UW NNCI WASHINGTON
NANOFABRICATION FACILITY
UNIVERSITY of WASHINGTON

University of Washington

Washington Nanofabrication Facility (WNF)

DEPARTMENTAL HEALTH AND SAFETY PLAN

Revision 2018.1

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A. INTRODUCTION:

1. Scope:

The policies and procedures described here apply to the Washington Nanofabrication Facility located primarily on the first floor of Fluke Hall and satellite facility in Ben Hall and addresses site-specific safety issues.

The Health & Safety Plan is publicly available in multiple venues:

- Electronically, on the WNF website at http://wnf.washington.edu
- Electronically in CORAL system
- In hard copy in the Emergency Control Station, Fluke 115A

2. Health and Safety Policy:

This Accident Prevention Program, or Health and Safety Plan, shares the commitment of the University of Washington to provide a "safe and healthful environment for all individuals associated with the institution, including faculty, staff employees, hospital patients, and visitors" (University Handbook Vol. IV, Part VI, Chapter 4). It follows UW policy set in the Administrative Policy Statements (APS) 10.3, and is consistent with requirements in the Washington State Industrial Safety and Health Act (WISHA) (WAC 296-24, 296-62 and 296-800) which is administered by the Department of Labor and Industries (L&I).

3. Responsibility:

The Dean, Director, Chairs and Supervisors are responsible for maintaining safe work practices in their respective units, including required health and safety training. We understand that it is University policy that this responsibility can neither be transferred nor delegated (University Handbook, Vol. IV, Part VI, Chapter 4, Section 1.A).

Our department requires all employees to comply with health and safety regulations, with departmental policies and procedures that apply to their own conduct on the job, and to report accidents, injuries, and unsafe conditions to their supervisor AND the WNF Director.

4. Safety Coordinator:

We have chosen one individual to serve as a Safety Coordinator for our department (see "Back Page"). This person has been given adequate authority to carry out the following responsibilities:

- Promoting this Health & Safety Plan in our organization
- Updating this Plan, at least annually, with management approval
- Assist with scheduling employee/user safety training
- Coordinating with Environmental Health & Safety (UW EH&S)
- Provide assistance to users and employees to resolve safety complaints
- Keeping safety bulletin boards current
- Maintaining our organization's safety records
- Keeping the department head aware of current safety concerns

B. FUNDAMENTALS: 8 KEYS

1. New Employee Health and Safety Orientation:

All our new users, employees, including those that are permanent, temporary, or part-time, must receive instruction for the following:

a. Reporting procedures for fire, police, or medical emergencies;
b. Evacuation procedures during an emergency;
c. Location of fire alarm pull-stations and fire extinguishers; Employees using fire extinguishers must have previously received training;
d. Procedures for reporting all accidents and incidents to their supervisors and completing a written online report using OARS;
e. Procedures for reporting unsafe conditions or acts to their supervisors, and, when possible, taking action to correct unsafe conditions;
f. Exact location of first-aid kits and identification of first-aid certified employees;
g. Description of UW and departmental Hazard Communication Program for chemical hazards to which they may be exposed;
h. Identification and explanation of all warning signs and labels used in their work area;
i. Use and care of any personal protective equipment (PPE) they are required to use;
j. Description of safety training they will be required to attend for their job. This includes General Asbestos Awareness Training which is mandatory for all employees.

The following procedures describe how we provide the above instruction, how and where records are kept, and what person is responsible for providing training. New users and employees must complete on-line EH&S training as well as an in-person on-site orientation as well as cleanroom gowning protocol, PPE, and wet chemical processing training. Training records are maintained on CORAL database and assigned to each user. Some training modules require annual or periodic retraining. CORAL will send users notification to alert users to retraining deadlines. Failures to complete retraining on-time will result in a suspension of user access privileges.

