

Appendix N

Spill Response Program

CONTINGENCY PLAN
FOR
THE UNIVERSITY OF ARIZONA
HAZARDOUS WASTE MANAGEMENT FACILITY

University of Arizona
Department of Risk Management Services
1548-2 N Ring Road
Tucson, Pima County, Arizona 85719
EPA ID NO. AZD000819615

Revised March 2016

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University of Arizona
Hazardous Waste Management Facility
1548-2 N Ring Road, Tucson
Pima County, Arizona 85719
EPA I.D. #AZD000819615

1. INTRODUCTION

The information contained herein is developed in accordance with the requirements for a Contingency Plan, as contained in 40 CFR 264 Subpart D. A copy of this Contingency Plan is available at the University of Arizona Police Department and the Department of Risk Management Services. Copies have also been provided to the Tucson Fire Department, Banner University Medical Center, Pima County Department of Emergency Services (LEPC), and the Arizona Department of Environmental Quality. Copies of cover letters to these agencies and Certified Letter receipts are included in this document as Exhibit 6.

This Contingency Plan is written for the Hazardous Waste Management Facility (HWMF), located at the University of Arizona, Building 229, 1548-2 N Ring Road, Tucson, Arizona, 85719 and the 90 Day Waste Accumulation Area in Koffler 321B, Building 113, 1340 E University, Tucson, AZ 85719. However, procedures listed herein are applicable to other incidents in UA facilities that involve hazardous waste/materials. A facility plan of the HWMF and Koffler 321B is included in Exhibit 4. A map of the University's main and AHSC campuses is also included in this document as part of Exhibit 4.

The purpose of the HWMF is to provide a location for on-site handling and storage of hazardous wastes that are generated on-site from University laboratories and other operations. Hazardous wastes generated on-site include used chemicals from experiments in the research and teaching laboratories and from maintenance operations which support these activities. Approximately 70% are flammable/organic liquids, 20% are corrosive liquids, and 10% are solids.

Exhibit 1 is a listing of the chemicals that might be encountered in UA facilities as either virgin chemicals, or as hazardous wastes.

2. EMERGENCY COORDINATORS

If an emergency situation develops involving hazardous waste/materials at the University of Arizona, the discoverer (hazardous waste personnel, laboratory personnel, security) will contact the dispatcher at the University of Arizona Police Department (UAPD) by calling 9-1-1 from a campus phone, or 621-8273 from non-campus phones. UAPD will then immediately contact an Emergency Coordinator as listed on the following page. The primary Emergency Coordinator is to be contacted first and, if not available, the secondary Emergency Coordinators will be called (in the order listed) until someone is reached. The

first of these individuals contacted becomes the Emergency Coordinator. An Emergency Coordinator can be contacted on a 24-hour basis through the University Police. There will always be at least one Emergency Coordinator available by cellular phone and the University Police have the phone numbers of all the Emergency Coordinators.

The decision to implement the Contingency Plan depends upon whether or not; an imminent or actual incident could threaten human health or the environment. It is the duty of the Emergency Coordinator to determine if the Contingency Plan is to be implemented and to direct and coordinate all activities undertaken if the Plan is implemented. The Emergency Coordinator is authorized to commit the resources of the University of Arizona as needed, in implementing the Contingency Plan as indicated in Exhibit 5. The specific types of incidents, which require implementation of the Contingency Plan, are listed on page 6 of this document.

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EMERGENCY COORDINATORS (This page last updated: 1/11/17)

The Emergency Coordinators designated below are University of Arizona personnel who are directly involved in the management and handling of hazardous waste and are trained in appropriate response measures. The Emergency Coordinators can be contacted directly at the phone numbers listed below or through the University of Arizona Police Department. An Emergency Coordinator is available by cellular phone 24 hours a day.

FACILITY ADDRESS:

1548-2 N Ring Road
Tucson, AZ 85719

OFFICE ADDRESS:

220 W 6th St. 300B 2nd Floor
Tucson, AZ 85701

MAILING ADDRESS:

PO Box 210300
Tucson, AZ 85721

PRIMARY EMERGENCY COORDINATOR:

Steven C. Holland

Assistant VP for Risk Management
UA Risk Management Services

Work Phone: (520) 621-1790

Cellular Phone: (520) 349-4273

Address: 12561 E. Sonoran Ridge Drive
Tucson, AZ 85749

SECONDARY EMERGENCY COORDINATOR (1):

Herbert N. Wagner

Director, OEHS
UA Risk Management Services

Home Phone: (520) 881-5448

Work Phone: (520) 621-7691

Cellular Phone: (520) 349-0984

Address: 2918 E. Croyden
Tucson, AZ 85716

SECONDARY EMERGENCY COORDINATOR (2):

Lloyd M. Wundrock

Environmental Safety Officer
UA Risk Management Services

Home Phone: (520) 240-9802

Work Phone: (520) 621-1590

Cellular Phone: (520) 349-1001

Address: 5307 W. Wood Owl Drive
Tucson, AZ 85742

SECONDARY EMERGENCY COORDINATOR (3):

