guideline

Hazardous Spills Management - North Shore Ryde

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Author Department	NSRHS HSDG Working Party
Contact (Details)	Dr A. Susie Mihailidou amihaili@nsccahs.health.nsw.gov.au
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Commitment

Northern Sydney Central Coast Health is committed to implementing control measures for management of hazardous substances within the workplace as per the NSCCHS Hazardous Substances policy, NSW Health Policy Directive PD2005_409 (NSW Health Workplace Health and Safety: Policy and Better Practice Guide) and NSW Health Hazardous Substances and Dangerous Goods in NSW Health - Guidelines for Safe Use. However in spite of these strategies, a hazardous substance spill, leak or uncontrolled release may still occur. These guidelines have been developed to provide information to staff that will allow appropriate management of hazardous spills and do not replace policy.

Legislative requirements

The NSW OHS Regulation, 2001 requires employers to ensure strategies are in place to control the use of hazardous substances in NSW workplaces. In regards to hazardous substances spills the Code of Practice for Control of Workplace Hazardous Substances, 1996 requires:

"Established emergency procedures, procedures for safe disposal of the substance and sufficient suitable personal protective equipment should be used, where appropriate, to enable the source of the release to be safely identified and contained."

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Spills in the workplace

The primary concern is to protect the health and safety of staff, visitors and the environment. No action should be taken during a spill or emergency response that directly or indirectly breaches this principle. The immediate actions of all personnel in the event of a hazardous spill must be understood before an incident occurs. Staff should put personal safety first:

- **Step 1**: Keep clear of a spill and use a risk management approach this may include evacuating the area;
- **Step 2:** Contact the relevant site Emergency Internal Response team;
- **Step 3:** Only staff trained in spills management to use the appropriate spill kit to ensure environmental contamination is minimised;
- **Step 4:** Where the hazards of the material and the correct clean-up procedures are known by trained staff, the spill can be controlled in cooperation with site Emergency Internal Response team by following written procedures provided for spill control;
- **Step 5:** An incident report must be completed and all Agencies notified as required.

Due to the wide range of hazardous or potentially hazardous materials used in the Health Service, each department, laboratory or work group must develop specific procedures depending upon the risks of the material they are using.

These guidelines should be used as the foundation for a spill response procedure developed specifically for the types of hazards your work entails. The relevant committees or personnel at each site will audit the development of the spill response procedures and implementation of spill kits on a regular basis.

Different kinds of spills will require different kinds of spill kits in order to manage the level of risk posed to staff. In some cases the spill kits will be very simple and in others specific items will be required. These Guidelines provide information on requirements to manage the following kinds of hazardous spills:

- Biohazard
- Cytotoxic
- Chemical
- Radioactive

1. Post Spill Management

- Following any kind of hazardous substance spill an incident report must be completed and all Agencies notified as required by NSCCH policies and legislation.
- If further improvements to OHS risks are identified these must be documented in the department's Hazard Register and managed accordingly.
- Safe Work Practices (SWPs)/Safe Work Method Statements must also be reviewed after an incident.
- Reorder and replenish used items from the Spill Kit, except cytotoxic Spill Kits these are sealed prior to use and not refillable.

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2. Staff Training

NSCCH Hazardous Substances Policy and the OHS Act 2001 require staff to be trained in the use of hazardous substances. The Department Manager is responsible for ensuring training is available for staff. Training regarding spills kits should include:

- A Safe Work Practice developed for the specific hazard
- Completion of all risk assessments for the substances used in the Department
- Location of spills kits
- Contents of the spill kit
- Use of the spill kit including dedicated spill kit instruction
- Spill protocols including evacuation and alert procedures
- Post Spill management and documentation

Managers and supervisors may attend Occupational Health and Safety Module 5 – Hazardous Substance Risk Assessment - through NSCCH Learning and Development to attain these skills. Further training in your department's spill kit can be provided from the supplier of the spill kit. Advice and support may also be obtained from the OHS Consultant at your site or by contacting the NSRHS Hazardous Substances & Dangerous Goods (HSDG) Committee via email: hsdg@nsccahs.health.nsw.gov.au.

3. Safe Work Practices/Safe Work Method Statements

Safe Work Practices (SWPs)/Safe work method statements (SWMS) are written documents that highlight the individual steps involved in performing a potentially hazardous procedure or task. Where possible, they should be kept simple and not exceed a single page. SWPs/SWMS should be reviewed at least every two years OR whenever an accident/incident associated with a SWP/SWMS occurs OR when changes occur in the workplace that could affect the safe work practice, eg introduction of new plant/technology, chemicals. Guidelines to develop SWPs/SWMS can be found in the NSCCH OHS&R Manual. Staff must be trained in the SWPs/SWMS for dealing with the specific spills and training must be recorded. SWPs/SWMS must be placed with or above the spill kit.

