**C - Radiological event details (if applicable)** Please attach relevant Health Physics Report**1. Exposure / Potential Exposure**

a) Was this an abnormal external radiation exposure (whole body, extremity or other) event?

☐ Y ☒ N

Details:

b) Was this an internal exposure (ingestion or Inhalation) or potential internal exposure event?

☐ Y ☒ N

Details:

2. Contamination / Potential Contamination

a) Was this a personal contamination (skin/body or clothing) event?

☐ Y ☒ N

Details:

b) Was this a contaminated wound?

☐ Y ☒ N

Details:

c) Was this abnormal area contamination?

☐ Y ☒ N

Details:

3. Release / Potential Exposure

a) Was this an abnormal release of radioactivity (liquid, gaseous, stack release, etc)?

☐ Y ☒ N

If "Yes", was there a release external to facility or site?

Details:

b) Detection of abnormal dose rates in an area?

☐ Y ☒ N

	Details:
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D - Safety Assessment Committee / Safety Analysis Report

Did the incident occur while the person was doing work covered by a SAC/SAR?

☒ Y ☐ N

If yes, please insert SAC/SAR Approval No:

For minor event sign off only

Are any actions required?

☒ Y

☐ N

If yes, complete section 5

Are any additional reports attached?

☒ Y

☐ N

If yes, complete table in section 4

Other comments

Minor event report close out

Supervisor Signature: 

Date: 29 / 09 / 2010

Minor event -- a copy of this report (and any supporting documentation) MUST be sent to QSERP (eventreports@ansto.gov.au) or faxed to 9717 9266) on completion.

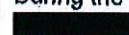
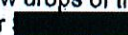
Section 4 - Event Investigation

Complete for Moderate, Major and Severe Events

Consider the following during your investigation: systems and procedures in place; supervision and training of staff; Material Safety Data Sheets; time of day event occurred; resources available; Health Physics Report and other technical reports. See Investigating Events Guide for further guidance

Detailed description of the event

What is the injury or damage? Or if a near miss occurred, what was the potential outcome?

During the Final Production Dispensing of the finished goods for Yttrium Batch 123946 at approximately 08:45am; Operator  was dispensing the 10th or 11th customer order vial when he unintentionally spill a few drops of the Yttrium fine product on the glove box floor within the close proximity of the pipette dispensing station. Operator  immediately stopped and informed me (Yttrium Production Supervisor) who was present during the entire production process; of the very minor spill.


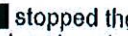
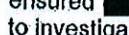
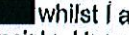

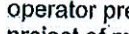
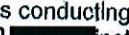

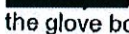
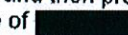

What happened immediately before the event?

The Yttrium 90 process was completed and the final stages of dispensing the finished goods was being undertaken.

What occurred / didn't occur that allowed this event to take place? Consider, equipment, plant, material, environment, management, and people; the sequence of events (timeline); and the outcome?

Whilst undertaking remote handling via aglove box and using the remote pipette sytem for dispensing, a few drops were accidently spill on the dispensing station drip tray and platform within the glove box.

Detail your findings and recommendations

 was immediately notified and in the presence of Health Physics, then  stopped the process and ensured  moved back along with  whilst I and  (HPS) took a close look into the glove box to investigate the severity of the spill using the STAR principle. Upon analysis and in the presence of both assigned second operator present;  and the Health Physics Surveyor (Health Physics Surveyor  was conducting his project of measurement of relevant dose attributed throughout the entire Yttrium 90 manufacturing process)  instructed  to take a lint free white cloth from the draw; fold in 4's and place ethanol onto it and then proceed to place it in the glove box entry. I then placed my hands within the glove box and in the visible presence of , proceeded to wipe the spill drops of Yttrium 90 within the confinements of the contained area it was restricted to which was within the pipette dispensing station. The area was immediately cleaned with no unusual or and extra dose being recorded to any of the individuals present including  The glovebox was monitored as well as specific EPD's issued to the Yttrium operators on day of manufacture as part of the ALARA principle carried out on the Yttrium manufacturing process and all results were recorded as per normal without any discrepancies.

