P: 08 9294 1832

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E: admin@unitedscanning.com.au

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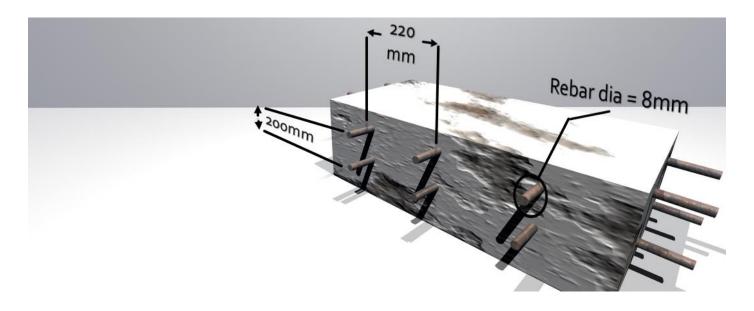
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Relative Humidity Test











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1. Scanning Results

To whom it may concern,

This document is to state that Ground Penetrating Radar Scanning was undertaken by UNITED SCANNING SERVICES PTY LTD on the:

Scanning was undertaken in the following location:

Description of Works Completed:

Undertook concrete scanning in two areas to detect and make reinforcing and services prior to drilling being undertaken. Undertook drilling and placed RH Test Probes in slab in two areas. Recorded initial readings. Site return to collect secondary RH readings. After 24 hours in place, the equilibrium of the relative humidity within the two tested locations was gained. The results of the tested and reported readings are within expected reasonable performance for the design of the structure. The slab has a high humidity content as expected for most slabs that are directly on grade and are permanently covered with a laminate or wooden flooring, such as is in this case. There appeared to be no difference between the two locations that were tested for the relative humidity within the concrete structure.

Whilst the readings are high they are not outside the expected results for this structure.

Structures that maintain a high relative or gain a higher relative humidity such as this structure tested are in many ways ideal in contrast to that of an expose structure where a continual cycle of moisturising then drying continues to occur on a daily basis. Provided the pH of the concrete structure remains stable, as is expected to be the case with this structure- there should be no concern for the foreseeable future of this concrete structures intended performance and its intended design parameters. If you require any more information, please let us know.



Matthew Hill

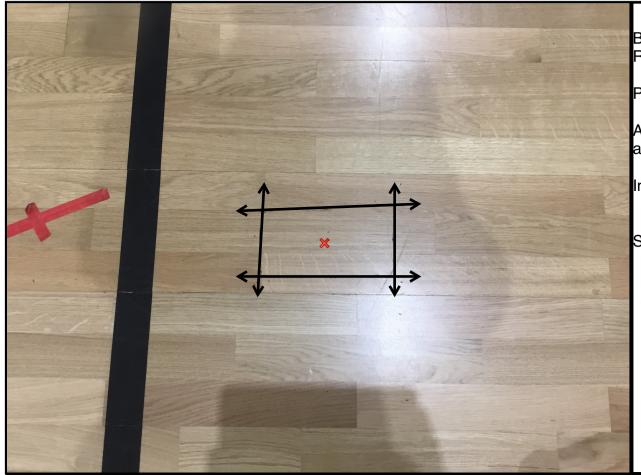








3. Photos



Location 1

Black lines show detected reinforcing bars. Red "X" marks the drilling location.

Probe #Y259993

Added ~40mm of spacers due to floorboards, underlay, and packers.

Initial reading - 23 C - 90% RH

Secondary reading - 22 C - 96% RH



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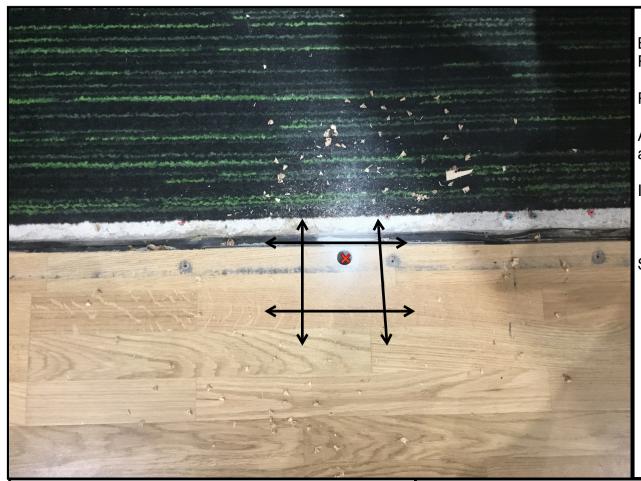
Site Address

Client

Date:

Drawn By:

This is an indication of utilities clearance area or utilities located only, and is to be read in conjunction with the service statement and location terms and conditions of service. The 'As Located' Reference Plan is not to scale and cannot be used as a survey document. Please contact our company for further information if any part of your site clearance is unclear prior to excavation. Be aware of your utility damage potential at conclusion of location service and the associated client duty of care requirements. Review Utility Risk level and Utility Duty of Care Requirements including the WA Utility Code of Practice.



Location 2

Black lines show detected reinforcing bars. Red "X" marks the drilling location.

Probe #Y260463

Added ~40mm of spacers due to floorboards, underlay, and packers.

Initial readings - 25 C - 90% RH

Secondary reading - 21 C - 95% RH



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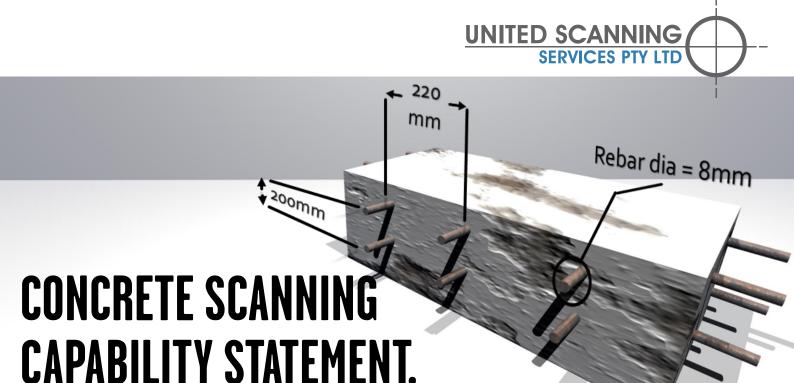
Site Address

Client

Date:

Drawn By:

This is an indication of utilities clearance area or utilities located only, and is to be read in conjunction with the service statement and location terms and conditions of service. The 'As Located' Reference Plan is not to scale and cannot be used as a survey document. Please contact our company for further information if any part of your site clearance is unclear prior to excavation. Be aware of your utility damage potential at conclusion of location service and the associated client duty of care requirements. Review Utility Risk level and Utility Duty of Care Requirements including the WA Utility Code of Practice.



United Scanning services can provide what no one else in Perth is able to. Our 3D Ground Penetrating Radar (GPR) technology allows our experienced technicians to provide insights into concrete that allows for informed construction decisions. We provide the following services:

CONCRETE SCANNING

We offer GPR Concrete Scanning in a safe and timely manner with GSSI and Mala equipment. This includes:

Location of safe areas to drill, cut or demolish

Determine the location and depth of steel reinforcement, post tension cables, embedded metallic or plastic conduits in concrete slabs, walls or structural members

Determine concrete slab thickness

Structural inspections - bridges, monuments, walls, towers, tunnels, balconies Identify defects or damage inside concrete (voids, fractures)

Quality inspection that identifies areas of delamination, tanking, honeycombing, cracks and voids Location of metallic and non-metallic targets in walls and floors Condition assessment - map relative concrete condition for rehabilitation planning NATA Accredited Lab testing

3D Imaging Technology

United Scanning use the best of GPR equipment including GSSI StructureScan and Mala CX Scanners.

ACCREDITED LOCATORS FOR

DIAL BEFORE YOU DIG AMCOM WESTERN POWER
WATER CORPORATION

ATCO GAS TELSTRA







Company Name:	United Scanning Se	rvice PTY LTD	Project:		
Company Address:	Level 8, 251 Adelaide	Tce Perth WA	ABN No.	89 262 952 771	
Job / Trade Activity:	USE OF GROUND P	ENETRATING RADAR, to locat	e services, P.T cables ar	nd re bar. Core drilling.	
SWMS Prepared by:	Name:	Sign			Date:



Emergency Company Contact Information

Contact: Matthew Hill

Position: Director

Phone: 0433 724 921

Email: matthew@unitedscanning.com.au

 PERMITS TO WORK (✓)
 Work at Height (unprotected over 2m)
 Confined Space
 Hot Work

 Excavation
 Concrete Cutting/Drilling
 Other (specify)

 MINIMUM PPE (✓)
 Safety Glasses (medium impact)
 Hi-Visibility vest or shirt
 Hard Hat

 Safety Footwear
 Hearing Protection (<85dB)</td>
 Other (specify)



EQUIPMENT / TOOLS (V) Mazard Warning Barricade or **Power Tools** EWP (Scissor Lift / Boom Lift) Guarding Signs Other (specify) Scaffolds Portable Ladder(s) Safety Harness **LEGISLATION Building Regulations 1989** Occupational Safety and Health Regulations 1996 WA Acts and Regulations Dangerous Goods Safety Act 2004 **Electricity Regulations 1947** Occupational Safety and Health Act 1984 Electricity (Licensing) Regulations 1991

WA Codes of Practice

(relevant to construction work, tick as applicable to work)

- Concrete and masonry cutting and drilling, 2010
- Excavation, 2005
- First aid, workplace amenities and personal protective clothing, 2002
- Manual handling, 2000
- Managing noise at workplaces, 2002
- Safe design of buildings and structures, 2008
- The Prevention of falls at workplaces, 2004
- Tilt-up and precast concrete construction, 2004
- Violence aggression and bullying at work, 2006
- Working hours, 2006



National Standards

(relevant to construction, tick as applicable to work)

- National Standard for Construction Work [NOHSC:1016(2005)]
- Adopted National Exposure Standards For Atmospheric Contaminants In The Occupational Environment [NOHSC: 1003(1995)]
- National model regulation for the control of scheduled carcinogenic substances [NOHSC:1011(1995)]
- National Standard for Manual Tasks (2007)
- National OHS Certification Standard for Users and Operators of Industrial Equipment 3rd Edition [NOHSC:1006(2001)]
- National Standard for the Storage and Handling of Workplace Dangerous Goods [NOHSC:1015(2001)]
- National Model Regulation for the Control of Workplace Hazardous Substances
- National Standard for Licensing Persons Performing High Risk Work
- National Standard for Occupational Noise [NOHSC:1007(2000)]
- National Standard for Plant [NOHSC: 1010(1994)]
- National Standard for Synthetic Mineral

National Codes of Practice (relevant to construction work, tick as applicable to work)

- Safe Removal of Asbestos 2nd Edition [NOHSC:2002(2005)]
- Code of Practice for the Management and Control of Asbestos in the Workplace [NOHSC:2018(2005)]
- Code of Practice for the Control of Scheduled Carcinogenic Substances [NOHSC:2014(1995)]
- National Code of Practice for Induction for Construction Work (May 2007)
- National Code of Practice for Precast, Tilt-up and Concrete Elements in Building Construction (2008)
- National Code of Practice for the Prevention of Falls in General Construction (2008)
- National Code of Practice for the Storage and Handing of Dangerous Goods [NOHSC:2017(2001)]
- National Code of Practice for the Control of Workplace Hazardous Substances [NOHSC:2007(1994)]
- National Code of Practice for the Control of Work Related Exposure to Hepatitis and HIV (blood-borne) Viruses [NOHSC:2010(2003)]
- National Code of Practice for the Control and Safe Use of Inorganic Lead at Work [NOHSC:2015(1994)]
- National Code of Practice for the Labelling of Workplace Substances [NOHSC:2012(1994)]
- National Code of Practice for the Prevention of Muskuloskeletal Disorders Caused From Performing Manual Tasks
- National Code of Practice for Noise Management and Protection of Hearing at Work 3rd Edition [NOHSC: 2009(2004)]
- National Code of Practice for the Safe Use of Synthetic Mineral Fibres [NOHSC:2006(1990)]

National Guidance Notes

- Guidance Note on the Membrane Filter Method for Estimating Airborne Asbestos Fibres 2nd Edition [NOHSC: 3003(2005)]
- Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment 3rd Edition [NOHSC:3008(1995)] (HTML)
- Guidelines for Integrating OHS into National Industry Training Packages



Australian Standards

As quoted in legislation and codes of practice

			Likelihood / Probability				
Level	Description of Consequence or Impact	Consequence	L Likely	M Moderate	U Unlikely		
H (1) (High level of harm)	Potential death, permanent disability or major structural failure/damage. Off-site environmental discharge/release not contained and significant long-term environmental harm.	H (1) (High)	1	1	2		
M (2) (Medium level of harm)	Potential temporary disability or minor structural failure/damage. On-site environmental discharge/release contained, minor remediation required, short-term environmental harm.	M (2) (Medium)	1	2	3		
L (3) (Low level of harm)	Incident that has the potential to cause persons to require first aid. On-site environmental discharge/release immediately contained minor level clean up with no short-term environmental harm.	L (3) (Low)	2	3	3		
Level	Likelihood / Probability						
Likely	Could happen frequently						
Moderate	Could happen occasionally						
Unlikely	May occur only in exceptional circumstances						

	Health and Safety	Environment
Catastrophic	Fatality or permanent disability (Class 1 incident)	High severity which has or may have permanent and/or irreversible effects (Level 1)
Major	Life threatening incident, Lost Time Injury or ongoing illness/health effects (Class 2 incident)	Medium severity which has or may have persistent but reversible effects (Level 2)
Moderate	Incident that requires medical treatment by a qualified medical practitioner (Class 3 incident)	Low severity which has short term and reversible effects (Level 3 incident)
Minor	Incident that may require first aid treatment only	Impact confined to area impacted by work operations
Insignificant	No injuries	Very low environmental impact, not noticeable



Elimination	Eg Eliminate the need for a fall risk area by careful design	Most Effective
Substitution	Eg Barricading or enclosing the fall risk area with edge protection	
Isolation	Eg Isolating the hazard or practice from people involved in the work	
Engineering	Eg Using a fall injury prevention system	Least Effective
Administrative	Eg Procedures, training, warning signs, limiting exposure time	
PPE	Eg Use of Personal Protective Equipment	

Risk Hierarchy of Control - Preferred Order of Control Measures to Eliminate or reduce risks of injury or illness.

To calculate Inherent and Residual risk, refer to 'Qualitative Risk Analysis Matrix: Level of Risk' on Page 2

N o	Job Step (break the job down into steps)	Potential Hazards (what can harm you or others?)	Inherent Risk* (Likelihood x Consequence)	Controls & Checks Required (What are you going to do to carry out the work safely – apply risk hierarchy of control)	Who is Responsible? (Position Title)	Residual Risk* (Likelihoo d x Conseque nce)	
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1	General planning Scanning and Coring	Inadequate training / instruction / supervision.	M (2) (Medium)	Matthew Hill to ensure all employees: Attend a construction industry "Safety Awareness Course Blue Card. Attend a site-specific induction. Attend a Daily Prestart Provide supervision on the site. Make sure the employees are instructed in the correct use of: Personal Protective Equipment (PPE). Tools, equipment and plant Hazardous substances and chemicals (Provide Material Safety Data Sheets - MSDS). Clean work areas regularly. Ensure that Personnel contact Site Manager for the following; Access to Site Inductions Ensure sign in complete Plant equipment onsite Hazardous substances Permit to Work to be opened prior to work commencing Core Drill Permit Deliver materials to a safe lay down area as close as possible to the work. Undertake Take 5 prior to commencing task. Note: If you identify additional risks and their control measures are not listed on this SWMS, set them out on an additional SWMS Worksheet and attach to the end of this SWMS	Matthew Hill/ Chris Poole	L (3) (Low)
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2	Inspect the work area before work begins for the day.	Hazards caused through work activity: Obstructed access. Poor housekeeping causing manual handling injuries/slips trips and falls. Other personnel injured from other work activities.	M (2) (Medium)	 Complete Take 5 Inspect the work area for hazards before work Provide safe access to all work areas. Clean up work areas on a regular basis. Make sure signs and barriers are erected in areas where required. 	Operator/ Chris Poole	L (3) (Low)
3	General planning	Areas been scanned for Core Holes • Electrical services	H (1) (High)	Prior to scanning ensure all exposed electrical cables that are in the area to be scanned are made safe or switched off (this does not include cables in conduits that are the in slab that is been scanned)	Operator/ Chris Poole	L (3) (Low)
4	Scan Area where Core Holes required.	Manual Handling Slips and Trips	M (2) (Medium)	 Equipment is brought to site via a trolley as required Ensure work area is clear and free of obstacles 	Operator/ Chris Poole	L (3) (Low)
5	Planning For Core Drilling - Arrive on site	- Site traffic and personal interference	M (2) (Medium)	United Scanning employee/s - consult with site Superviser - Ensure Necessary Permits are obtained - Wear correct PPE before entering site - Take care during site movement - Sign In prior to undertaking work.	Operator/ Chris Poole	L (3) (Low)



6	- Meet with client, discuss job - Site Induction	- Activity of other workers - General site environment eg. objects or liquids on the ground Inadequate training and supervision of employees	M (2) (Medium)	United Scanning employee/s Client - Wear correct PPE - Take care during site movement - Have a blue/white card - Attend site specific induction - Attend Prestart and Tool box meetings - Ensure Relevant Permits Obtained - Check notice board - Ensure appropriate training and tickets have been acquired	Operator/ Chris Poole	L (3) (Low)
7	- Check work area	- Unsafe work environments, eg excavations, confined spaces, chemical presence etc - Inadequate airflow - Inadequate lighting - Obstructed or insufficient access and/or egress - Poor housekeeping - Uncomfortable or cramped work conditions - Unstable footing - Work activity of others - Weather conditions	M (2) (Medium)	United Scanning employee/s Client Inspect the work area for hazards Eliminate hazards where possible. Ensure appropriate measures are taken should hazards exist. Raise any safety concerns with supervisor and do not conduct work activity until all safety concerns are adequately dealt with Ensure safe access and egress is in place Cleanup work area Ensure there is adequate airflow Ensure there is adequate lighting Erect signs and barricading around area Ensure firm footing Ensure the weather conditions are conducive to safe work activity, i.e. comfortable working temperature and dry. Use sunscreen and wear trousers and long sleeve shirts when exposed to direct sunlight Have First Aid Kit in close proximity and be familiar with first aid personal	Operator/ Chris Poole	L (3) (Low)



8	-General Planning and considerations	- Noise - Slurry, spark or shard projectiles - Slurry/water migration - Dust and mist - Fume build up - Insufficient propping, falling objects - Services being struck - Presence of other trades - Presence of general public There is an environmental risk due to; - Slurry entering drains and waterways	M (2) (Medium)	United Scanning employee/s Client Obtain permits (concrete cutting/core drilling/hot works) Complete (United Scanning) general procedures and pre start checks Ensure you and others in close proximity, are equipped with the appropriate PPE Be aware of possible slurry, spark, shard projection and slurry migration, use vacuum to control slurry and additional guards to control possible projectiles Check exit location of blade or barrel and likely slurry projection at exit points Erect signage and bunt off area Use spotter where necessary Do not cut dry, use water Ensure there is adequate air flow. Use extraction systems if necessary Communicate with other trades as to the impact of activity Do not cut concrete in the presence of general public Ensure by way of bunting, silt traps and wet vacs that the slurry will be properly contained and disposed of	Operator/ Chris Poole	L (3) (Low)
9	Set up; -Carry tools and equipment to work site -Set up tools and equipment, water hoses, slurry control and barricades	- Heavy equipment - Creation of obstacles - Spilling of fuel and oil - Faulty equipment - Faulty blades/barrels	M (2) (Medium)	United Scanning employee/s - Limit load size - Use correct/alternative manual handling techniques - Keep work area neat and clean - Clear area of slip and trip hazards - Use lead hooks and stands - Be aware of surroundings - Wear correct PPE - Ensure regular workshop servicing and complete machinery pre start check lists - Check electrical tags - Ensure blades and bits are in good condition	Operator/ Chris Poole	L (3) (Low)



10	Use of Hand Held Drill - Barrel jamming and twisting - Moisture entering motor - Incorrect technique - Entanglement - Fatigue	Wrist injury Electrocution Body stress, strains, sprains	M (2) (Medium)	United Scanning employee/s Use correct PPE Ensure operator is properly trained and competent Employ proper technique, use both handles for support and/or to brace drill, grip drill firmly Ensure drill is in the correct gear for hand held drilling and clutch is in good condition Use drill rig for larger diameter core holes Keep loose clothing clear Keep hands and drill motor dry Do not wear gloves while operating electric core drill or near rotating parts Take frequent breaks Do not hand drill above head height	Operator/ Chris Poole	L (3) <i>(Low)</i>
11	Use Electric Rig Mounted Drill - Fix anchor in concrete - Hammer drill jamming and twisting - Poor punch and lump-hammer contact	- Wrist injury - Hand injury - Line of Fire Injury	M (2) (Medium)	United Scanning employee/s - Ensure operator is properly trained and competent - Employ proper technique - Ensure Line of Fire hazards identified	Operator/ Chris Poole	L (3) (Low)
12	- Mount rig, attach motor, tighten anchor bolt, tighten rig toes , attach barrel and position unit - Maneuvering heavy equipment	- Body stress, strains, sprains,	M (2) (Medium)	United Scanning employee/s - Use correct/alternative manual handling techniques - Limit load size	Operator/ Chris Poole	L (3) (Low)
13	- Commence drilling	- Moisture entering motor - Entanglement - Fatigue - Electrocution	M (2) (Medium)	United Scanning employee/s - Keep loose clothing clear of rotating parts - Keep hands and drill motor dry - Ensure Drill is tagged Current - Do not wear gloves while operating electric core drill or near rotating parts - Take frequent breaks	Operator/ Chris Poole	L (3) <i>(Low)</i>



14	- Remove concrete core	- Manual handling - Slip on core - Electrocution	M (2) (Medium)	United Scanning employee/s - Employ proper technique - Dispose or core appropriately - Ensure personnel identify Line of fire hazards	Operator/ Chris Poole	L (3) (Low)
15	Housekeeping	Trips and slips.	M (2) (Medium)	Housekeeping standards are adequate to prevent other trades, personnel or members of the public from slipping or tripping on materials or associated discarded rubbish. • Work areas are left clean and safe at the end of each working day. • To prevent injury from poor housekeeping make sure: • Workers are trained in good housekeeping practices. • Regular clean-ups occur throughout the working day and at the conclusion • Permit to be closed on completion, of work. Discarded materials and rubbish is placed in designated areas or bins/skips. Access ways are not obstructed by rubbish from work activity.	Operator/ Chris Poole	L (3) (Low)
16	Working near the public	injury to public: Trips / slips / falls Struck by plant	M (2) (Medium)	When working near the public:	Operator/ Chris Poole	L (3) (Low)



Revisions	1	2	3	4	5
Initial / Date	Jan 2017	July 2017	July 2018	Jan 2019	

Employees involved in consultation, development and acceptance of this Safe Work Method Statement

Print Name:	Signature	Date signed	Print Name:	Signature	Date signed

Personnel qualifications and experience required to complete the task (eg work at heights training)	Specific training required to complete this task:	Engineering Details/Certificate/Regulatory Approvals
Site Induction		
Construction Industry Safety Awareness Training		



Job Safety Analysis Checklist

Safety Hazards Fall to below **Contact with Chemicals** Fall to same level **Contact with Pressure** ☐ Dropped objects Overstress, strain, sprain Struck against Fire Struck by **Explosion** Caught between **Engulfment** Cuts / Abrasion Oxygen deficiency / excess Flying particles **Atmospheric contaminants Electrical contact** Burns - Hot, Cold, Acid \Box **Health Hazards** ☐Heat Stress **Dust □**Noise **Biological Hazards □**Radiation **Synthetic Mineral Fibres □Vibration** Asbestos □Contact with Chemicals **Atmospheric Contaminants Environmental Hazards □Chemicals Chemical Spills**



☐ General Rubbish ☐ Hazardous Waste