Generic Safe Work Practices/Safe Work Method Statements can be obtained from the Health Safety & Risk Management Unit (HSRMU) on the NSCCH Intranet site or the local OHS Consultant and laboratory-specific safe work practices on the Scientific Staff Council (SSC) site located at http://intranet01.nsahs.nsw.gov.au/intranet/area/scientificcouncil. Departments can then tailor those SWPs/SWMS to suit their department's spill kits. Sample SWPs are included in Appendix 1 of this document.

4. Biohazard Spills

Staff handling human or animal blood, tissues or body fluids and micro-organisms could potentially be exposed to a number of infectious agents. These guidelines complement the advice provided in "Standard Precautions" of the NSW Health Infection Control Policy PD 2007_036. Spills or accidental release of blood and body fluid or cultured microorganisms have the potential of infection or contamination and all spills should be reported to a Senior staff member immediately and an incident report must be completed. Advice can be sought from the Infection Control Department should personnel require assistance. The hazard of any spill of biological material can be minimized by performing all work on plastic-backed absorbent liner to absorb spills where appropriate. For laboratories handling genetically modified organisms, the Institutional Biosafety Committee should also be contacted.

Although the type of dedicated biohazard spill kit should be risk assessed, it may include the following items:

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- package or roll of paper towels
- autoclavable bag
- latex or nitrile gloves
- forceps for picking up broken glass

The Infection Control management as per NSW Health Infection Control Policy PD2005_247 is to wear Personal Protective Equipment (PPE), confine and contain the spill and mop up excess with paper towel, dispose into a clear plastic waste bag and deposit into yellow clinical waste bins. The floor is to be washed with neutral detergent and water or have carpet shampooed. Laboratory areas may, in line with a risk assessment, incorporate the components such as fresh 1% bleach or Viraclean may be incorporated to decontaminate surfaces and appropriate PPE as required. An example Safe Work Practice/Safe Work Methods Statement for Biological spills is included in Appendix 1, pages 10-13.

5. Cytotoxic Agent Spills

Cytotoxic drugs (CD) are used primarily in anti-cancer therapy as well as some other medical conditions and some Laboratory use. Occupational exposure to these drugs can potentially cause damage to the genetic material of those workers who are exposed. The exact amount of exposure that could be considered unsafe is still largely unknown and the long-term effects are only partly understood at present. Hence, it is vital that the safe handling of these substances and the various forms of contaminated waste generated from their use be understood and stringently practised (Refer to RNSH Cytotoxic Drugs and Related Waste Policy on the NSAH Intranet site).

As per the RNSH Cytotoxic Drugs and Related Waste Policy - 7.1 Cytotoxic Spills, the Nursing Unit Manager or Clinical Nurse Consultant must ensure that a complete Cytotoxic Spill Kit is available within close proximity to all patients receiving parenteral CD (Workcover Authority of NSW, Guidelines, 1995). In non-ward areas, Laboratory Managers should ensure that the cytotoxic spill kit is available within close proximity to the use of the substance. Additional kits are available from Oncology Pharmacy. The relevant Emergency Internal Response team should be notified immediately to assist with controlling the spill and an incident report must be completed. See example Safe Work Practice/Safe Work Methods Statement for Cytotoxic spills as per Appendix 1, pg 15.

6. Hazardous substances/chemical Spills

NOTE: A small spill may be just as dangerous as a large spill.

A hazardous substance is any material that can cause possible harm to people's health or safety and/or the environment while being used in the workplace. This includes the production, handling, storage, transport or disposal of the substance in the workplace. The substance may be solid, liquid, gas, pure or a mixture. Health effects may be immediate and short term—such as irritation to the skin or eyes, or corrosive burns—or long term, such as tumours, cancers, or damage to organs.

A Material Safety Data Sheet (MSDS) provides the information needed to allow the safe handling of hazardous substances used in the workplace. It is the duty of the manufacturer, importer or supplier of a hazardous substance to provide a current MSDS. The employer also has a duty to ensure MSDS are obtained and made accessible to employees. Employees need to consult the MSDS prior to handling hazardous substances. The Australian Safety and Compensation Council provides a publicly available database - the Hazardous Substances.

Information System (HSIS) (http://hsis.ascc.gov.au), which provides information on hazardous substances that have been classified in accordance with the Approved Criteria for Classifying

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Hazardous Substances [NOHSC:1008(2004] 3rd Edition and integrates the *List of Designated Hazardous Substances* [NOHSC:10005(1999)] with the current National Exposure Standards (NES) for atmospheric contaminants.