What are the causes of the event? Provide details and justification

Direct cause (Immediate events or conditions that caused the incident e.g. a slip or a trip on an uneven surface)
Remote handling whilst dispensing the final yttrium product using the pipette system in the glove box.

Contributing / Indirect cause (Events and conditions that collectively with other causes increased the likelihood of an incident but individually did not cause the incident e.g. the fact that a package was being carried at the time of the slip / trip
New personal undertaking training and becoming more familiarised and competent with the process.

Root cause (Factors that if corrected, would prevent recurrence of the same or similar incidents e.g. a lack of maintenance of pathways)

Having an automated dispensing system would be ideal and would eliminate the risk, but this has been tried and was very difficult to implement and had more issues with set up, product waste and the settling out of the microspheres during dispensing caused dispensing errors.

Table of all relevant reports (eg Personal Contamination Report, Investigation Reports, Root Cause Analysis, etc)
Email copies of all documents to QSERP at eventreports@ansto.gov.au

Type of Report	Author	Approved by	Date Approved
HPS log	HPS Officer		27 / 09 / 2010
HPS log	HPS Office		28 / 09 / 2010
			dd / mm / yyyy
			dd / mm / yyyy
			dd / mm / yyyy
			dd / mm / yyyy

Investigation completed by:	Name: Not Applicable - not required for "Minor" event Email address:	Date: dd / mm / yyyy
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Section 5: Action Report Form

Responsible person must sign off acceptance of an action (via electronic signature or a hand-written signature)
Hierarchy of Controls: 1. Elimination 2. Substitution 3. Isolation 4 Engineering 5. Administrative 6. PPE

No	Recommended Actions <small>How can we prevent a re-occurrence? Actions must be Specific, Measurable, Achievable, Reasonable, Time bound</small>	Hierarchy of Controls	Estimated Completion Date	Responsible Person	Signature
1	Remote handling training	Administrative Controls	30 / 10 / 2010		
2	continued and ongoing Competency Training on Y90	Administrative Controls	30 / 10 / 2010		
3		Select....	dd / mm / yyyy		
4		Select....	dd / mm / yyyy		
5		Select....	dd / mm / yyyy		
6		Select....	dd / mm / yyyy		
7		Select....	dd / mm / yyyy		
8		Select....	dd / mm / yyyy		
9		Select....	dd / mm / yyyy		
10		Select....	dd / mm / yyyy		

Have actions been recorded in or linked to ANSTO Action Tracking Spreadsheet? ☐ Y ☐ N

Section 6: General Manager / Head of Institute Close Out

Lessons learnt at divisional level

Other comments


Is a follow-up investigation required? ☐ Y ☒ N

If yes, who will be the lead investigator?

[Redacted]

30/9/10

Event report close out (to be actioned when the event report is finalised and complete)

General Manager/Head of Institute Signature: 	[Redacted]	7/10/10	Date: dd / mm / yyyy
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A copy of this report (and any supporting documentation) **MUST** be sent to QSERP (eventreports@ansto.gov.au or faxed to 9717 9266) on completion.



Approval Details

Request

You have been nominated as the supervisor for this event. Please Accept this task however if you are not the correct person press "Reject" above to escalate the issue to your local GM.

If you accept, and if an investigation is required, please complete the Event Response Investigation form Docushare No: AF-2582. The link to the form is available at the top of this form.

Supervisors Only: Prior to clicking "Accept or Reject" please click on the orange link to open an Event Response Investigation form Docushare No: AF-2582 in order to complete the investigation.

Event Number 27342

Title Event Notification Form

Requestor

Date and Time of the 27/09/2010 8:30 AM

Event:

1. What did or could have occurred? (Event description - what, where, when, how, did SOSS attend, etc? - please write as a story/narrative)

While [REDACTED] was dispensing the final 2 production customer order vials yesterday for Yttrium batch 123945; Operator [REDACTED] hit the end of the pipette against the neck of one of the 10 ml vials and a few drops of the final product was spilt on the glovebox floor in the vicinity of the Pipette dispensing station.

2. Describe action taken immediately as a result of the event?

I was immediately notified and in the presence of Health Physics, I proceeded with the assistance of Operator [REDACTED] to transfer a lint free cloth containing ethanol and cleaned up the glovebox cell floor where required with no traces remaining anywhere as it was contained immediately within the confined area it existed in originally. The remaining volume of the final product was measured and it was determined that the volume remaining was not altered.