2. Emergency Evacuation and Operations Plan (EEOP):

All University employing units must develop procedures for evacuation in an emergency and for response to fires, bomb threats, chemical spills, earthquakes, etc. WNF has an EEOP that is located here: https://www.wnf.washington.edu/docs/Fluke_EEOP.pdf**.** The Fluke Hall EEOP contains:

a. Building floor plans that show safety equipment and exit pathways;
b. Evacuation procedures;
c. Evacuation assembly point(s);
d. Methods for accounting for staff, students, visitors;
e. Areas of refuge for mobility-impaired occupants.

For more information, you may call the EH&S Building and Fire Safety Office at 206.543.0465. All WNF staff and users must be trained in the EEOP. If an employee moves to a new location, the EEOP must be reviewed for the new work-site.

3. Accidents:

a. Medical Emergencies:

All medical emergencies must be reported to the nearest Emergency Medical Services (EMS), usually 911. Our department uses the following method to summon EMS help.

WNF staff and users use 911 to summon EMS help. If using a cellular phone, dial 911 and tell the dispatcher you are at Fluke Hall on the University of Washington campus in Seattle and the nature of the emergency. For fire, pull the red alarm pull station, then call 911. For hazardous chemical spills, pull the yellow hazardous process materials (HPM) alarm and then call 911. Follow all procedures and protocols explained in the Fluke Hall EEOP.

b. Report form to supervisor and EH&S:
All accidents *and near misses* must be reported to the employee's supervisor, the WNF Director, and EH&S as soon as possible. Near misses are valuable opportunities to correct unsafe situations, which under slightly different circumstances, would result in serious injury. A report may be filled out by the employee, the supervisor, or both using the Online Accident Reporting System (OARS) at: http://www.ehs.washington.edu/ohsoars/index.shtm.

Non-UW WNF users should list the WNF Director as their supervisor in OARS.

Copies of this department's completed forms are distributed -to the following people:

- Immediate supervisor of the party involved
- UW EH&S
- WNF Director and Safety Manager

c. Investigation:
All accidents and near accidents must be investigated by the supervisor and/or WNF Director who then summarizes the details and corrective measures in the above report. EH&S and the department's organizational safety committee review the report. Assistance from EH&S is available by calling 206.543.7388.

4. First Aid Kits and CPR Given:
Quick and effective first-aid for an injured University employee results from the availability of strategically located first-aid kits and first-aid/CPR certified individuals whenever department staff are working. Adequate employee *access* to these resources is addressed in this section.

a. Department First Aid
Consistent with the UW First Aid Response Plan (APS 10.5), certified first-aid and CPR assistance is available to department employees by contacting UW Police Department. Some WNF staff have first aid training and can be consulted during normal business hours for local first aid response.

Related department *training* requirements are addressed later in section C.4 First Aid and CPR Training. Names and phone numbers of employees who are first-aid/CPR certified are listed on the "Back Page" of this document and on the outside of first aid kits.

b. First Aid Kits

Locations and sizes of first-aid kits in our department are listed below. First-Aid Kits are inspected periodically so they can be restocked before running out of an item. Names and phone numbers of those employees who are CPR trained and those employees who are responsible for first-aid kits are listed on the outside of the kits and on the "Back Page" of this document.

The first aid kits are located in the cleanroom gowning room and the Emergency Control Station located in Fluke 115A.

5. Safety Problems: Reporting and Resolving:

Employees are encouraged to report safety concerns to their supervisor. If employees do not feel they can do this, or have done so and do not feel the problem has been resolved, they may discuss the situation directly with their safety coordinator or safety committee representative. Assistance from EH&S is available, if needed, to resolve a problem. Safety problems may be reported online using OARS as you do for accidents/incidents. Other departmental procedures for reporting and resolving safety problems or potential workplace violence are described below:

Call 911 for emergencies or issues needing immediate attention, or UW police department non-emergency number for other concerns at 206-685-UWPD (8973)

If safe, yet concerned, report threats, potential workplace violence, or other suspicious situations to UW Safe Campus at 206-685-SAFE (7233)

For personal emotional or personnel issues including counseling, legal advice, work-life solutions and other issues UW personnel can contact UW Care Link at 866-598-3978 or get more information at http://hr.uw.edu/benefits/uw-carelink/

6. Safety Meetings: Supervisor Leadership

Supervisors can promote health and safety in formal safety meetings or in regular staff meetings, but either way, discussion of safety issues needs to be documented. Formal safety meetings are held as described below, including organizational policy, meeting frequency, responsibility for minutes, location of minutes, and how part-time employees can participate or be informed.