The majority of hazardous substance/chemical spills can be prevented or minimized by maintaining a clean and organised work area. The immediate actions of all staff in the event of a hazardous substances/chemical spill must be understood before an incident occurs. Actions may include evacuating the immediate area and notifying the relevant Emergency Internal Response team to cooperatively control the spill using the appropriate spill kit.

An incident report must be completed. The incident may need to be notified to WorkCover and the local OHS Consultant can provide advice. An example of a Safe Work Practice/Safe Work Methods for Hazardous substances/chemical spill is included in Appendix 1, page 17.

7. Radioactive Spills

Radioactive substances are used for diagnosis of many patient conditions, Nuclear Medicine imaging studies, for therapeutic purposes and in laboratories in various tests and procedures. The use of all radioactive materials in NSW is controlled by the Radiation Control Act 1990 and the Radiation Control Regulation 2003 of NSW, which are administered by the Radiation Control Section of the Department of the Environment and Conservation. These require that all persons using or possessing or selling radioactive materials, must be licensed, unless exempted, if they are students, in which case they must be supervised by a licensed person. Only appropriately trained persons can be licensed. Further, radioactive materials can only be used in registered premises, and can only be purchased with approval from the Radiation Protection Officer. This is so that a high degree of safety is maintained. Further information can be provided by contacting the RNSH Radiation Protection Officer.

It is necessary to have an appropriate spill kit available. This should contain some of the normal implements that chemical spill kits contain, as well as a quantity of non radioactive material of the same type as that which is radioactive – eg some non radioactive iodine if radioactive iodine is used. The type of dedicated radioactive spill kit may include the following items:

- Overshoes, Overalls, Gowns, Goggles, Gloves
- Detergent, Absorbent paper
- Sterile facewasher, Nail brush + soap
- Radiation signs, clear plastic bag, yellow bag
- Titanium Dioxide
- Potassium lodide
- Lugol's lodine For radioactive iodine only
- Sodium thiosulphate

There are certain reporting (within 48 hours) requirements and provisions in the Regulation for accidents or spills involving radioactive substances. For this reason, it is imperative that all spills of radioactive substances are **immediately** reported to the Radiation Protection Officer (RPO) as well as Emergency Internal Response team. The RPO is then able to gauge whether further reporting is necessary. An incident report must be completed and a Radiation incident form may also need to be completed. See example Safe Work Practice/Safe Work Methods Statement for Radioactive spills as per Appendix 1, page 19.

8. Disposal of substances following a spill

All unwanted chemicals, hazardous waste and hazardous spillage material must be disposed of in a safe manner as per guidelines of the Environmental Protection Authority. The costs incurred for disposal are charged to the individual Cost Centre as are the charges incurred for Fire Brigade

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Hazmat clean up. The process for disposal is outlined in the chemical disposal flyer (see Appendix 2). Contact your Environmental Services Manager on site to arrange collection by the contractor.

9. Risk Assessment for type of spill kit

The content and size of the spill kit required for a department should be considered through risk assessment in consultation with employees. The risk assessment should include the following considerations:

- The types of substances or agents that are used in the area
- The physical characteristics and maximum volume of materials being handled, their toxicity and potential for release to the environment
- Review Material Safety Data Sheets (MSDSs) for recommended spill control and need for personal protective equipment (PPE eg respirator, gloves, protective clothing)
- Is there a synergistic effect from the potential mixture created
- Could the spill be in or around water
- The likelihood and consequence of contents of the spill to contaminate persons or the environment
- Training in spill containment and use of PPE
- Spill response plan including evacuation procedures

This will assist in determining:

- The size and capacity of spill kits
- The types of components required for the spill kit
- Materials and components required to deal with the specific chemical hazards
- The containers utilised to dispose of specific spill products
- The potential for further effects from mixtures
- The need for further containment or isolation

10. Labelling and checking spill kits

Spill kits purchased from a supplier are to be labelled appropriately, stating the type of spill it has been designed to clean up. Each department is required to ensure clear labelling of spill kits with respect to the contents, type of kit and location as seen in Appendix 3. Each department is also to maintain the contents of the kit. The contents of spills kit are to be checked on a regular basis. How often the kit is checked will depend on the frequency of use. As a minimum spill kits are to be checked every six months as part of the Hazardous Substance Hazard Register inspection checklist. The checklist is also to be completed following the use of the kit. A list of contents of the kit is to be placed on the outside of the kit or clearly visible inside the kit with sign off and date of the checking of contents documented (see sample checklist - Appendix 4).

11. Details of Suppliers Spills Kits

A list of suggested suppliers of spill kits has been attached to be used as a guide but is not definitive. Spill kits may be purchased from a number of suppliers however the contents of the spill kit need to be assessed with reference to the nature of substances used in the proximity of the spill kit as per risk assessment completed. Generic spill kits may be used that have been prepared in consultation with potential users if they meet the needs of the substances identified in the department. Such kits should contain as a minimum: -

Personal Protective Equipment and tools such as:

- Gloves Risk assessed on types of substances used Latex /Nitrile as required
- Mask face and respirator and filter if required eg. Ammonia
- Eye protection Goggles, full face protection

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- Disposable impermeable gown / apron plasticised apron recommended, coveralls, shoe covers: disposable
- Neutral absorbent materials. Eg. spill pillows, granules, pads, booms
- Dust pan and brush/broom to collect waste
- Waste disposal bag or container as appropriate
- Labelling of disposed material

Such items may be currently in stock or may be purchased as individual items from the suggested suppliers noted below. Specific spill kits should be purchased for those areas of high risk. A breakdown of types of kits available is listed in Appendix 5.

Setons
 112 Christina Rd Villawood.
New South Wales 2163
Phone: 1800 65 1173
E-mail: seton aust@seton.com
Website: http://www.seton.net.au

Blackwoods
 Source Street Smithfield
 New South Wales 2164
 Fax: (02) 9203 0533
 Sales: (02) 9203 0111
 Website: http://www.blackwoods.com.au/indexbw.asp

United Biosciences

11 Spanish Crt. Carindale Qld 4152 or: PO Box 1516 Carindale QLD 4152 Phone: 07 3219 2964 Fax: 07 32192974 Mob: 0417 521772 E-mail: <u>sales@unitedbiosciences.com.au</u> Website: <u>http://www.unitedbiosciences.com.au/</u>

• Medtex

Po Box 380 Mount Waverley Victoria 3149 Phone: 03 9543 4800 Fax: 03 9543 4500 E-mail: <u>orders@medtex.com.au</u> Website: <u>http://www.medtex.com.au/pages/default.cfm?page_id=7378</u>

• Clean Room Garments

4 Carlotta street Artarmon, Sydney Phone: 02 9439 3622 Fax: 0294374351 Email: <u>sales@cleanroom.com.au</u> Website: <u>http://www.cleanroom.com.au</u>

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• Spill Station Australia

Matthews

1 Blackfriar Place Wetherill Park NSW 2164 Phone: 02 9725 5640 Fax: 02 9757 4249 Email: <u>sales@spillstation.com.au</u> Website: <u>http://www.spillstation.com.au</u>

The following are alternative suppliers of spill kits - NB: This list is not definitive, only suggestive:

- Crown Scientific <u>http://www.crownscientific.com.au/</u>
- Lomb Scientific <u>http://www.lomb.com.au/</u>
 - http://www.matthews.com.au/
- Envirosafe Australia <u>http://www.evaandassociates.com.au/</u>

12. References:

Northern Sydney Health Hazardous Substances Policy, 2001

Royal North Shore Hospital Cytotoxic Drugs and Related Waste Policy, Version 6 – May 2004

National Occupational Health and Safety Commission (NOHSC) HSIS

Occupational Health and Safety Regulation, 2001

Code of Practice for Control of Workplace Hazardous Substances, 1996

Purchasing Spills Kits, Motor Trade Association of Western Australia, Government of Western Australia

School of Chemistry, Faculty of Science, University of Melbourne

NSW Health Infection Control Policy PD2005_247

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Project Executive sponsors:

Ms Sue Shilbury General Manager

Ms Jo Uttley Acting DoN/Executive Manager

Project manager:

Dr Anastasia Susie Mihailidou Chair, Hazardous Substances & Dangerous Goods Committee

Working Party members:

Ms Louise Barker-Allner Ms Xanthe Easterbrook Mr Leslie Gibbs Dr A. Susie Mihailidou NSCCH Counter Disaster Manager NSCCH OHS Manager OHS Consultant Chair, NSRHS HSDG Committee

Contributions received from:

NSRHS Hazardous Substances & Dangerous Committee NSRHS Infection Control Committee RNSH Radiation Safety Committee RNSH NUM Ward 12A & Oncology CNC RNSH Laboratory Safety Officers Committee PaLMS RNSH Emergency Planning Committee HSRMU, OHS Division RNS Occupational Health & Safety Committee Ryde Occupational Health & Safety Committee RNS Quality & Risk Management Unit Ryde Incident & Risk Management Committee

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Document Owner:	Dr A. Susie Mihailidou	Authorised by	NSRHS Executive
Document author:	NSRHS HSDG Committee	Document Created:	November 2005
	Working Party		
Email:	amihaili@nsccahs.health.n	Last Modified:	27 th January 2009
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Appendix 1 - SAFE WORK PRACTICES/SAFE WORK METHODS STATEMENT FOR HAZARDOUS SPILLS

Task: Blood and E	Body Substa	nce/Pathology Spills	
Ward/Department: All		Date Revised:	July 2009
		Date for Next Review:	July 2014
	Hazards o Occupatio Contamin	f Task: onal exposure to blood or body s ation and infection with potentia	substance Ily infectious agents
502	Controls -	- Safety Rules	
	 Standard Personal gown, sir Where th Spill mat skin/much 	Precautions must be followed Protective Equipment is require ngle use, disposable gloves) here is risk of splashing, facial p erial to be handled in a manner osal membrane exposure	ed (apron/long sleeved rotection should be worn that prevents
		Steps of Task	
 Barricade area a Don personal pro Use appropriate Collect spill kit al spill Treat paper towe Place any laund placing in linen s Disinfect the are applying. Remove any be contaminated du Clean spill site coloured cleanir processing or dis Dispose of single Contact the staff Replenish used in 	iffected and response of equipment device to remon and confine and els/contaminate ry items soake kip a using approp inch covering of with neutral d ing equipment, spose of single e use personal int report and d health nurse in items from spil	strict traffic around spill area nent (PPE) by broken glass/sharps to prev contain spill by covering with p ed disposable items as clinical v d with blood and body substant briate disinfectant, ensuring the or any items in the vicinity to er become contaminated during t letergent followed by appropria send contaminated articles (in use cleaning cloths in clinical v protective equipment in clinical ocument in Hazard Register. f there has been exposure of sta l kit.	ent injury aper towels to absorb bulk of vaste ces in a leak proof bag before re is no splash or spray when nsure that they have not been the cleaning process. ate disinfectant using Yellow e. mop head and cloths) for vaste waste
 For spills on Soft F Spills on fabric such Soak up as much Remove soft furrout Contact Enviror cleaner as soon and the spilt mate 	urnishings ar as carpet and h of the spill as hishings from g mental Servic as possible. erial is contain	nd Carpet soft furnishings should be man possible using disposable pap general use for professional clea ces to shampoo carpet or up Ensure that the soiled area is ed.	aged as follows: er towels. ining, if required. pholstery using an industrial segregated from other areas

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Task: Spills inside Biological Safety Cabinets						
Ward/Departmen	Ward/Department: Laboratories Date Revised: July 2009					
•		Date for Next Review:	July 2014			
	Hazards of Task: ■ contamination wi animal or microb	ith potentially infectious materia	al from human,			
	Controls – Safety	Rules				
 Controls - Safety Rules Personal Protective Equipment is required including apron, goggles and single use disposable gloves Ensure there are no splashes or sprays when applying suitable disinfectant detergent & water Spill material to be handled in a manner that prevents skin/mucosal membrane exposure 						
	Ster	os of Task				
1. Ensure that the	cabinet remains operat	ting to retain aerosols				
2. Cover the spill untouched for a	and immediate area with minimum of 10 minutes	with solution of a suitable disi s.	nfectant and leave			
3. Disinfect gloved hands, remove protective gloves and dispose into contaminated waste disposal. Place gown in a leak proof bag before placing in linen skip indicating special need for cleaning. Wash hands and arms. Put on a clean set of protective clothing and gloves for carrying out the remainder of the clean up.						
 After initial inactivation of the spill, remove excess fluid with absorbent material and discard into double bag for contaminated waste – separating disposable and re-use bottles etc. Remove for sterilisation culture media and disposable materials adjacent to the spill and contaminated by it. 						
5. Wipe down the fresh disinfectar	5. Wipe down the work floor, cabinet work zone and remaining items of equipment with fresh disinfectant solution. Disinfect the front grille and work floor within the cabinet.					
Check that the spill has not contaminated the sump. If contaminated, add sufficient disinfectant solution to completely cover it. If the spill is large, use sufficient disinfectant to dilute and inactivate the infectious material.						
7. If the spill is lar cabinet should b	ge or involves a highly be decontaminated with	y infectious microorganism, co i formaldehyde gas before furth	nsider whether the ler use.			
8. An incident repo	ort must be completed.					