3. Other information you think is important for us to assess the incident and reduce the risk of re-occurrence

The glovebox was monitored as well as specific EPD's issued to the Yttrium operators yesterday as part of the ALARA principle carried out on the Yttrium manufacturing process and all results were recorded as per normal without any discrepancies.

Names of People Involved (list if multiple)

[REDACTED], [REDACTED], [REDACTED] and [REDACTED].

Location of Event Room 0099 at the Yttrium Production area.

Contact Telephone [REDACTED]

Number of affected person, etc (if known ie: mobile of contractor)

Radiological Facility - False

Personal

Contamination,

Unplanned Personal Exposure, Unplanned

Environmental
Exposure, Abnormal
Dose Rates in an Area
Offsite Medical **False**
Treatment -
Paramedical Services,
NSW Ambulance
Services
OHS - Injury/Illness, **True**
Near Miss, Hazard,
Exposure -
Chemical/Biological
Plant & Equipment **False**
Abnormal Occurrence **False**
Environmental Issue **False**
Supervisor [REDACTED]
Nominated Individual

Linked Items**Objects**

(None)

Approval

Approval Number 372889
Title Supervisors Investigation Acceptance
Type Approval Default
Priority Default Priority
Customer [REDACTED]
Status Unspecified

Objects

(None)

History**Request #27342**

28/09/2010 8:50 AM - [REDACTED]

[Request Created]

Request #27342

28/09/2010 8:50 AM - [REDACTED]

[Request Forward Internally to Group (OHSS)]

Messaging Task #372884

28/09/2010 8:50 AM - [REDACTED]

[Task Created]

Messaging Task #372885

28/09/2010 8:50 AM - [REDACTED]

[Task Created]

Conditional Branching Task #372886

28/09/2010 8:50 AM - [REDACTED]

[Task Created]

Request Start Task #372887

28/09/2010 8:50 AM - [REDACTED]

[Task Created]

Request Start Task #372887

28/09/2010 8:50 AM - [REDACTED]

[Task Activated by [REDACTED]]

Request Start Task #372887

28/09/2010 8:50 AM - [REDACTED]

[Task Updated]

Request Start Task #372887

28/09/2010 8:50 AM - [REDACTED]

[Task Closed Immediately]

Closure Task #372888

28/09/2010 8:50 AM - [REDACTED]

[Task Created]

Customer Approval Task #372889

28/09/2010 8:50 AM - [REDACTED]

[Request Submitted]

Customer Approval Task #372889

28/09/2010 8:50 AM - [REDACTED]

[Approval Created]

Messaging Task #372890

28/09/2010 8:50 AM - [REDACTED]

[Request Submitted]

Messaging Task #372890

28/09/2010 8:50 AM - [REDACTED]

[Task Created]

Messaging Task #372891

28/09/2010 8:50 AM - [REDACTED]

[Task Created]

Messaging Task #372891

28/09/2010 8:50 AM - [REDACTED]

[Request Submitted]

Messaging Task #372892

28/09/2010 8:50 AM - [REDACTED]

[Request Submitted]

Messaging Task #372892

28/09/2010 8:50 AM - [REDACTED]

[Task Created]

Customer Approval Task #372893

28/09/2010 8:50 AM - [REDACTED]

[Approval Created]

Customer Approval Task #372893

28/09/2010 8:50 AM - [REDACTED]

[Request Submitted]

Task #372894

28/09/2010 8:50 AM - [REDACTED]

[Request Submitted]

Task #372894

28/09/2010 8:50 AM - [REDACTED]

[Task Created]

Messaging Task #372884

28/09/2010 8:50 AM - [REDACTED]

[Task Activated by [REDACTED]]

Messaging Task #372884

28/09/2010 8:50 AM - [REDACTED]

[Task Closed Immediately] Email sent to : OHSS

Messaging Task #372885

28/09/2010 8:50 AM - [REDACTED]

[Task Activated by [REDACTED]]

Messaging Task #372885

28/09/2010 8:50 AM - [REDACTED]

[Task Closed Immediately] Email sent to : [REDACTED]