WNF Safety Coordinator will arrange quarterly meetings to discuss regular business. Issue specific meetings are conducted, in cooperation with EH&S on an as-needed basis. Meeting minutes are kept and will be digitally archived and available upon request. Noteworthy issues requiring the attention and participation of users and occupants will be disseminated via “WNF-all-users” email alias messages. Other non-urgent information will be discussed on a weekly basis during weekly user and staff meetings. Minutes for the weekly user meetings are archived and available to users here https://www.wnf.washington.edu/category/minutes/

7. Health & Safety Committee Participation:

Health & Safety Committees at three organizational levels help determine unsafe conditions and procedures, suggest corrective measures, and obtain the participation of all UW personnel. At the Organizational and University-Wide levels, fifty percent (or more) of the representatives are elected by employees and fifty percent (or less) are appointed by management. Safety issues may originate at any level. Health & Safety Committees are required by Washington State regulation (WAC 296-800-14005). A listing of committees and current members may be found at the EH&S web-site: www.ehs.washington.edu (click on Safety Committees).

a. Departmental Health and Safety Teams

Departmental Health & Safety Teams deal with “front line” issues. Large departments may especially benefit from this centralized approach to health and safety issues. In addition to providing a pathway for communication between different sections, teams involve employees in the process of identifying and resolving safety issues. Our department *does not have* a formal health and safety team. Instead, health and safety issues are discussed in staff meetings (see section B.6) and as part of our Organizational Health & Safety Committee.

b. Organizational Health and Safety Committees

The University is divided into eleven organizational groupings, each one represented by an *Organizational Health and Safety Committee*. This committee deals with issues the members may have in common but can handle more effectively together. Each elected member represents all units of that organizational group, including his/her own.

Our department is represented on the Group #9 Organizational Health & Safety Committee.

The Group # 9 Committee reports to the following executive, the Dean of the College of Engineering, who is represented on the Committee by Michael Glidden.

Our current representatives are identified on the "Back Page" of this document.

c. University-wide Health and Safety Committee

In addition, to provide consistency and oversight, a *University-wide Health and Safety Committee* has been established. Its members come from the official organizational committees. Safety issues referred to this level are relevant to the entire University community. The member(s) who currently represent us from the Group # 9 Organizational Health & Safety Committee are listed on the "Back Page" of this document.

8. Safety Bulletin Boards

Our departmental safety bulletin boards are used for posting DOSH (formerly WISHA) posters, safety notices and safety newsletters. Safety committee minutes, training schedules, safety posters, accident statistics, and other safety education material may also be posted. They are located in CORAL and the Emergency Control Station in Fluke 115A where all employees, students, and visitors can see them (WAC 296-800-19005) and at all University reference stations.

C. ACCIDENT/ILLNESS PREVENTION: 6 KEYS:

1. Identification of hazards:

This is the foundation for our Accident Prevention Program. The boxes we have checked in the following chart, "*Typical WorkSite Safety Issues To Address*," indicate health and safety concerns present in our own department.

- We consulted knowledgeable staff to identify possible hazards.
- We reviewed records of past injuries to understand their causes.
- We developed Laboratory Safety Manuals for our laboratories (including Chemical Hygiene Plans) if required.
- We visited all work areas, and examined processes from beginning to end in order to record possible hazardous situations.
- We developed inspection checklists (see section C.3 below).
- We applied recommendations from inspectors outside our department, such as EH&S.
- We consulted the Washington Administrative Code (WAC) Chapters 296-24, 296-62 and 296-800 for General Safety and Health Standards and Occupational Health Standards established by the State Department of Labor and Industries (L&I), as well as the University of Washington Administrative Policy Statements (APS), 10.3.
- We performed Job Hazard Analyses (JHA).