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Task: Biological Spill inside centrifuge						
Ward/Department: Laboratories Date Revised: July 2009						
	Date for Next Review: July 2014					
		Hazards of Task:				
		Contamination and infection with potentially infectious agents				
	GTND)	Controls – Safety Rules				
ļ	 Wear gloves, a gown and goggles. If a breakage is obvious or suspected while the centrifuge is still running, switch off the instrument. Always inspect centrifuge buckets for breakages of tubes through the transparent rotor or bucket cover before opening. 					
		Steps of T	ask			
1.	If rotor or bucket	lid is removed before noticing	g the breakage, replace lid	immediately.		
2.	2. Inform Laboratory Safety Officer.					
3.	Consult centrifug with its cover stil	ge manual for directions on t Il on.	the removal of centrifuge	rotor or carrier		
4.	Wear disposable gloves and mask.					
5.	Open rotor or carrier in a biosafety cabinet.					
6.	3. If appropriate, recover the contents of the unbroken capped tubes inside the biosafety cabinet by carefully wiping the outside of the tubes with a suitable disinfectant and placing specimens in clean containers.					
7.	Replace the roto	or or carrier lid for transport to	the autoclave.			
8.	Remove lid and	autoclave at 121°C for 15 mir	nutes.			
9.	Use forceps or cotton swabs to carefully pick up debris and discard into a sharps container.					
10.	Clean centrifuge	e rotor with an appropriate dete	ergent.			
11.	Disinfect the inne	er surface of the centrifuge wi	th an appropriate disinfecta	ant.		
12.	Replace rotor.					
13.	. An incident report must be completed.					

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TYPE: BIOHAZARD

Remember to replace contents after use. This sign is to be displayed prominently where spill kits are located.

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	Task: Cytotoxic Drugs Spill					
Ward/Department:		Date Revised:	July 2009			
		Date for Next Review:	July 2014			
	Hazards of Task	ζ:				
	Exposure to C	ytotoxic Drugs and Related Wa	aste			
STOP	 Controls – Safety Rules Use Risk assessment process Collect and open spill kit and Don Personal Protective Equipment (PPE) Two staff members are required to work on chemotherapy spill containment. At least one staff member should be trained in cytotoxic spill management (Workcover Authority of NSW Guidelines 1995, p20) If a sharps injury occurs during the spill incident – follow Sharps Injury to Staff as per RNSH Cytotoxic Drugs and Related Waste Policy 					
	Steps	s of Task				
 Collect spill kit The more experience Personal Protective impervious single use disposable overshoes The second person area Cleaning the spill Determine the cause Place chemosorb pare Wipe around the area Collect slurry with plate Discard chemosorb pare Wash all contaminate Place linen contamin placing into a cloth line be packaged on the was mucous membrane irrigate well with wate 	ed staff member, who has Equipment (PPE) pro- e gown, purpose manuf s. should don the PPE ar of the spill and take the ds on the spill to absorb a with spill towlettes istic scoop bads, towlettes and scool ed furniture, equipment hated by CD, or body to hen collection bag befor ward while wearing PPE of exposure to the CD exposure, irrigate the a er or normal saline solut	as the major role in cleaning up ovided in the spill kit. The r factured nitrile gloves x2, P2 n vailable and assist with the p e appropriate action to stop it the liquid (each chemosorb pa op inside the white waste bag and other surfaces with soapy fluids of CD treated patients if re sending to the laundry for wa E (WorkCover Authority of NSV of patient/s, staff or other pe area vigorously with water. In ion	o the spill, should don the minimum required is an nask, safety goggles and rocedure by clearing the ad absorbs 500mls water into a plastic bag before ashing. This linen should V Guidelines, 1995, p19) ersons. In case of skin / n case of eye exposure,			
 Remove PPE in the f Shoecovers Chemo gown Dispose of the white Purple Waste bag wit Dispose of purple wa Document as per 7.3 Health Surveillance a Replace spill kit Spill Clean away from transportation of a switchboard ext. 33, of NSW Guidelines 	ollowing sequence and (2) Outer pr (4) Safety of bag inside the purple with h white plastic tie ste bag into purple cyto Documentation / Notific is per 8.0 in RNSH Cyto m Clinical Areas For sp patient or disposal of who will co-ordinate sp	discard into white disposable w urple gloves (leave inner glove glasses (5 aste bag. Then remove the inn toxic "wheelie" bin cation in RNSH Cytotoxic and l otoxic and Related Waste Polic bill clean up procedure away f body waste. Contact Emerg ill management (see Appendix	waste bag: es on at the moment) i) Respirator her purple gloves. Tie Related Waste Policy cy from clinical areas during hency Team via hospital < 5) (Workcover Authority			

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TYPE: CYTOTOXIC

Remember to replace contents after use. This sign is to be displayed prominently where spill kits are located.