Conditional Branching Task #372886

28/09/2010 8:50 AM - [REDACTED]

[Task Activated by [REDACTED]]

Conditional Branching Task #372886

28/09/2010 8:50 AM - [REDACTED]

[Task Closed Immediately]

Customer Approval Task #372889

28/09/2010 8:50 AM - [REDACTED]

[Approval Activated by [REDACTED]]

Customer Approval Task #372893

28/09/2010 8:50 AM - [REDACTED]

[Approval Activated by [REDACTED]]

Conditional Branching Task #372886

28/09/2010 8:51 AM - [REDACTED]

[Task Updated]

Conditional Branching Task #372886

28/09/2010 8:51 AM - [REDACTED]

[No Conditional Branching Task Conditions were met]

Customer Approval Task #372889

28/09/2010 8:51 AM - [REDACTED]

[Report Event Form - CUST APP Forwarded To Customer [REDACTED]]

Messaging Task #372890

28/09/2010 8:51 AM - [REDACTED]

[Task Closed - Redundant]

Messaging Task #372891

28/09/2010 8:51 AM - [REDACTED]

[Task Closed - Redundant]

Messaging Task #372892

28/09/2010 8:51 AM - [REDACTED]

[Task Closed - Redundant]

Messaging Task #372884

28/09/2010 8:52 AM - [REDACTED]

[Task Updated]

Customer Approval Task #372893

28/09/2010 8:52 AM - [REDACTED]

[Report Event Form - CUST APP Forwarded To Customer [REDACTED]]

Messaging Task #372885

28/09/2010 8:52 AM - [REDACTED]

[Task Updated]

Customer Approval Task #372889

29/09/2010 2:38 PM - [REDACTED]

[Approval Actioned by [REDACTED]]

Customer Approval Task #372889

29/09/2010 2:38 PM - [REDACTED]

[Report Event Form - CUST APP Forwarded To Customer [REDACTED]]

Customer Approval Task #372893

29/09/2010 2:40 PM - [REDACTED]

[Approval Actioned by [REDACTED]]

~~**Customer Approval Task #372893**~~

29/09/2010 2:40 PM - [REDACTED]

[Report Event Form - CUST APP Forwarded To Customer [REDACTED]]

Customer Approval Task #372889

29/09/2010 2:42 PM - [REDACTED]

[Approval Approved]

Task #372894

29/09/2010 2:46 PM - [REDACTED]

[Task Activated by [REDACTED]]

Task #372894

29/09/2010 2:47 PM - [REDACTED]

[Task Forward Internally to Group (OHSS)]

Customer Approval Task #372893

29/09/2010 6:14 PM - [REDACTED]

[Approval Approved]



Quality, Safety, Environment and
Radiation Protection

ARI Health Physics Log Book

Document Number

S-ROH-F-019

HP Office Location:	ARI
Date:	27th September 2010
Health Physics Surveyor(s):	██████████

Time (24hrs)	Location	Task Information	HPS Initials
05.50	Bld 23	HP SAR survey of Y90 production	██████████
07.30	Office	Instruments checks done (OK)	██████████
08.00	Bld 23	SCADA checks done (NTR)	██████████
08.40	Bld 23	HP walk through of wet lab. NTR	██████████
09.00	IHB,J/caves	Clear flasks	██████████
09.00	Gatri	HP weekly survey done (NTR)	██████████
10.00	Bld 23	HP SAR survey of Y90 production	██████████
11.30	Bld 23	HP routine survey of barrier and change rooms	██████████
12.00	J/Caves	Clear flask to go to IHB	██████████
12.45	IHB	Clear 1.2Tflask (empty) at IHB	██████████
13.20	Bld 23	Clear 2 x MM 710	██████████
13.30	Bld 23A	Sticky mats pulled up and gamma specked	██████████
14.00	Bld 23a	HP weekly survey done for QC labs (Nil contamination found)	██████████
16.45	Phone	Received a phone call from ██████████ at approx 1645 regarding my knowledge (of which I did not have any) of a possible personal contamination during the day and that he believed an employee had gone home wearing contaminated clothing. He requested HP to attend site at 6am on 28/9/2010. I received another phone call at 1910 asking if there was a HP surveyor on site to survey the Y90 lab. I told him there was not and was asked if someone could go in. I responded by telling ██████████ that I would have the conversation with my supervisor. I received a further phone call from ██████████ at 1951 and informed him that there would not be a surveyor onsite until 0730 on 28/9/2010.	██████████
13.00	J/Caves	Counted for 300 seconds on each side on the <u>White</u> system	██████████