A *Job Hazard Analysis* may be performed by the first line supervisor in the following way:

- Review job injury and illness reports (including “close calls”) to determine which jobs to analyze first.
- Involve employees in all phases of the analysis. Explain to workers that you are studying the job, itself, not checking up on them.
- Review work plans for an overview of job activities.
- First note deficiencies in general conditions, such as inadequate lighting, noise, or tripping hazards that may not be directly related to the job.
- Break the job down into steps in the order of occurrence.
- Examine each step to determine hazards that exist or might occur.
- Determine whether the job could be performed in another way or whether safety equipment or precautions are needed.
- If safer job steps can be used, write new procedures to describe specifically what the worker needs to know to perform them.
- Determine if any physical changes will eliminate or reduce the danger (e.g. redesigned equipment, different tools, machine guards, personal protective equipment or ventilation).
- If hazards are still present, try to reduce the necessity or frequency for performing the job.
- Document the assessment: job covered, task, date, and person performing the analysis.
- Review recommendations with all employees performing the job.
- Review and update the job hazard analysis periodically, especially if an accident occurs in that job.

2. Reduction of hazards:

Our department head and supervisors have complied with the requirement for a written plan in their areas of responsibility by *identifying* each hazard, *evaluating* its potential risk, and *controlling* or eliminating it according to the measures described below. Some plans (**e.g., Laboratory Safety Manuals, Emergency Evacuation and Operation Plans, Radiation Safety records)** are located elsewhere and are referenced accordingly.

When possible, we modified or designed our facilities and equipment to eliminate employee exposure to hazards. Where engineering controls are not possible, we have instituted work practice controls that effectively prevent employee exposure to the hazard. When these methods of control are not possible or not fully effective, we require the use of personal protective equipment (PPE), such as safety glasses, hearing protection, respirators, self-contained breathing apparatus (SCBA), etc.

a. Evaluation

Evaluation of potential risk (probability and magnitude of harm) has been done for certain hazards. When hazards are either (1) present in an unknown or a variable amount **(such as airborne contaminants like asbestos or carbon monoxide),** or (2) subject to complicating factors **(such as extreme risk or individual medical sensitivity)**, monitoring has been done to determine the safest procedures**.** EH&S has been consulted as needed. The following describes evaluations we have made:

- Hazardous Production Materials (HPM) risks and utilization including compressed, corrosive, and pyrophoric gases, and wet chemicals including acids, bases, and solvents. Resins including photoresists.

b. Engineering Controls

Engineering controls have been employed, whenever possible, as the preferred way to eliminate the following specific hazards.

WNF employs the following engineering controls **(**

- Continuous gas source and breathing zone monitoring for hazardous gases and low oxygen concentrations
- Automated gas safety systems for hazardous gases including reduced flow orifices and automated shut off capabilities
- A central Hazardous Production Materials alarm panel monitors gas detectors, HAZMAT pull stations, exhaust status, and the building fire alarm. Any low-level detection or maintenance event triggers alarms and notifications to a 24/7 monitoring service center that calls staff in parallel to email and text notifications. Any high-level alarm triggers the building fire alarm and dispatches the UWPD, Seattle Fire Department (SFD), and a Facilities Operations Maintenance Specialist (FOMS) to respond. The “Silent Knight” auto dialer had two dedicated analog phone lines whose numbers are 206-685-6641 (primary) and 206-685-6752 (alt).
- Wet process engineering controls including fume hoods, wet process stations with a central Acid (and corrosive) Waste Neutralization (AWN) for acid and corrosive/caustic materials removal.
- For airborne contaminants and chemical risks that cannot be contained using traditional engineering controls, select WNF personnel are trained and certified in the use of half or full face respirators, SCBAs and HAZMAT suits. Users are NOT AUTHORIZED to use these items.
- Pyrophoric materials abatement via pyrolysis using a “burn box”. This system burns off hydrogen and other pyrophoric gases like silane, diborane, and phosphine before being diluted and released into the corrosive exhaust stream.

c. Administrative Controls

Administrative controls, the way a job is done, have been used to reduce some of the hazards in our department, and on-going training is an inherent part of our safety program (see section C.5).

The following administrative controls are used in our department**:**

WNF has established Standard Operating Procedures (SOPs) for all equipment and for all wet chemical related operations and pre-approved chemical mixtures in the facility. New materials or mixtures and processes must be submitted through a chemical review request via this website https://www.wnf.washington.edu/new-new-materials-request/
Users are trained in all operations and must pass a knowledge assessment and obtain periodic retraining and utilize the training and adhere to the SOPs that implement best practices. Users are also welcome to submit suggestions for improvements at any time in person or via web form https://www.wnf.washington.edu/lab-user-portal/issues-suggestions/ or at the weekly user meetings.

d. Personal Protective Equipment

Personal protective equipment (PPE) is used as a "last line of defense" for some hazards, particularly chemicals. Our hazard assessment and training documentation is located in CORAL and in the WNF user manual. The following information is required (UW APS10.4):

- Hazard Assessed, (site, evaluator, date, supervisor verifying)
- PPE Selected
- Type and frequency of Training

WNF hazards and PPE protocols are referenced in the user manual and covered in orientation training and as part of an annual refresher. Aperiodic training may be needed as the lab user manual and SOPs are updated to be in compliance with current best practices.

3. Safety Inspections

To maintain our commitment to safe work practices, and to ensure that our department continues to meet regulatory standards, we conduct regular, thorough inspections of associated work areas and continually check for unsafe conditions and practices. We consider these inspections an additional opportunity to provide practical training in safety awareness as well as a systematic method for involving supervisors and others in the process of reducing workplace hazards. Our department's policy on the frequency and methods for periodic safety inspections, and the location of inspection records is described below.

WNF performs semi-annual inspections with EH&S to correct deficiencies and establish best practices for safety. These checklists are populated onto an EH&S Dashboard for lab safety performance and give a finite amount of time to take corrective actions. Access to the reports can be made by submitting a written request to the WNF Director.

Additionally, the WNF Director and Safety Manager perform random periodic inspections and put in place corrective actions on an as-needed basis. WNF engages directly with SFD and explains site conditions, performs a semi-annual walkthrough with Fire Marshalls and offers co-training opportunities.

WNF also cooperates with local regulatory agencies including King County Industrial Waste (KCIW) and the Puget Sound Clean Air Agency (PSCAA) to review and monitor aqueous and airborne effluent. KCIW discharge reports are submitted on a monthly basis and permit renewal is performed every 3 years. PSCAA

inspections are random and require that discharge records be kept on hand for a period of 5 years.

4. First Aid and CPR Training

The UW Police Department provides adequate access to emergency first aid for our employees (see section B.4). Consequently, we do not require employee training in First Aid and CPR. **However, WNF staff are encouraged to take first aid training and can be consulted during normal business hours.**

5. Safety Training: On-Going

To ensure an effective health and safety program, we continually re-educate employees on how to work safely with all applicable hazards. Supervisors are responsible for this training and for seeing that safe practices are followed. Listed below are the training requirements for hazards identified in our department, how training is obtained, and how often it must be renewed. You will get renewal notifications via CORAL. Training records, including completion dates, are kept to maintain program continuity and to satisfy legal requirements. Documentation is kept in CORAL database.

Hazard	Type of Training	Frequency	Person/Position
ALL SITE HAZARDS	ORIENTATION		ALL PERSONNEL
PPE/WET PROCESS	ORIENTATION/ANNUAL		ALL LAB USERS
EH&S MANDATORY	ORIENTATION/AS NEED		ALL PERSONNEL

6. Medical Exams and Vaccinations

Certain work environments or specific work practices create health risks that require medical examinations or immunizations for employees. Our department has checked the UW APS 10.3 or 10.6, or called the Occupational Health Nurse at 206.221.7770 and determined that this does not apply to us. Some WNF employees are part of the respirator and HAZWOPR programs and have associated medical exams, training, and fit testing on an annual basis.

D. DOCUMENTATION AND FOLLOW-UP

1. Record-Keeping

To meet State requirements, our department maintains records of safety activities for varying lengths of time depending upon the type of record, and is able to produce them when requested by EH&S or L&I. **Note: the EH&S Training office maintains records for EH&S classes. Call 206.543.7201 for more information.**

Department records should include:

- **Results of self-evaluation inspections.**
- **Records of requests for assistance in correcting noted deficiencies.**
- **Minutes of safety education-accident prevention meetings.**
- **Records of employees requiring medical evaluations including dates of examinations and immunizations.**
- **Records of employee safety training, including dates when certificates expire, where applicable.**

For this Plan, we have listed below applicable records maintained by our department, and their locations.

All training records are located in CORAL with backup copies of initial training in email records.

2. **Updates:**
   For this Plan to be useful as a "living document," it must reflect the department's *current* safety program and its *current* responsible parties. Periodic updates, at least annually, are necessary to ensure this. The "Back Page" of this document provides a convenient place to look for the most recent revision date, the names of key safety personnel, and other information.

E. The Safe Campus Program

All managers, supervisors, and employees must be aware of the appropriate processes to follow regarding workplace and domestic violence prevention. They can receive assistance in answering any employee questions from the HR Violence Prevention and Response Program Manager. **We expect our entire faculty and staff to take Workplace Violence training at least once every biennium, as well as receive information during new employee orientation**. We arrange for the biennial training [fill in the method used by your work group]. Records of the training are maintained in the [give location] Office.

While there are specific regulatory requirements for hospitals and late night retail operations regarding workplace violence that don't apply to general University operations, we do recognize that individual attacks on faculty, staff and students can and have occurred due to domestic violence or workplace violence. As part of maintaining a healthy, safe working environment, the University has developed and administers one UW Violence in the Workplace Policy and Procedure through the Human Resource's Violence Prevention and Response Program. Information on the program/policies is published on the UW website at http://www.washington.edu/admin/hr/polproc/work-violence/index.html.

University services include nighttime safety escort services, counseling sessions, a dedicated assessment team, and informational materials and training, but services are not limited to these items.

For more comprehensive information, access the SafeCampus website at http://www.washington.edu/safecampus.

If any staff has concerns regarding a threat of violence, call:

. Seattle: 206-685 SAFE (206-685-7233)
. Bothell: 425-352-SAFE (425-352-7233)
. Tacoma: 253-692-SAFE (253-692-7233)

In a life threatening situation or imminent danger call 911, immediately!

“Back Page”

1. Department: Washington Nanofabrciation Facility (WNF)

2. Today’s date / signature: February 5, 2018

3. Last update (date/person): 2/5/2018 / Michael Khbeis

3. Health and Safety Coordinator for our department:
   Name Duane Irish
   Phone 206-221-5821
   E-mail irishd@uw.edu
   Bldg./Room/Box # Fluke 115 / Box 352143

4. Health and Safety Team members in our department **(if applicable)**:
   Michael Khbeis
   David Nguyen

5. **Organizational** Safety & Health Committee:
   Group # 9
   Elected: Name/e-mail/phone Michael Khbeis/Khbeis@uw/3-5101
   Appointed: Name/e-mail/phone _____ (from ___ to ___)
   Chair: Name/e-mail/phone Michael Glidden/glidden@uw/5-2105

6. **University-Wide** Safety & Health Committee representative for above Gr. #:
   Name/e-mail/phone Dean of College of Engineering

7. First-Aid/CPR Certified employees in our department:
   Name/Phone/Expiration Date _____
   Name/Phone/Expiration Date _____
   Name/Phone/Expiration Date _____
   Name/Phone/Expiration Date _____

   Person responsible for stocking First-Aid Kits (UW APS 10.5):
   _____

8. Important Non Emergency Phone Numbers:
   _____
   _____

   See EH&S web-site at www.ehs.washington.edu
   Click on “Service Phone Numbers”

Small Utility Vehicle and Golf Cart Procedure

These procedures are provided to facilitate safe operation of small utility vehicles and golf carts used during UW operations. Because these vehicles are typically of lighter construction, feature less safety equipment, and operate in different environments than typical motor vehicles, it is imperative that operators understand the particular capabilities and limitations of these vehicles, and that they are aware and take precautions against the particular hazards they may be exposed to.