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Task: Hazardous Substance/Chemical Spills						
Ward/Department	All	Date Revised:	July 2009			
		Date for Next Review:	July 2014			
	Hazards of Task:					
	Hazardous substance/chemica	I exposure to skin, eyes and	clothes			
STAD	Controls – Safety Rules					
	 Risk Assessment of the spill 					
	Call 33 for Emergency Responses	nse Team indicating location	of spill and name of			
	hazardous agent if known. Als	o indicate if medical assistan	ce is required.			
	Weal Appropriate Personal Pr Lise of Snill Kit	otective Equipment				
	Steps of Ta	sk				
1. Evacuate personnel	from immediate area / barricade	off area affected. If outside a	assemble upwind of			
the spill and maintai	n this cordon until the incident is sto	ood down.	·			
2. Locate relevant Mat	erial Safety Data Sheet (MSDS) if s	afe to do so (don't re-enter co	ontaminated area).			
3. If you are able to ma	anage the spill and are trained in s	pills management, collect the	appropriate spill kit			
hazardous agent if k	known.	in as required, indicating to				
4. Provide a situation	report to the Internal Response Te	eam indicating the exact natu	ure of the incident -			
what happened, ha	zardous agent involved, how the i	ncident has been managed	and if anybody has			
been affected by the	hazardous substance/chemical.					
• Don all the Pers	sonal Protective Equipment (PPF) from the Spill Kit				
 Use the Absorb 	pent Pillows/booms/material to pro-	event the chemical reaching a	any nearby			
drains	·	5	, , , , , , , , , , , , , , , , , , ,			
Use the neutral	ising agent in the spill kit (if require	ed by the MSDS) as directed	on the packaging			
 Isolate any nea 	rby machinery that may create a sp	ark if required				
 I urn oπ any rec If broken glass i 	s involved use scoop or tongs to pl	imediate work area	rd box or plastic			
container		ace it into a bag in a cardboa				
 Clean up the sp 	ill with disposable cloths, sand or al	bsorbent pillows/booms				
 Place all contant 	ninants into an appropriate containe	er (as per MSDS) or clear plas	stic bag			
6. Decontaminate the a	area with appropriate product as pe	r MSDS.				
7. Discard all used PPI 8. Review the MSDS	for correct disposal method and	contact Environmental Servi	ces if quidance is			
required.			des il guidante is			
9. Incident report mus	st be completed and document ir	n Hazard Register if further	control measures			
required						
10. Replenish used item	10. Replenish used items from spill kit					
NON - HAZARDOUS	SPILLS ONLY					
1) Don personal protect	ctive equipment					
2) Clean up the spill wi	th disposable cloths or absorbent a	nd place all contaminants into	o a clear plastic			
bag 3) Place contaminated	absorbant cloth or other absorbant	utilised into the clear plastic	bog			
 a) Prace contaminated absorbent cloth or other absorbent utilised into the clear plastic bag. 4) Wash down the area with neutral detergent and water. 						
5) Discard all used PP	5) Discard all used PPE into the clear plastic bag.					
6) Seal the clear plastic	c bag and place into a yellow conta	minated waste bag and seal,	dispose of sealed			
bag in the contamina	ated waste bin.	tor if roquirod				
	eport and document in nazard regis					

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TYPE: CHEMICAL

Remember to replace contents after use. This sign is to be displayed prominently where spill kits are located.

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Appendix 1 - SWPs/SWMS FOR HAZARDOUS SPILL cont'd

Task: RADIOA	ACTIVE SPILL PROCEDURE						
Ward/Departr	ment:	Date Revised:	July 2009				
		Date of Next Review:	July 2014				
STOP	 Hazards of Task: Contamination of skin, clothing, environment Ingestion/absorption of radioactive material 						
 Controls – Safety Rules Use a contamination monitor to assess contamination. If you're not contaminated, wear PPE to prevent self contamination. Minimise/reduce contamination of the area Prevent/minimise the ingestion/skin absorption of radioactive material and contam clothing Use water, detergent, paper, and/or radioactive spill kit to decontaminate a 							
	Steps of Task						

A. INITIAL ACTION:

- 1. Evacuate unaffected people from area and cordon off. Maintain this cordon until the incident is stood down.
- 2. Call 33 for Radiation Protection Officer and Internal Emergency Response Team indicating location of spill and the radioactive agent.

IF RADIOACTIVE IODINE IS SPILT:

- 1. Treat with excess iodide and thiosulphate solution
- 2. If broken capsule, cover with wet absorbent paper

ALL RADIOACTIVE SPILLS:

- 1. If you're not contaminated, wear PPE, use spill kit.
- 2. Cordon off the area if necessary and notify people in the area that a spill has occurred
- 3. Cover spill with absorbent paper
- 4. All people not involved must leave the area
- 5. Contaminated people must limit their movements
- 6. Close doors and windows to prevent traffic and draughts
- 7. If spill is on skin, flush thoroughly
- 8. If spill is on clothing discard clothing
- 9. Notify Radiation Protection Officer
- 10. Continue decontamination
- 11. If ingestion is suspected, notify Radiation Protection Officer IMMEDIATELY
- 12. If no person contaminated, wear gloves, use radioactive spill kit to decontaminate area
- 13. Collect contaminated waste in plastic bags do not contaminate bags on outside.