Jeffrey G. Christensen

Hazardous Waste Supervisor
UA Risk Management Services

Home Phone: (520) 408-4895

Work Phone: (520) 621-5861

Cellular Phone: (520) 349-2187

Address: 1300 W. Roller Coaster Road
Tucson, AZ 85704

UA POLICE DEPT: 9-1-1 for campus phones, 621-8273 for non-campus phones

Banner University Medical Center Emergency Room: 694-6093

3. CRITERIA FOR CONTINGENCY PLAN IMPLEMENTATION

The Contingency Plan will be implemented in any of the following situations:

1. Fire and/or Explosion Involving Hazardous Materials
 - a. A fire causes, or could cause, the release of significant amounts of toxic fumes.
 - b. The fire spreads and could possibly ignite nearby fuel, oil or other hazardous materials.
 - c. The fire could possibly spread to off-site areas.
 - d. The fire cannot be contained by the use of fire extinguishers.
 - e. Run-off from the fire fighting operation or explosion has not been contained by the containment system.
 - f. An explosion has occurred.

2. Spills or Material Release

- a. The volume of hazardous material spilled or otherwise released meets or exceeds the Reportable Quantity (RQ) as listed in Exhibit 1.

AND

- b. The spill can be contained on-site, but a potential exists for ground water or surface water contamination.
- c. The spill cannot be contained on-site, resulting in a potential for off-site soil contamination and/or ground or surface water pollution.

4. EMERGENCY RESPONSE PROCEDURES

4.a Local Notification

The first person that becomes aware of an emergency shall immediately notify the Emergency Coordinator by contacting the University Police at 9-1-1 from campus phones or at 621-8273 from non-campus phones. Any initial information available (chemicals involved, volume, etc.) should be provided to UAPD by the individual making the call. Personnel who are familiar with the area and local operations are to remove themselves from the impacted area, but must remain on-site until the Emergency Coordinator gives them permission to leave.

If there is a fire, explosion, or imminent threat of either occurring, the discovering individual shall activate the nearest fire alarm pull station to activate the facility alarm system. At the HWMF, the facility alarm automatically notifies the University of Arizona Police Department (UAPD) dispatch desk. The UAPD dispatcher sends officers to the facility and notifies the Tucson Fire Department. To eliminate any doubt as to whether the alarm signal has been received by UAPD, the discovering individual should verify alarm notification by calling UAPD at 621-UAPD (8273) or 9-1-1.

The initial discovery personnel, and then UAPD are to limit entry into the incident area by whatever means are appropriate. This traffic control must continue until the Emergency Coordinator arrives and provides further instruction.

4.b. Evacuation

The signal to evacuate from the HWMF or any campus building shall be the activation of an alarm horn for the facility. Personnel in the HWMF shall evacuate the facility either through the northwest HWMF gate to the parking area, or south and then west through the Physical Plant's northwest gate to the AHSC Ring Road. Exhibit 4 includes an aerial photo of the Physical Plant area and HWMF. Arrows are drawn on this photo to indicate the evacuation routes from the facility. The assembly area after evacuation depends on wind direction. The primary site will be the parking lot of 1610 N. Vine if upwind of the release. The secondary assembly location will be the south end of the turbine enclosure on Cherry/Ring Road (if upwind).

In the event of a hazardous waste incident in a UA building other than the HWMF, activation of the building fire alarm system shall be the signal to evacuate the building. This is also the signal for fire evacuation or other emergencies. Evacuation of main campus buildings is via stairwells

and/or corridors to the nearest exit to the exterior of the building. Elevators may not be used for emergency evacuation.

4.c. Assessment

The Emergency Coordinator will assess the possible hazard to human health or the environment that may result from the release, fire, or explosion. This assessment will consider the specific hazards of the released materials as determined from Material Safety Data Sheets or other reference sources. The assessment will also consider the volume of the release, whether further releases are likely, the release pathways, and other criteria specific to the released material, such as containment and clean-up procedures. This assessment will provide the Emergency Coordinator with information to decide if the Contingency Plan is to be implemented.

The Emergency Coordinator must also assess the degree of remedial response that will be required to handle the incident. If the spill is relatively small, then properly trained in-house personnel may act under the direct supervision of the Emergency Coordinator to contain, absorb, and remove the released material for disposal. If the spill or release is large enough to warrant outside assistance for remediation, the Emergency Coordinator or his on-scene designee is responsible to notify one of the State contracted response firms listed in Section 4.c.6 on page 11 of this plan.

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4.d External Notification

If the Emergency Coordinator determines that the facility has had, or may have, an incident such as a spill, fire, or explosion, which requires the implementation of this plan, then the following actions must be taken immediately.

1. Alert on-site personnel of the emergency through whatever means are available. This may include activation of a building or area alarm system, verbal notification, or other immediate methods.
2. Direct UAPD to contact the Tucson Fire Department. UAPD Phone: 9-1-1 from campus phones, 621-8273 from off campus.
3. In consultation with UAPD and TFD, determine the extent of surrounding area evacuation required for the incident.
4. Gather the information necessary to complete the Hazardous Materials Incident – Initial Response Report. Blank forms are included in Exhibit 8.

The report requires the following minimum initial information:

- a. Name, Title and on-scene telephone number of the reporter
- b. Building name, room number, and address of the facility
- c. Time and type of incident (e.g., release, fire), and the duration of the event.
- d. Chemical name or identity of substances released and a description of the container or vessel from which the release occurred.
- e. Estimated volume of the spill or release.
- f. The medium or media into which the release has occurred.
- g. Any known or anticipated acute or chronic health risks associated with the release and, if within the reporter's knowledge, advice regarding medical attention necessary for exposed individuals.