Each department that operates these types of vehicles must adhere with the requirements of this procedure and should have trained staff members who are responsible for supervising operators. Since this procedure may not identify all hazards associated with particular vehicle operations, each department is responsible for conducting a "job hazard analysis" to determine the potential hazards for their specific operations and operating conditions (for example, crowded stadiums, steep slopes, or severe weather) and to take appropriate action to mitigate any particular hazards identified in that analysis. Departments are also responsible for ensuring that vehicles are maintained in a condition that allows for safe operation.

This procedure is for small utility vehicles and golf carts only, and is not intended for typical automobiles, trucks, or vans, or for riding lawnmowers, tractors, etc. This procedure does not replace or invalidate any other requirements or rules governing use of UW vehicles or equipment.

1. Definitions:
    a. Golf Cart: Small motorized vehicle with room for a driver, one or more seated passengers, and a small amount of equipment, generally not licensed for street use.
    b. Small Utility Vehicle: Small motorized vehicle designed for a specific type of work, such as a Cushman, a John Deere Gator or Kawasaki Mule, etc. These vehicles are mainly intended for off-street use, although they may be licensed for street usage. They are generally designed to carry equipment and/or passengers.
    c. Street Legal: A small utility vehicle or golf cart that meets the requirements of the State of Washington to be able to be driven on public roads according to the appropriate RCW and WAC sections and has been approved for such use by the manufacturer.
    d. Trained Staff Member: UW employee who has been received training on the elements of this procedure and who is authorized by their department to supervise golf cart and/or small utility vehicle operations.

2. All drivers of utility vehicles or golf carts must attend a training session prior to operating any such vehicles, and must be a trained staff member or under the supervision of a trained staff member while operating vehicles.

    The training program should include:

    - The contents of this procedure, especially including all safety rules.

- Safe operating rules of the road.
- Precautions for operating in low-light or dark conditions.
- Designated paths and routes for vehicle operation.
- Procedures for unusual operating conditions, for example, while using an attached snow plow or towing, as applicable.
- Limitations and restrictions on the use of the golf cart.
- The difference between street legal and non-street legal golf cart/small utility vehicle.
- Steps to be taken in an emergency.

3. All drivers must be 18 years of age or older and must have a valid driver's license. A copy of the current valid driver's license should be on file with the responsible department prior to operating the vehicle. Each department should designate an HR representative to keep this confidential information on file.

4. Utility vehicles and golf carts shall observe all vehicle traffic laws (e.g. stopping at stop signs, yielding to pedestrians, etc).

5. Vehicles shall not be operated in a manner that may endanger passengers, other members of the campus community, or property. Drivers must not be under the influence of alcohol or drugs. Drivers should not use radios or cell phones while the vehicle is moving. Absolutely no horseplay while operating vehicles.

6. The number of passengers and load capacity shall not exceed the manufacturer's rated limit. Passengers must be in seats. Seatbelts must be worn, if installed. Safety equipment, especially including seatbelts, may not be removed from the vehicle.

7. Driver and passengers must hold on to the utility vehicle or golf cart at all times while the vehicle is in motion unless securely seat-belted in place. Luggage, packages, cargo, and/or equipment must be adequately secured for safety.

8. Operators must operate vehicles at a safe speed for conditions, and should not operate vehicles at maximum speed.

9. Utility vehicles and golf cart-type vehicles that are not licensed for street usage are restricted to sidewalks and paths on the University campus. Street-legal vehicles may be operated on streets with prior approval of responsible department. Small utility vehicles and golf carts must be operated in accordance with all applicable traffic laws, particularly regarding usage of seat-belts and prohibitions against use of cell phones or texting while driving.

10. Check path of utility vehicles or golf carts and identify areas of caution or reduced speeds over designated paths. Drivers should slow when approaching such areas, or if traveling over paths which have not been assessed. Included in training session will be instructions on which paths to use.

11. Operators must reduce speed to match other users on all streets, sidewalks, and paths. In congested pedestrian areas, operators must either park or proceed at a slow walking pace.