B. FURTHER ACTION IF SKIN MAY BE CONTAMINATED:

- 1. Rinse, flush with running water no rubbing
- 2. Lather with mild soap, rinse no rubbing
- 3. Soak with decontamination or other detergent rinse
- 4. Use brush with detergent and rinsing do not damage skin
- 5. Dry
- 6. Monitor with contamination monitor

IF PERSISTENT CONTAMINATION IS STILL ON THE HANDS:

- 1. Cover with titanium dioxide
- 2. Wear gloves to promote perspiration
- 3. Wash to remove titanium dioxide
- 4. Monitor with contamination monitor
- 5. Incident report must be completed and document in Hazard Register if further control measures required

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TYPE: RADIOACTIVE

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How to organise it....

If you have any hazardous substances / chemicals in your department that you want to have removed, this is what you do:

1. Ring your Site Environmental Operations Manager. They will give you two things:

• a form for listing your chemicals <u>FOR</u> <u>DISPOSAL</u>

• the contact details for the Northern Sydney Central Coast Health chemical waste collection contractor, Chemsal Pty Ltd.

2. You need to complete the form and fax or email it to Chemsal Pty Ltd, ensuring that you include your department name, contact person, phone number and Cost Centre Number.

Once your chemical collection needs have been documented on the form and forwarded to Chemsal, Chemsal will return a quote for the collection and disposal service. If you require it, they will assist you to complete the form and assess your chemical storage, labelling and collection needs.

collection The and disposal service can be a one-off, or on a regular basis. Some departments as Anatomical such Pathology have a twice a week service. others monthly, quarterly or 6 monthly. Assess your needs. You choose the



frequency. The aim is to prevent stockpiling of chemicals that can pose health and safety risks and challenges for safe storage.

3. Once your collection needs are worked out and the quote accepted, **you organise a requisition to pay for the service.** The requisition is provided to the site Environmental Operations Manager who will submit it on your behalf.

4. On the day, Chemsal will arrive, take your copy of the form and your chemicals / hazardous substances. You sign the appropriate section of the form to verify receipt of service.

The rest is done by Chemsal, and the Site Environmental Operations Manager. This is what happens.

A Waste Data Form, required by the **Environmental Protection** Authoritv (EPA), for collection, transport and disposal of anv hazardous substances. must be completed by Chemsal and signed by



the Site Environmental Operations Manager, before leaving the site. Your signed Chemical Collection form is used <u>**TO**</u> verify the collection and to generate the Waste Data Form.

Chemsal send the invoice for the service to Accounts Payable. They forward it to the Site Environmental Operations Manager who compares it with the Waste Data Form, receipts the service and sends the invoice to Supply for payment.

Environmental Operations provide quarterly reports to the EPA providing a <u>LIST</u> <u>OF</u> all hazardous substances that have been collected and <u>THEY</u> store the Waste Data Forms for the required period of 5 years.

Our environment needs your support. The Site Environmental Operations Manager contact details are listed below.

 RNSH
 9926
 8025
 Ryde
 9858
 7578

 Manly
 9976
 9872
 Hornsby
 94779988

 Macquarie
 9887
 5783
 Mona
 Vale
 9998
 0746

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Spill Kit Location:

This sign should be displayed prominently in each department where spills kits are located.

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Appendix 4 – SPILL KIT CONTENTS

All spills kits are required to be checked at a minimum every six months when the Hazardous Substance Hazard Register inspection checklist is completed or following the use of the kit. All items required for the spill kit should be identified in the "Item" column.

Note: The Cyotoxic spill kits are sealed and not refillable

Type of kit:

Location of Kit:

Date checked	Items in Spill Kit (eg gloves, goggles, spill pillow etc)							
& signature								

Document any action required in the Hazard Register (eg replacement of used spill kit items)

North Shore & Ryde Health Service Guidelines for Management of Hazardous Spills

Appendix 5 – SPILL KIT SUPPLIERS

Supplier	General	Mercury	Oil	Infectious	Laboratory	Formaldehyde	Formalin/ Glutaraldehyde/ Cidex	Cytotoxic	X-Ray processing	Refills available
Blackwoods	\checkmark		\checkmark							\checkmark
Setons	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark					\checkmark
United Biosciences	\checkmark	\checkmark			\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Medtex	\checkmark	\checkmark				\checkmark	\checkmark			\checkmark
Baxter								\checkmark		
Superior Environmenta Protection Equipment	\checkmark	\checkmark		V	\checkmark			\checkmark		V
Spill Station Australia			\checkmark		\checkmark			\checkmark		\checkmark