- h. Proper precautions to take as a result of the release, including evacuation and other proposed response actions.

THE INFORMATION REQUIRED ABOVE SHALL BE GATHERED AS QUICKLY AS PRACTICABLE, BUT APPROPRIATE INCIDENT RESPONSE ACTIONS SHALL NOT BE DELAYED FOR THIS PURPOSE.

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HAZARDOUS MATERIALS INCIDENT

INITIAL RESPONSE REPORT

Responder's Name and Title: _____

Incident Location: Building Name and Room No.: _____

Street Address if Available: _____

Time of Event: _____ Estimated Duration: _____

Type of Incident: _____

Chemicals Released: _____

Estimated Volume of Release: _____ RQ: _____

Type of Container Involved: _____

Media Into Which Substance Has Been Released: _____

Known Physical Hazards: _____

Known Acute Health Hazards: _____

Known Chronic Health Hazards: _____

Known Injuries: _____

Recommended Precautions: _____

4.c. External Notification Continued

5. As soon as practicable after becoming sufficiently knowledgeable about the incident, the Emergency Coordinator will contact the following agencies to provide the information on the Initial Response Report described above.
 - A. Banner University Medical Center Emergency Room
(520) 694-6093
 - B. National Response Center 1-800-424-8802
 - C. Arizona Department of Environmental Quality
Emergency Response Unit: (602) 771-8786 (24 hr)
 - D. Pima County Industrial Wastewater Control
(520) 724-6200 (If sewer is impacted by incident)
6. If the Emergency Coordinator determines that outside assistance is required to implement appropriate remedial response and clean up, he will contact the following response firm which is available to state agencies under an existing contract.

Southwest Hazard Control (800) 622-3607 (24 hr answering service)

4.d. Identification of Hazardous Materials

Safety Data Sheets containing current data characterizing the hazardous materials which may be encountered in UA facilities SDS's can be obtained through Risk Management Services within an 8-hour work shift. Lists or inventory of hazardous chemicals are maintained for all work areas. Current records of all hazardous wastes held at the storage facility are located in HWMF. Additional references concerning hazardous materials management are available at the Risk Management Office.

ToxNet and ChemPub allow 24 hour Internet access to a number of hazardous chemical databases to guide proper spill response as listed below. The URLs are: <http://toxnet.nlm.nih.gov/> <https://pubchem.ncbi.nlm.nih.gov/>

These web sites provide access to millions of documents from over 100 sources through a time-saving interface.

Safety Data Sheets contain pertinent hazard information for the chemicals which may be stored at the site including:

Identification of chemical components in each wastestream by name, including synonyms;

Identification of waste's hazardous characteristics (e.g., toxicity, reactivity, and ignitability);
Important chemical and physical properties for which data are available, such as vapor pressure, pH, and solubility in water;

Fire control procedures (e.g., water or chemical foam);

Appropriate procedures to counteract human exposure (e.g., thorough washing with soap and water in the event of dermal contact).

Laboratory and/or hazardous waste/materials spills which may occur will typically be no larger than five gallons as that is the largest container that is accepted from laboratories for waste disposal. Containers up to 55 gallons in size are present for liquid consolidation and labpacking in the HWMF, and for solvent dispensing at both the Chemistry Department Stockroom and at the Medical/Scientific Stores facility. All containers of hazardous materials are required to be properly labeled with the chemical name, and specific hazard communication data. Hazardous waste containers are labeled with either a waste tag from the laboratory, or a Hazardous Waste label, which includes EPA waste codes and the DOT hazard designation.

There are several UA locations where much larger quantities of hazardous materials are stored. These include the two Central Heating and Refrigeration Plants (main campus and AHSC) which have large quantities of Sulfuric Acid and Sodium Hydroxide.

4.e. Control Procedures

Potential accidents fall under two general classifications: (1) fire and/or explosions and (2) spills or airborne release. The following sequence of events constitute the specific responses and control procedures to be taken in the event of a fire, explosion, or release of hazardous waste to air, land or water.

The initial response to any emergency will be to protect human health and safety, and then the environment. Secondary response to the emergency will be identification, containment, treatment, and disposal assessment.

1. Fire and/or Explosion

If fire or explosion appears imminent, or either has occurred, all activity in the vicinity of the incident will be stopped immediately.

The response time of the Tucson Fire Department is three to five minutes. For any fire event in a University building, the policy is to activate a fire alarm pull station first, and then assess if the fire can be approached with a portable fire extinguisher. Dry chemical extinguishers are installed in most University laboratories and/or adjacent corridors. This type of extinguisher works well on a wide variety of small fires, including flammable liquids. If a single fire extinguisher is insufficient to put out the fire, all personnel should evacuate the building and await TFD response.

When a fire alarm sounds, it is University policy for all personnel not directly involved in incident response to immediately evacuate the building to an outside refuge area, at least 100 feet from the building structure. Evacuated personnel are to stay out of the building until they receive specific verbal instruction that the scene has been cleared for re-occupancy. During the response activity, the actual alarm siren is typically silenced to facilitate communication. Silencing of the alarm is **not** a signal to re-enter the building.

If an explosion has occurred, it must be determined immediately if any personnel require medical attention. Laboratory personnel familiar with the operations at the time of the incident must remain on-site to answer questions from response personnel.

After medical attention has been addressed, it must be determined if there is any potential for further reactions or explosions from the materials remaining at the scene of the incident. This knowledge is required before appropriate clean-up can begin.

If the situation appears uncontrollable, and poses a direct threat to human life, a verbal warning will be given to all personnel fighting the fire or controlling the spill to secure their emergency equipment and immediately evacuate the area.

The Emergency Coordinator will consult with the TFD on-scene commander concerning the need for additional evacuation beyond the building or facility in which the incident occurred. This decision will be based on a hazard assessment of the potential for the released material to migrate to nearby structures in concentrations sufficient to represent a health threat to nearby occupants.

The Emergency Coordinator in consultation with the TFD-on-scene commander will notify personnel in the area when the immediate hazard has passed, and the facility or area can be re-occupied. This may be a phased process as some

areas of a building may be safe to re-enter before others, particularly in the immediate vicinity of the spill clean-up activities.

All equipment used in the emergency will be cleaned and repaired within 48 hours for use in the event of any future emergency. Sufficient backup equipment and supplies are available to provide necessary coverage during this recovery period.

2. Spill or Container Leak Within HWMF

In the event of a spill within the HWMF, the containment system and container management systems will prevent the spill from migrating out of the facility or coming in contact with incompatible materials. Hazardous waste personnel will respond to such spills by first verifying the identity of the spilled material and utilizing appropriate personal protective equipment. An absorbent or neutralizing material will be placed on the spill to initiate the clean-up process. Using non-sparking tools, the spilled material is mixed with the absorbent/neutralizer. For acid or caustic spills, pH of the neutralized solution will be verified using pH paper. Collected spills will be placed in an appropriate waste container, labeled, and replaced in the proper storage location to await final packaging and/or shipment. Spill incidents are documented in the facility-operating log.

3. Spill of Hazardous Waste Outside Containment

The largest single container used for hazardous waste management activities at the University of Arizona is a 55-gallon drum. Other than bulk chemical tanks at the power plants, 55 gallons represents the largest probable spill of hazardous waste likely to ever occur outside the HWMF containment system. Spill pillows and booms are stored at the HWMF (See [Exhibit 3](#) for inventory). There are also spill response supplies on the waste transport truck. For any spill outside of containment, the first response is appropriate notification and personal safety. If approach to the spill area can be accomplished safely with appropriate personal protective equipment, then spill containment materials may be placed to keep the spill from migrating to contaminate a larger area. If the spill can be safely approached access to sewers or storm drains will be blocked. Once the spill is contained and identified through the assessment procedure described in Section 4.b., spill absorbents and/or neutralizing material may be placed on the spill to begin clean-up. Clean-up methods will be varied by the Emergency Coordinator to address the specific hazards and physical properties of the spilled material. Handling and disposal of clean-up materials will be per Section 6.5., Post Incident Procedures.

4. Prevention of Recurrence or Spread of Fires, Explosions or Releases

Specific actions to prevent the recurrence or spread of fires, explosions or releases include stopping all processes and operations, collecting and containing released waste, and recovering or isolating containers. When ignitable waste is involved or in the area, all ignition sources will be removed, and care will be taken to avoid introducing sources into the response activity (i.e. electrical pumps, etc.). Additionally, surrounding materials that could be reactive with material in the spilled/released waste will be removed from the area.

5. POST-INCIDENT PROCEDURES

Following the initial emergency response to an incident, and subsequent implementation of this Contingency Plan, the following procedures must be followed.

5.a. Storage and Disposal of Released Material

An absorbent material compatible with the spilled waste will be utilized to contain, divert, and clean up the spill. The material collected during the clean-up process will be containerized, handled and disposed as hazardous waste. This handling process will also apply to any equipment used in the process which either is not feasible to decontaminate (i.e. Tyvek coveralls) or is awaiting decontamination for further use (shovels, etc.).

Immediately following the response to an emergency event, the Emergency Coordinator will arrange for proper containerization and handling of the cleaned up materials as hazardous wastes. After initial containerization and storage arrangements have been made, an appropriate decontamination procedure will be specified which will remove any remaining residue or other contamination at the site of the spill or release. This procedure will include sampling and analysis to demonstrate the adequacy of the decontamination.

Any analysis performed as part of this procedure will be in accordance with the Waste Analysis plan, which specifies the analytical parameters of pH, flashpoint, EPA Methods GC/MS 624/524.2/8260, and the Toxicity Characteristic Leaching Procedure (TCLP) as a minimum. Additional parameters may be selected based on the conditions specific to incident.

5.b Post-Incident Equipment Maintenance

After an emergency event, all emergency response equipment used for the incident will be decontaminated for future use or will be discarded as hazardous waste. Any piece of response equipment for which there is not a duplicate piece available, will be cleaned or replaced within 48 hours after the emergency event.

UA Risk Management Services maintains a variety of equipment and supplies that are designated for emergency response to hazardous materials incidents. Spill response supplies are housed at the HWMF. Individually assigned gear bags of personal protective equipment are stored by each staff member in their office. A listing of supplies and emergency equipment is included in this plan as Exhibit 3.

5.c. Required Reports

As required, any emergency event which requires implementation of this Contingency Plan will be reported in writing within fifteen (15) days to the EPA Region IX Administrator and to the Arizona Department of Environmental Quality.

Within thirty days after the incident, a similar written report must be submitted to the Pima County Local Emergency Planning Committee and the Arizona Emergency Response Commission. Mailing addresses are listed below.

Environmental Protection Agency
Region IX Administrator
75 Hawthorne Street
San Francisco, CA 94105

Arizona Department of Environmental Quality
Director
1110 W. Washington St.
Phoenix, AZ 85007

Pima County Local Emergency Planning Committee
Tucson/Pima County Office of Emergency Management
3434 E 22nd St
Tucson, AZ 85713

If the nature of the incident represents a potential liability for civil, environmental, property, or other damages, then immediate written notification must also be provided to the Arizona Department of Administration, Risk Management Division. This is the office, which provides insurance coverages for the University of Arizona and the Arizona Board of Regents.

Department of Administration
Risk Management Section
100 N 15th Ave Suite 301
Phoenix, AZ 85006

Phone: (602) 542-2182

If the incident impacts the sewer or storm drain systems a written report must be submitted to the Pima County Industrial Wastewater Control office at the address listed below:

Pima County Regional Wastewater Reclamation Department
Permit & Regulatory Compliance Coordinator
3035 W El Camino del Cerro
Tucson, AZ 85745

5.d. Content of Written Reports

The written reports must contain a complete summary of the information that is incorporated into the Hazardous Materials Incident – Initial Response Report form. Additionally it must include the following descriptive information about the incident.

1. Specific actions taken to respond to and contain the release.
2. Any known or anticipated acute or chronic health risks associated with the release.
3. If appropriate, advice regarding medical attention necessary for exposed individuals.
4. Measures which have been or will be taken at the facility to avoid similar releases in the future.

If new pertinent and/or significant information about the incident becomes available after the submission of written reports, a written addendum report shall be forwarded to the same agencies within seven calendar days.

6. CONTINGENCY PLAN UPDATE, DISTRIBUTION AND CONTROL

Update

This Contingency Plan will be updated as required to reflect changes in procedures, Emergency Coordinator information, etc. Each page of this Plan incorporates a document footer with the month and year of the current revision. When the plan is updated, the cover page and footer will be updated to reflect the current revision date in the text pages of the document. If an Exhibit to the Plan requires an update, the individual Exhibit will be marked with a revised date.

Distribution

Each time the Plan is updated or revised, complete new copies of the Plan will be printed and distributed as follows:

- Arizona Department of Environmental Quality – 1 copy
- U of A Police Department – 1 copy
- U of A Risk Management Services – 1 copy
- Hazardous Waste Management Facility – 2 copies
- U of A Research Laboratory Safety Services – 1 copy
- Banner University Medical Center – 2 copies**
- Tucson Fire Department – 2 copies
- Pima County Local Emergency Planning Committee – 1 copy
- Arizona Department of Environmental Quality – 1 copy
- Southwest Hazard Control – 1 copy
- Pima County Industrial Wastewater – 1 Copy

Copies of cover letters to these agencies are included in this document as Exhibit 6.

EXHIBIT 1
HAZARDOUS MATERIALS LIST
AND
REPORTABLE QUANTITIES

EXHIBIT-2
CHEMICAL COMPATABILITY CHARTS

EXHIBIT 3
EMERGENCY EQUIPMENT INVENTORY

EMERGENCY EQUIPMENT INVENTORY

Emergency response equipment is stored at the Hazardous Waste Management Facility (HWMF) at the north end of the AHSC Central Plant and the Risk Management Services main office in the University Services Annex (USA) building located at 220 W 6th St. 300B 2nd Floor. The items below are listed by their normal storage location.

Stored at the Risk Management Offices and the HWMF

A. Personal Protective Equipment

Emergency Response Gear Bags

Distribution:	Asst VP (1) Director/Safety Officers (3) Health/Safety Coordinators (2) Hazardous Waste Specialists (3) Total = 9, stored in individual offices
Bag Contents:	Tyvek suit (polyethylene-laminated type) Grey coveralls and/or regular Tyvek suit Neoprene overboots Leather gloves Latex and/or nitrile gloves (2-3 pair) Neoprene oil/acid resistant gloves Silvershield gloves and sleeves (2 pair) Silvershield apron Full-face respirator (P100/-OV/AG/AM combination cartridges) Mercury cartridges N95 disposable respirator Chemical splash goggles Safety glasses (clear or smoke) Clean-room booties Mini-flashlight Duct tape pH indicator paper

Other Available Personal Protective Equipment *

Location

Respirators

4 – MSA Self-Contained Breathing Apparatus	HWMF Room 121
2 – 3M BreathEasy hooded powered air purifying respirators	USA Room B213
Cartridge Inventory:	
3 - 3M combo P100-OV/AG (pink & yellow)	USA Room B213
6 - 3M combo P100- AG, formaldehyde (pink & white)	USA Room B213
6 - 3M P100 cartridges (pink)	USA Room B213, B200N

Full-face air purifying respirators	USA Room B221
6 - MSA UltraTwin 3 small 2 med 1 lrg	