12. Vehicles can only be parked in a safe manner and location and must not block any entrances to buildings, stairways, ramps, or thoroughfares. Passengers who are not UW employees should be embarked and disembarked only when the vehicle is parked on a hard, level surface.

13. Charging stations for electric golf carts and utility vehicles shall be located in a safe location that has adequate ventilation to prevent potential build-up of explosive hydrogen gas, and which is adequately protected from weather.

14. Report all work-related injuries or near miss incidents to supervisor as soon as possible. Incident report instructions: http://www.ehs.washington.edu/ohsoars/index.shtm. Traffic and vehicle accidents may also require additional reporting to UWPD, Washington State Patrol, and/or Washington Department of Transportation.

Required Elements for Department
Small Utility Vehicle and Golf Cart Procedures

The following are minimum elements that are required to be included in department specific procedures for operation of small utility vehicles and/or golf carts.

- All drivers of utility vehicles or golf carts must attend a training session prior to operating any such vehicles, and must be a trained staff member or under the supervision of a trained staff member while operating vehicles.

  The training program should include:

  - The contents of this procedure, especially including all safety rules.
  - Safe operating rules of the road.
  - Precautions for operating in low-light or dark conditions.
  - Designated paths and routes for vehicle operation.
  - Procedures for unusual operating conditions, for example, while using an attached snow plow or towing, as applicable.
  - Limitations and restrictions on the use of the golf cart.
  - The difference between street legal and non-street legal golf cart/small utility vehicle.
  - Steps to be taken in an emergency.

- All drivers must be 18 years of age or older and must have a valid driver's license. A copy of the current valid driver's license should be on file with the responsible department prior to operating the vehicle. Each department should designate an HR representative to keep this confidential information on file.

- Utility vehicles and golf carts shall observe all vehicle traffic laws (e.g. stopping at stop signs, yielding to pedestrians, etc).

- Vehicles shall not be operated in a manner that may endanger passengers, other members of the campus community, or property. Drivers must not be under the influence of alcohol or drugs. Drivers should not use radios or cell phones while the vehicle is moving. Absolutely no horseplay while operating vehicles.

- The number of passengers and load capacity shall not exceed the manufacturer's rated limit. Passengers must be in seats. Seatbelts must be worn, if installed. Safety equipment, especially including seatbelts, may not be removed from the vehicle.

- Driver and passengers must hold on to the utility vehicle or golf cart at all times while the vehicle is in motion unless securely seat-belted in place. Luggage, packages, cargo, and/or equipment must be adequately secured for safety.

- Operators must operate vehicles at a safe speed for conditions, and should not operate vehicles at maximum speed.

- Utility vehicles and golf cart-type vehicles that are not licensed for street usage are restricted to sidewalks and paths on the University campus. Street-legal vehicles may be operated on streets with prior approval of responsible department. Small utility vehicles and golf carts must be operated in accordance with all applicable traffic laws, particularly regarding usage of seat-belts and prohibitions against use of cell phones or texting while driving.

- Check path of utility vehicles or golf carts and identify areas of caution or reduced speeds over designated paths. Drivers should slow when approaching such areas, or if traveling over paths which have not been assessed. Included in training session will be instructions on which paths to use.

- Operators must reduce speed to match other users on all streets, sidewalks, and paths. In congested pedestrian areas, operators must either park or proceed at a slow walking pace.

- Vehicles can only be parked in a safe manner and location and must not block any entrances to buildings, stairways, ramps, or thoroughfares. Passengers who are not UW employees should be embarked and disembarked only when the vehicle is parked on a hard, level surface.

- Charging stations for electric golf carts and utility vehicles shall be located in a safe location that has adequate ventilation to prevent potential build-up of explosive hydrogen gas, and which is adequately protected from weather.

- Report all work-related injuries or near miss incidents to supervisor as soon as possible. Incident report instructions: http://www.ehs.washington.edu/ohsoars/index.shtm. Traffic and vehicle accidents may also require additional reporting to UWPD, Washington State Patrol, and/or Washington Department of Transportation.