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Custodian : Health Physics Surveyor

Approved Date 6 November 2009

Approved by : Radiation Protection Advisor, ARI

Page 1 of 4



Quality, Safety, Environment and
Radiation Protection

ARI Health Physics Log Book

Document Number
S-ROH-F-019

		Isotope Energy	Background	Side 1	Side 2	
		140.		169	45	
		159.		172	47	
		284.				
		364.				
		529				
16.00	R0127	HP changing of Tc-45 for I-123 production (gamma specked results are DAC = 1.40 E -03				RS

Sticky Mats		
Location	Isotope	Abundance(cps)
White barrier	Tc99m (140keV)	3
Blue barrier	Tc99m (140keV)	6
	Cr-51(320keV)	2
	I-131 (364keV)	1
QC	Tc99m (140keV)	9
	I-131 (364keV)	1
Dispatch	Tc99m (140keV)	0.37
Cell end	Tc99m (140keV)	10
	I-123 (159keV)	
	Tl-201 (167keV)	
	Cr-51(320keV)	
	I-131 (364keV)	5
Health Physics Surveyor:		Date:

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Custodian : Health Physics Surveyor

Approved Date 6 November 2009

Approved by : Radiation Protection Advisor, ARI

Page 2 of 4

Surveys					
Time	Location	Comments	Action Required		
			A/Sup	RPA	
11.30	Barrier and change rooms	NTR	N	N	
09.00	GATRI	Weekly survey. NTR	N	N	
Clearances					
Clearance Type	Certificate No.	Description	Dose Rate	Removable Contamination	
RCCC	109042	1.2T flask	1 μ Sv/h	<4Bq/cm ²	
RCCC	108995	2.4T flask	<1 μ Sv/h	<4Bq/cm ²	
RCCC	108999	1.2T flask, TE1013, S17-22, S17-23	440 μ Sv/h	<4Bq/cm ²	
RCCC	109043	1.2T flask	1.1 μ Sv/h	<4Bq/cm ²	
RCCC	101271	2 x MM 710	0.3 μ Sv/h	<4Bq/cm ²	

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Radiation Protection Advisor:	Reviewed:	Date:

Custodian : Health Physics Surveyor(s) - OHP	Approved Date : 6 November 2009	Page 4 of 4
Approved by : Radiation Protection Advisor, ARI		



Quality, Safety, Environment and
Radiation Protection

ARI Health Physics Log Book

Document Number

S-ROH-F-019

HP Office Location:	ARI
Date:	28 th September 2010
Health Physics Surveyor(s):	██████████

Time (24hrs)	Location	Task Information	HPS Initials
07.40	Office	Instruments checks done (OK)	██████████
08.00	Bld 23	SCADA checks done (NTR)	██████████
08.00	Office	Doing calculations for I-123 process (DAC = 1.40 E -03)	██████████
08.15	Bld 23	Survey of Y90 gloves. Highest reading of 6.9mSv/h. Refer Y90 run log folder	██████████
08.20	BLD 23	Conversation had with ██████████ regarding yesterday's calls from ██████████ regarding possible personal contamination. An employee had stated that the hand/foot monitor showed 16cps on his shoe and had successfully removed the contamination prior to leaving the lab area. This is an acceptable practice to undertake without reporting to HP.	██████████
08.30	Bld 23	Clear active waste	██████████
09.00	Dispatch	HP weekly survey done for dispatch (NTR)	██████████
09.15	Bld 23	Survey lead castle in waste area prior to transferring iodine pots. Mo99 x 2 lead pots already being stored in castle. Highest dose rate of 28 μ Sv/h at contact with lead caste adjacent to Mo99 pots. Ambient was <1 μ Sv/h.	██████████
09.45	IHB	HP weekly survey done (NTR)	██████████
09.30	Bld 23	HP walk through of wet lab. NTR. QC noticed a waste container in dry lab giving off 750 μ Sv/h. Removed approx 15 vials giving off the high dose rate and bagged. QC to place behind cells.	██████████
10.30	Opal	Run through of level 10 with ██████████	██████████
11.30	Bld 41	HP checks done for lab equipment (Rejected due to removable contamination)	██████████
12.15	IHB	Clearances at IHB. 4 x lead pots	██████████
13.00	Bld 23	Collect sticky mats and stack filter for gamma specking.	██████████
13.30	Bld 23	Survey of production labs. 500cps found on chair at cell face.	██████████