Half-face air purifying respirators

13 - MSA Advantage 420 4 sm, 4 med, 5 lrg
 11 - MSA Comfo Classic: 2 sm, 8 med, 1 lrg
 6 - MSA Comfo Elite: 2 sm, 1 med, 3 lrg
 20 - 3M 5 sm 7501, 7 med 7502, 8 lrg 7503

Cartridge (Pairs) Inventory

USA Room B220N, Hall Cabinet
 USA Room B213 Storage

12 - MSA P100-AG/OV/AM combo cartridges (pink & lime green)
 5 - MSA AG/OV/AM (lime green)
 10 - MSA P100 cartridges (pink)
 15 - MSA mercury/chlorine
 3 - MSA Advantage P100 (pink)
 3 - MSA Advantage P100-OV/AG/AM (pink & lime green)
 9 – MSA Advantage N95 Flexifilter
 2 – 3M for 7500s P100/OV/AG/AM (pink & lime green)
 6 – 3M for 7500s OV/AG/AM (lime green)
 18 – 3M for 7500s P100 (pink)

N95 disposable respirators

USA Room B213, B200N

Flat Fold:	3M 9210	140 single size
	3M 9211	30 (single size with exhalation valve)
	3M 1870	580 (single size biofluid resistant)
	3M 1870	40 (single size biofluid resistant)
Cup Style:	3M 1860	140 (regular size, biofluid resistant)
	3M 1860s	80 (small biofluid resistant)

Eye Protection

USA Room B213, B221

6 - Uvex Stealth Goggles
 6 - Uvex Futura Goggles
 3 – Uvex Goggle – Over the Glasses
 9 – Uvex Safety Glasses

Body Protection

20 – Tyvek Suits	USA Room B213
4 – Silver Shield Aprons	USA Room B213
1 – Traffic Safety Vest	USA Room B213

Hand Protection

11 – Kevlar/Leather Gloves	USA Room B213
20 – Silver Shield Gloves Size 8, 10	USA Room B213
6 Boxes – Nitrile Disposable XL, Med	USA Room B213, B223

B. Spill Response Equipment

Location

Hazorb Spill Pillows – 2	USA Room B213
Hazorb Spill Pillows – 1 case	HWMF Room 121
Hazorb Spill Booms – 1 case	HWMF Room 121
Spill Pillows for HF – 1 case	HWMF Room 121
Vermiculite, medium grade – 5 x 14 lb. bags	HWMF Room 121
Sodium Bicarbonate – 4 x 25 lbs.	HWMF Room 121
Clear plastic bags, 4 mil – 1 case	HWMF Room 121
Garden Hoses – 2	HWMF Room 121
Push Broom – 2	HWMF Room 121
Non-sparking plastic dustpans – 1	HWMF Room 121
Polyethylene Sheeting, 6 mil – 1 roll	HWMF Room 121
85 gallon overpack drum – 1	HWMF Room 121
Drum de-header tool – 2	HWMF Room 121
Non-sparking bung wrench – 1	HWMF Room 121
Explosion proof liquid transfer pump – 1	HWMF Room 106B
Liquid transfer pump – 1	HWMF Room 106B
Hako Minuteman Mercury Vacuum	HWMF Room 106B
Sigma Automatic Wastewater Samplers – 3	HWMF Room 121
Sensidyne HazCat Chemical ID Kit	HWMF Room 119
Universal Spill Kit	Vehicle 4022
Acid Spill Kit	Vehicle 4022

C. Transportation Equipment

Location

Risk Management Vehicles:

Chevy Van 4709 - plate: G-715GB	Parking Lot at 220 W. 6 th St.
Chevy Blazer 4242 – plate: G-899DX	
Chevy Impala Sedan 8091 – plate G-158HA	
Chevy Impala Sedan 8092 – plate G-159HA	
Dodge Stratus Sedan 3898 – plate: G-503DB	
Toyota Prius Sedan 3822 – plate: G-884DX	
Dodge Ram 1500 Pickup Truck 8089 – plate G-163HA	

Dodge Ram 1500 Pickup Truck 8088 – plate G-162HA	HWMF
Chevy Silverado Box Truck 4022 – plate: G-163DM	HWMF
Chevy Silverado Flat Bed Truck 4076 – plate: G-485GA	HWMF

D. Communications Equipment

Location

Each staff member is assigned a cellular phone

9 – Portable Two-Way Radios	USA Room B224, B226, B246, B250, B241, B239, B235, B237, B254 HWMF (3)
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Rx Frequencies: CH 1 – 460.35000 – UAPD 1
 CH 2 – 460.55000 – UAPD 2
 CH 3 – 460.25000 – UAPD 3
 CH 4 – 453.42500 – UA Community Use
 CH 5 – 453.10000 – TFD HAZMAT
 CH 6 – 453.20000 – TFD Dispatch

Realistic PRO-42 10-Channel Programmable Scanner	USA Room B213
HP Fax Machine Number = 621-3706	USA Room B227
Ricoh Fax Machine Number = 626-4925	HWMF Room 101

E. Industrial Hygiene Monitoring Equipment

Location

Euroclean Dry HEPA Vacuum	USA Room B213
Foxboro Miran 1B Portable Ambient Air Analyzer	USA Room B213
Industrial Scientific Carbon Monoxide Monitor	USA Room B213
MEI pDRs: Respirable Aerosol Monitors (3)	USA Room B213
Rae Systems QRae 4 Gas Monitor (O ₂ , H ₂ S, CO, LEL)	USA Room B213
RaeSystems ToxiRae PID (2)	USA Room B213
RaeSystems ppbRae PID	USA Room B213
RaeSystems ppbRAE 3000 PID	USA Room B213
TIF RX-1A Refrigerant Leak Detector	USA Room B213
Jerome 431-X Mercury Vapor Analyzer	HWMF Room 119
TSI IAQ Calc (CO ₂ , Relative Humidity, Temp)	USA Room B213
Draeger Acura Pump (Colorimetric Tubes)	USA Room B213
3 – SKC Airchek Personal Sampling Pumps	USA Room B213
2 – Gilian Gilair Personal Sampling Pumps	USA Room B213
5 – Gast High Volume Air Sampling Pumps	USA Room B213
Assorted Sorbent Tubes & Filters	USA Room B223
Bios Dry Cal	USA Room B223
OHD Fit Tester 3000 – Quantitative Respirator Fit Tester	USA Room B221
4 – Qualitative Respirator Fit Test Kits (Bitex)	USA Room 221B
Digital Micromanometer & Pilot Tube	USA Room B213
Alnor Thermo Anemometer	USA Room B213
Fluke TiS Infrared Camera	USA Room B213

*Items may be on loan to various campus locations. See sign out sheet at USA Room B227A Risk Management Reception to locate.

Stored at Koffler 321B

Hazorb Spill Pillows – 1 case
Hazorb Spill Booms – 1 case
Small Spill Kits – 4
Hydrofluoric Acid Spill Kit – 1
Sodium Bicarbonate - 2 x 25 lbs

EXHIBIT 4
HWMF AND CAMPUS MAP



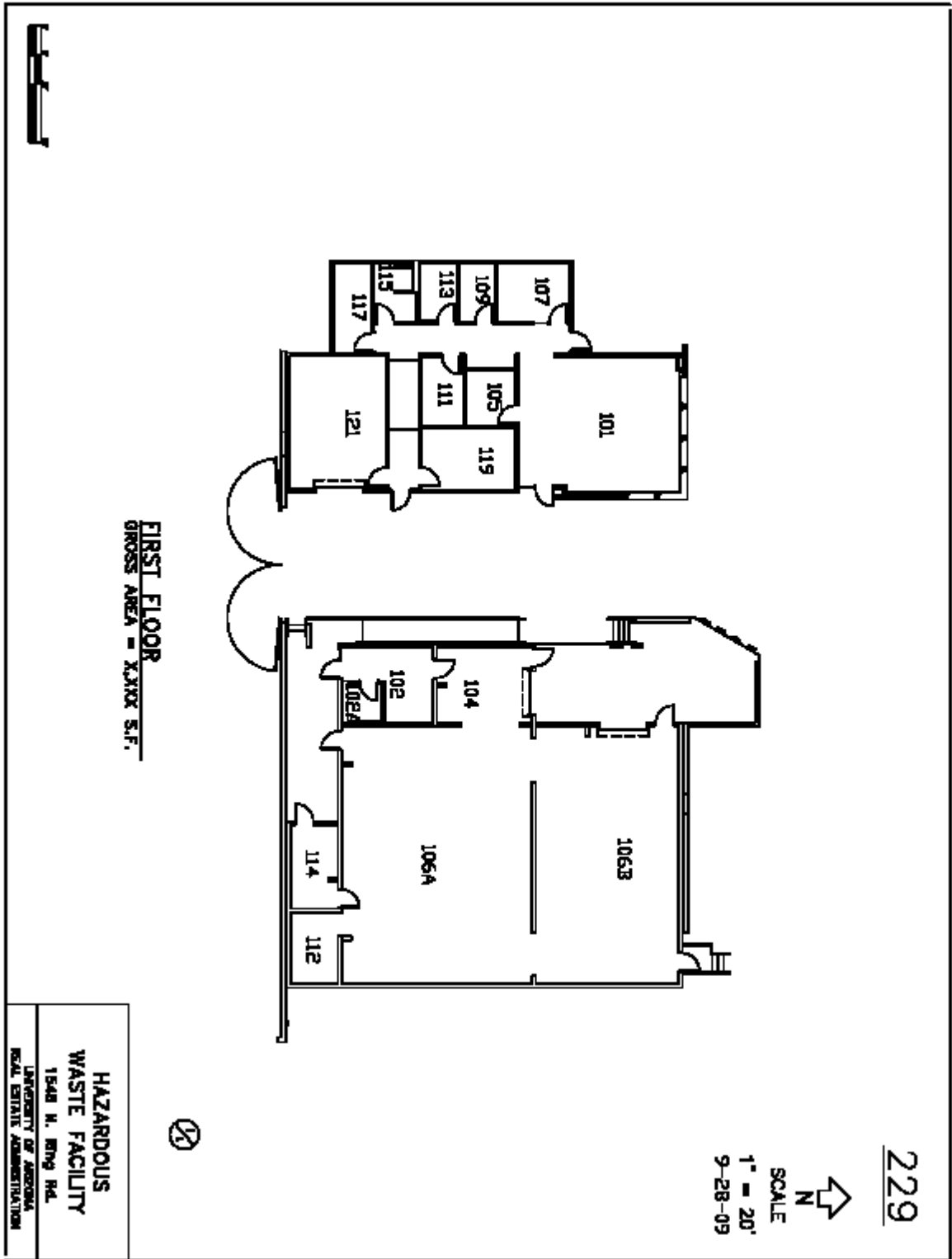
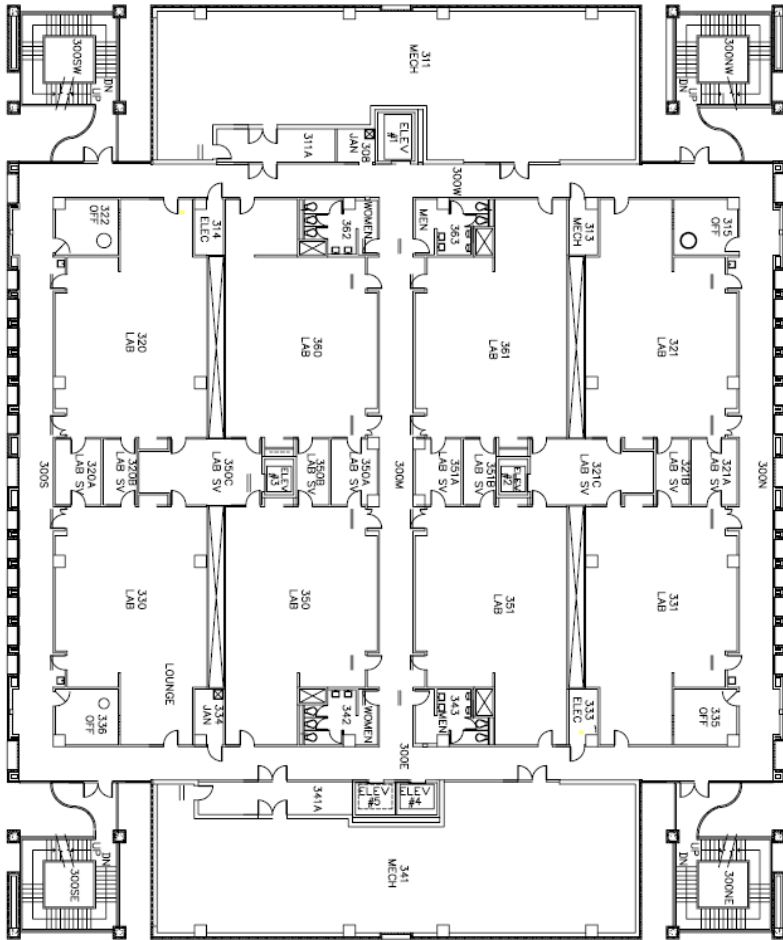


EXHIBIT 4A
KOFFLER 321B FLOOR PLAN



THIRD FLOOR
GROSS AREA: 27,968 SF



113



SCALE
1" = 30'

5-31-01



HENRY KOFFLER
BUILDING
1340 E. University Blvd.
UNIVERSITY OF ARIZONA
SPACE MANAGEMENT

EXHIBIT 5
AUTHORITY FOR EMERGENCY COORDINATORS
TO COMMIT RESOURCES

May 25, 2016

Arizona Department of Environmental Quality
Office of Waste Programs
1110 West Washington Street
Phoenix, Arizona 85007

To Whom It May Concern:

In accordance with the requirements of 40CFR §264.52 the University of Arizona has identified a Primary Emergency Coordinator and three Secondary Emergency Coordinators (listed below). These individuals are authorized to implement the Contingency Plan for emergency events associated with the university's Hazardous Waste Management Program.

Further, in accordance with 40CFR §264.55, the Emergency Coordinators listed below are authorized to direct and commit, if necessary, all available resources to implement the Contingency Plan.

Primary Emergency Coordinator:

Steven C. Holland, Assistant Vice President – Risk Management Services

Secondary Emergency Coordinators:

Herbert Wagner, Director – Occupational and Environmental Health and Safety

Lloyd Wundrock, Environmental Safety Officer

Jeff Christensen, Hazardous Waste Program Supervisor

Sincerely,



Gregg Goldman
Senior Vice President for Business Affairs and Chief Financial Officer



EXHIBIT 6
DOCUMENTATION OF CONTINGENCY
PLAN DISTRIBUTION

Electronic copies were sent to the following entities on and .

Arizona Department of Environmental Quality	Yvonne Rodriguez
University of Arizona Police Department	Brian Seastone
Research Laboratory Safety Services	Dan Silvain
Pima County LEPC	Courtney Bear
Tucson Fire Department	Mike Carsten Jeff Lengejans
Banner University Medical Center	Jim Schweikhard Don Brazie
Southwest Hazard Control	Jennifer Kilpatrick
Pima County Industrial Wastewater Control	Jeff Prevatt

EXHIBIT 7
LETTERS OF COORDINATION FROM
EMERGENCY RESPONSE AGENCIES

EXHIBIT 8
HAZARDOUS MATERIALS INCIDENT
INITIAL RESPONSE REPORT
BLANK FORMS