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Custodian	: Health Physics Surveyor	Approved Date 6 November 2009
Approved by	: Radiation Protection Advisor, ARI	Page 1 of 5



Quality, Safety, Environment and
Radiation Protection

ARI Health Physics Log Book

Document Number

S-ROH-F-019

		Cleaned down to 200cps removable. [REDACTED] is continuing to clean or cover. Refer to Production survey log.																									
13.00	J/Caves	Counted for 300 seconds on each side on the <u>white</u> system																									
		<table> <tr> <th>Isotope Energy</th><th>Background</th><th>Side 1</th><th>Side 2</th></tr> <tr> <td>140.</td><td></td><td>110</td><td>37</td></tr> <tr> <td>159.</td><td></td><td>969</td><td>461</td></tr> <tr> <td>284.</td><td></td><td></td><td></td></tr> <tr> <td>364.</td><td></td><td>56</td><td></td></tr> <tr> <td>529</td><td></td><td></td><td></td></tr> </table>	Isotope Energy	Background	Side 1	Side 2	140.		110	37	159.		969	461	284.				364.		56		529				
Isotope Energy	Background	Side 1	Side 2																								
140.		110	37																								
159.		969	461																								
284.																											
364.		56																									
529																											

Sticky Mats		
Location	Isotope	Abundance(cps)
White barrier		NTR
Blue barrier	Tc99m (140keV)	4.36
	Cr-51(320keV)	6.95
	I-131 (364keV)	0.26
QC	Tc99m (140keV)	5.94
	Cr-51(320keV)	1.04
	I-131 (364keV)	0.16
Dispatch	Tc99m (140keV)	1.49
	Cr-51(320keV)	0.31
	I-131 (364keV)	1.43
Cell end	Tc99m (140keV)	1.26
	I-131 (364keV)	0.61
Health Physics Surveyor:		Date:

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Custodian	: Health Physics Surveyor	Approved Date 6 November 2009
Approved by	: Radiation Protection Advisor, ARI	Page 2 of 5



Quality, Safety, Environment and
Radiation Protection

ARI Health Physics Log Book

Document Number

S-ROH-F-019

Uncontrolled in hard copy unless otherwise stated. Date Printed : 30-Sep-10

Custodian : Health Physics Surveyor

Approved Date 6 November 2009

Approved by : Radiation Protection Advisor, ARI

Page 3 of 5



Quality, Safety, Environment and Radiation
Protection

Health Physics Log Book

Document Number
S-ROH-F-039

Surveys					
Time	Location	Comments	Action Required	A/Sup	RPA
09.00	Dispatch	HP weekly survey done for dispatch (NTR)	N	N	N
09.45	IHB	HP weekly survey done (NTR)	N	N	N
13.30	Production Labs	HP weekly survey of area	N	N	N
Clearances					
Clearance Type	Certificate No.	Description	Dose Rate	Removable Contamination	
RCCC	109044	1.2T Flask	0.26 μ Sv/h	<4Bq/cm ²	
WOSR	S051102	Active waste	<1 μ Sv/h	<4Bq/cm ²	
WOSR	S052351	Active waste	5 μ Sv/h	<4Bq/cm ²	
WOSR	S051183-S051200	Active waste	75 μ Sv/h	<4Bq/cm ²	
RCCC	109046	2 x lead pots carrying activated material	100 μ Sv/h	<4Bq/cm ²	
RCCC	109045	2 x lead pots carrying activated material	110 μ Sv/h	<4Bq/cm ²	

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Health Physics Log Book

Document Number

S-ROH-F-039

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Reviewed:

Date:

