University of California, Davis, Department of Viticulture and Enology, **Workshops and Vineyards General Safety Policy and Information** Injury and Illness Prevention Program for the Field Facility 3155 Straloch Road, Building A, Q047

April 1, 2002



Prepared by Richard W. Hoenisch Vineyard Manager

Prepared for the College of Agriculture and Environmental Sciences

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Chapter 1 University Guidelines for Safety Performance

University of California, Davis, Department of Viticulture and Enology, Workshops and Vineyards General Safety Policy and Information

The web site for the Department of Viticulture and Enology is: http://wineserver.ucdavis.edu

Guidelines for Evaluating Safety Performance

SafetyNet #64 http://www.ehs.ucdavis.edu/

UC Davis policy requires that all members of the campus community be held accountable for accident prevention. Department chairpersons and unit heads are required to maintain a safe work environment. All supervisors are accountable for providing training on safe practices and assurance that work is conducted safely. All employees are required to follow established safety procedures and practices in the performance of their duties.

Safety Performance Evaluations

Performance evaluations at all levels must include an assessment of the individual's commitment to and performance of the accident prevention needs of his/her position. The following are examples of factors that should be considered when evaluating an employee's safety performance.

- **Adherence to defined safety practices.**
- > Use of provided safety equipment.
- > Reporting of unsafe acts, conditions, and equipment.
- > Offering suggestions for solutions to safety problems.
- > Planning of work to include checking safety of equipment and procedures before starting.
- **Early reporting of illness or injury that may arise as a result of the job.**
- Providing support to safety efforts.

Some Special Requirements for Supervisors

- > Provide careful orientation to new employees on safety requirements.
- Provide instruction to employees on safe practices for hazards unique to their job assignments.
- Clearly inform employees which conditions are safety infractions.

- > Consistently and effectively enforce the safety program, including sanctions for employees who violate the safety program.
- > Ensure that employees have supervised work experience before they are allowed to perform hazardous operations on their own.
- > Ensure rapid correction of identified safety hazards through adoption of interim solutions and permanent corrections.
- > Provide early return-to-work opportunities that assure compliance with medical limitations.

REMINDER: Federal and state laws and University policy requires that employees have the right to a safe work environment.

For further information or guidance contact EH&S (752-1493).

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Chapter 2 UC Davis Principles of Community

The University of California, Davis, is first and foremost an institution of learning and teaching, committed to serving the needs of society. Our campus community reflects and is a part of a society comprising all races, creeds and social circumstances. The successful conduct of the university's affairs requires that every member of the university community acknowledges and practices the following basic principles:

We affirm the inherent dignity in all of us, and we strive to maintain a climate of justice marked by respect for each other. We acknowledge that our society carries within it historical and deep-rooted misunderstandings and biases, and therefore we will endeavor to foster mutual understanding among the many parts of our whole.

We affirm the right of freedom of expression within our community and also affirm our commitment to the highest standards of civility and decency towards all. We recognize the right of every individual to think and speak as dictated by personal belief, to express any idea, and to

disagree with or counter another's point of view, limited only by university regulations governing time, place and manner. We promote open expression of our individuality and our diversity within the bounds of courtesy, sensitivity and respect.

We confront and reject all manifestations of discrimination, including those based on race, ethnicity, gender, age, disability, sexual orientation, religious or political beliefs, status within or outside the university, or any of the other differences among people which have been excuses for misunderstanding, dissension or hatred. We recognize and cherish the richness contributed to our lives by our diversity. We take pride in our various achievements, and we celebrate our differences.

We recognize that each of us has an obligation to the community of which we have chosen to be a part. We will strive to build a true community of spirit and purpose based on mutual respect and caring.

April 20, 1990

Safety Information, Standards and Agencies

Below are listed the agencies and their web sites governing the safety regulations, guidelines, and training norms for the VEN Field Facility Workshops and Vineyards. Please check the guidelines of California Division of Occupational Safety and Health (CalOSHA)

http://www.dir.ca.gov/DOSH/dosh1.html, the California Environmental Protection Agency (Cal/EPA)
http://www.calepa.ca.gov/, the Environmental Health and Safety Department of the University of California, Davis, http://www.ehs.ucdavis.edu/, the Division of Human Resources, http://www.hr.ucdavis.edu/, and the County of Yolo Department of Agriculture,

http://www.yolocounty.org, as well as the protocols established by the Department of Viticulture and Enology (VEN), UC Davis. The VEN Field Facility at UC Davis has undergone a thorough evaluation by CalOSHA and UCD EH&S (March 1, 2001) and is compliance with their guidelines. These are the normative rules governing the operation of equipment, the use of pesticides, and activities in the department of Viticulture and Enology Field Facility workshops and vineyards.

Protocol for Training Sessions

Training sessions for Viticulture and Enology Vineyard (VEN VYD) equipment and tools must be made by appointment with the authorized VYD Staff trainer. One must be thoroughly trained, tested, and checked out on the particular piece of equipment or tool before beginning use. The equipment or implement must be checked back in with the designated trainer when the task is completed.

VEN Field Facility Workshops and Vineyard Safety Information

- Report all injuries immediately to the vineyard staff and your supervisor
- Call **911** for Fire, Police, and medical emergencies
- For severe medical emergencies report to UCD Employee Health Services located at 501 Oak Avenue, Davis, 530.752.2330
- Emergency evacuation procedures have been reviewed
- ➤ Material Safety Data Sheets (MSDS) are in the hallway of Building A (Q047) opposite the vineyard manager's office
- > The departmental Injury Illness Prevention Program (IIPP) is located in the Vineyard Manager's office library and on the Viticulture and Enology web site.
- > The location of first aid kits, fire extinguishers, emergency showers, and personal protective equipment have been reviewed
- ▶ Ir
- ➤ Instructions on the use of fire extinguishers have been reviewed
- Smoking is not allowed in any of the buildings, including the nursery area, or vehicles. One is not to smoke in front of windows or door or within 15 feet of others. http://www.ehs.ucdavis.edu/im/newsltr/fall00/fall00 7.htm
- The location of hazardous materials have been identified

- ➤ Safety concerns may be addressed to safety officer **Ernie Farinias** (530.754.9067, egfarinias@ucdavis.edu) or to **Richard Hoenisch**, Vineyard Manager, (530.752.1008, rwhoenisch@ucdavis.edu)
- Series A9 of California Environmental Protection agency Right to Know and Workers rights, are located in the hallway of Building A (Q047) of the VEN field house, opposite the Vineyard Manager's office, and has been reviewed. This can also be found at:
- http://www.cdpr.ca.gov/docs/whs/psi2menu.htm

Agricultural Chemical Handling and Storage

1. Pesticides

- Pesticide application will be done only by trained and documented personal http://www-plb.ucdavis.edu/greenhouse/A9.pdf
- > Do not enter areas posted with restricted entry
- ➤ The faculty, staff, and students will be informed by email regarding vineyard closure for pesticide use and the type of pesticide. The gates will be properly posted and locked for the appropriate interval
- You have the right to know if, when, and what pesticide(s) may have been applied in the area you might be working. ftp://ehs.ucdavis.edu/docs/sftynet/sn_40.pdf
- ➤ Pesticide use records may be found in the Vineyard Manager's office in VEN field house bldg. A (Q047), in the workshop of bldg. A, and at the Yolo County Department of Agriculture, 70 Cottonwood St., Woodland, CA, 95695, phone 530.666.8140
- ➤ Worker Protection Standards have been reviewed http://www.dir.ca.gov/DOSH/dosh1.html
- ➤ Be sure to check pesticide bulletin board located in the hallway of VEN field house bldg. A (Q047) opposite the Vineyard Manager's office, for current pesticide applications and Notice of Intent (NOI) for materials that may be applied in your work area prior to starting job duties
- The symptoms of pesticide exposure have been reviewed
- First aid procedures for pesticide exposure has been reviewed

2. Fertilizers

- ➤ Wear gloves, safety glasses, and dust mask when working with dry fertilizers, and wear gloves and safety glasses when working with liquid fertilizers
- ➤ Use proper lifting procedure when lifting heavy objects
- ➤ Work with dry fertilizers in well ventilated areas
- ➤ Do not store oxidizers such as ammonia nitrates with flammables such as oil, diesel, or gasoline
- ➤ Wash skin exposed to concentrated fertilizers with ample soap and water

3. Cleaning Agents and Solvents

- ➤ Do not use concentrated volatile solvents in non-ventilated areas
- Read the Material Safety Data Sheet (MSDS) for any product you are unfamiliar with
- ➤ Consider using gloves, safety glasses, rubber boots, and chemical apron, depending upon the hazard of the chemical being used.

EMERGENCY NOTICE

IN THE EVENT OF A MEDICAL EMERGENCY **CONTACT**

PHONE 911 OR 752,2330

YOU ARE LOCATED AT THE VITICULTURE AND ENOLOGY FIELD HOUSE, 3155 STRALOCH ROAD 1.5 MILES WEST OF HIGHWAY 113

All injuries must be reported to your supervisor

Employee Health Services

501 Oak Avenue (corner of Oak and Russell Blvd-dark brown building)

Davis, CA 95616-8764

Michael A. O'Malley, M.D., M.P.H. Medical Director

Suzanne Nash, M.D. Associate Physician Diplomate

(530) 752-2330

(530) 752-5277 FAX

Hours: Monday, Tuesday, Thursday, Friday 8:00a.m. - 5:00p.m.

Wednesday 9:00a.m. - 5:00p.m. (we are here for meetings from

8-9, but if emergency arrives we take care of the patient if injuries

warrant immediate attention.)

Closed on University Holidays --- IF we are closed at other times, i.e. Holiday Season between 12/25 and 1/2, flyers are sent to every campus department via intercampus mail, e-mail notice to all campus Safety Coordinators and post in the unit for 2-3 weeks prior with notices on the

door when closed.

Cowell Student Health Center

located on California Avenue has an Urgent

Care Clinic the is open:

Monday through Friday 5:00-7:30p.m.

Saturday and Sunday: 9:30am-1: 00p.m.

Closed on University Holidays

Cowell Student Health Center's phone number from 8-5 is (530) 752-2300

(they are closed until 9am on Wednesdays)

The Urgent Care phone number is (530) 752-2311. This phone is not answered until the clinic opens, for example at 5pm on weekdays.

Sutter Davis Emergency Room –

2000 Sutter Place, Davis, CA 95616 (530)

756-6440.. ask for the Emergency Room

911 - If deemed that medical needs require ambulance. The patient will be transported to Sutter Davis Emergency Room as they are the closest emergency medical facility.

Appendix I

Chapter 4 WRITTEN INJURY AND ILLNESS PREVENTION PROGRAM

Completion of this form indicates that it is the policy of the employer to fully comply with Labor Code §6401.7(SB 198) and General Industry Safety Order §3203, Injury and Illness Prevention Program.

DEPARTMENT INFORMATION
Department Name: Viticulture and Enology
Department Chairperson: James A. Wolpert, Ph.D.
Address: 1023 Wickson Hall, University of California, Davis, CA
Telephone Number: 530.752.0381
DEDCON/G) WITH A LIEU ODITY AND DEGDONGING THE FOR
PERSON(S) WITH AUTHORITY AND RESPONSIBILITY FOR IMPLEMENTING THE INJURY AND ILLNESS PREVENTION PROGRAM:
Name (of Safety Coordinator): Ernie G. Farinias 530.754.9067
Name (Alternate): Richard W. Hoenisch (Vineyard Manager) 530.752.1008
THE DEPARTMENT'S SYSTEM FOR IDENTIFYING, EVALUATING, AND PREVENTING OCCUPATIONAL SAFETY AND HEALTH HAZARDS INCLUDES THE FOLLOWING:

- ? Review of applicable General Industry Safety Orders and other Safety Orders that apply to the operation.
- ? Review of industry and general information (including Material Safety Data Sheets and Chemical Hygiene Plan for chemicals used) on potential occupational safety and health hazards.
- ? Investigations of all accidents, injuries, illnesses, and unusual events that have occurred at this location.
- ? Periodic and scheduled inspections of general work areas and specific workstations.
- □ Evaluation of information provided by employees.

UC Davis Department of Viticulture and Enology Workshops and Vineyards Faculty, Staff, and Student Orientation and Review

Faculty, Staff, and Students who are using the VEN Vineyard and Workshop facilities and equipment for the first time are to be given an orientation tour and trained on the appropriate tools and machinery. This training is to be conducted by the designated member of the VEN Vineyard Staff. This training record is to be recorded using the following form and maintained in the Vineyard Staff safety files in the Vyd Staff Office for three (3) years.

Awareness of potential health and safety hazards, was well as knowledge of how to control such hazards is important for maintaining a safe and healthful environment and preventing injuries and illness in the VEN Department facilities.

A. When training will occur:

- 1. Upon acceptance into the department of Viticulture and Enology
- 2. Whenever a faculty, staff, or student is given a new duty assignment for which training has not previously been provided
- 3. Whenever new substances, processes, procedures or equipment, which represents a new hazard, are introduced into the department.
- 4. Whenever the VEN department is made aware of new or previously recognized hazard.
- 5. Whenever the VEN departmental safety officer or any faculty, staff, or student believes that additional training is necessary
- 6. Monthly training for safety related issues such as electrical safety, chemical safety, biohazard safety, hazardous chemical safety, and equipment and implement safety.

B. Areas of Training

- 1. A new member will review the Code of Safe Practices with the designated safety officer and will be advised of limitations and duties until all proper training has been completed. This information will be documented on the VEN faculty, staff, and student orientation and safety review form
- 2. Training will include, but not limited to, the requirements of other applicable CAL/OSHA http://www.dir.ca.gov/DOSH/dosh1.html standards such as Hazard Communications, or University, State, and Federal rules and regulations. Please see http://www.ehs.ucdavis.edu/

Viticulture and Enology Workshop and Vineyard Code of Safe Practices for Injury and Illness Prevention Program

This code of safe practices may be amended or added to whenever is deemed necessary

1. Appropriate protective equipment, gloves, goggles, safety glasses, respirators, dust masks will be worn as required by the safety officer.

- 2. All faculty, staff, and students will follow safe procedures related to chemical safety, hazard chemical safety, electrical safety, biohazard safety, pesticide safety, agricultural chemical safety, forklift safety, and specific protocols related to individual projects.
- 3. All equipment and implements will be maintained in a safe working order
- 4. Ill, fatigued, or injured faculty, staff, and students will inform the safety officer or delegate immediately in order to insure the safety of the individual(s) involved
- 5. All faculty, staff, and students will review the "Viticulture and Enology Workshops and Vineyards Orientation and Safety Review" form in order to be familiar with the safety procedures of the workshops and vineyards."
- 6. All faculty, staff, and students will wear covered shoes, long pants, shirts (not "tank tops") while working in the VEN workshops and vineyards.

Viticulture and	Enology	Works	hops ar	nd Vir	ıeyards
Safety Review I	Form				

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Trainee's name_	
Supervisor	
Vyd Staff	

Category	Training (yes/no) and date
1. Parking Locations and Policy	
2. Driving and Speed Limit Policy	
3. Telephone Locations and Policy	
4. Location of Emergency Numbers	
5. Emergency Action Plan	
6. First Aid Station locations	
7. Tour Field House – see Field House Map	
A. Building A Q047	
B. Building B Q048	
C. Building C Q049	
D. Building D Q050	
E. Ag Chemical Storage shed	
F. Greenhouse and Nursery area	
1. Equipment Training	
(see individual protocols)	
A. Kubota L3450T Tractor	
B. Ford 5030 Tractor	
C. Clark 3500 Forklift	
D. Post Pounder	
E Stake Press	
F. Honda ATV's (2)	
G. Environmist Herbicide Sprayer	
H. PBM 50 gal Herbicide Sprayer	
I. Weed Eaters	
J. Spectrum Electrostatic Sprayer	

K. Chain Saws	
L. Vineyard tools	
M. Rototillers	
N. Pack Flail	
O. Resources of UC Ag Services	
9. Nursery / Propagation Training	
A. Grafting Machines	
B. Wax warmer	
C. Cold Room	
D. Callus-Warm Room	
E. Callus & Planting Mixes	
F. Labels	
G. Costs of Materials	
H. Staff Service Request	
10. Vineyard Safety – see Vineyard Map	
A. Vineyard Tour	
B. Policies (see protocol)	
C. Gates & Keys	
D. Equipment Use in Vyd	
E. Service Request (see protocol)	
F. Project Request and Description	
G. Ag Chemical / Pesticide Use	
H. Vyd Closure	
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11.Injury Illness Prevention Program	
12. Material Safety Data Sheets	
12. Material Safety Data Sheets 13. Hazardous Disposal and Spill Procedure (form F2)	
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Proper Clothing for the Workshops and Vineyard

Long pants, closed shoes, and a shirt (non-tank top) are required dress for work in the VEN vineyard and workshops. A hat is also suggested for protection from the sun, dust, and agricultural chemicals.

When pruning or working with trellis systems and canopies, everyone is required to wear safety glasses to protect the eyes from wire, canes, and other sharp objects.

Pets in the Workshops and Vineyard

Many individuals and research groups use the workshops and vineyard. For the safety of all concerned and for reasons of liability, no pets are allowed in the workshops and vineyard.

Emergency Procedures for Pesticide and Agricultural Chemical Spills for the VEN Workshops and Vineyards

Small Spills

Liquids: use vermiculite to absorb spilled material, sweep up contaminated material and place in plastic bags, including gloves. Use a spray mask if necessary. Label the bag with the name of the compound, formulation, amount (volume or weight), date, your name and phone number.

Granular materials or powders: sweep up and reuse material if possible. If not, place material in plastic bags and label the bag with the name of the compound, formulation, amount, date, your name and phone number

In both cases call Environmental Health and Safety (EH&S) at 530.752.1493 to dispose of contaminated material and also notify your supervisor immediately.

Large Spills:

If spilled on your body immediately remove contaminated clothing and shower thoroughly. A shower is located in the men's bathroom in Building A (Q047) of the Viticulture and Enology Field House. Place the contaminated clothing in a plastic bag and call EH&S at 530.752.1493 for disposal.

Call **911** and report the spill. Include the location of the spill, the compound, formulation, and approximate quantity involved. Call UCD EH&S at 530.752.1493 to report the spill, including the location, compound, formulation, and amount.

Call your supervisor and report it to the resident VEN safety officer (Richard Hoenisch) or a VEN staff member

Monitor your own physical condition for any signs of pesticide poisoning or burning and report to the Cowell Student Health Center if poisoning symptoms appear. If these signs are serious, call **911** immediately. Be sure you have the name of the material, the formulation, the exposure period, and the route of exposure (skin, oral, eyes, etc.) of the compound spilled.

Medical Care can be obtain at the following locations:

> Employee Health Services

501 Oak Avenue (corner of Oak and Russell Blvd-dark brown building) Davis, CA 95616-8764 Michael A. O'Malley, M.D., M.P.H. Medical Director

Suzanne Nash, M.D. Associate Physician Diplomate (530) 752-2330

(530) 752-5277 FAX

Hours: Monday, Tuesday, Thursday, Friday 8:00a.m. - 5:00p.m. Wednesday 9:00a.m. - 5:00p.m. (we are here for meetings from 8-9, but if emergency arrives we take care of the patient if injuries

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756-6440..ask for the Emergency Room

911 - If deemed that medical needs require ambulance. The patient will be transported to Sutter Davis Emergency Room as they are the closest emergency medical facility.

Trainee		
Safety Officer		
Date and Place		

OC Davis, Department of Viticulture and Enology, Davis Field Facility Safety and Training Policy
Supervisor

Safety training

There are several web sites available for safety training and information. The following include several of these web sites for videos and information on safety matters.

http://www.ehs.ucdavis.edu/im/video/videoalp.html http://www.ehs.ucdavis.edu/im/video/videolst_nf.htm

Safety forms

http://ehs.ucdavis.edu/hsep/iipp/index.htm

UCD EH&S Department has an excellent series on various safety issues. This series is called SafetyNet

Chapter 5 EH &S Respiratory Protection Program

http://www.ehs.ucdavis.edu/

Hazards to the Respiratory System

Your body's respiratory system is constantly working to cleanse and purify the air you breathe. Some occupational activities and/or environments require the extra protection of equipment specifically designed to protect against hazards that may enter the body through the nose and mouth when a person breathes. Like clean air, many of these hazards are invisible and odorless. Breathing (or respiratory) hazards include dusts, fumes, mists; gases and vapors; oxygen deficient atmospheres and temperature extremes. Knowing the characteristics of each hazard helps to understand why respiratory protection is so important.

Dusts, Fumes, and Mists - are tiny particles that float in the air. Dusts are formed when solid materials are broken down in activities such as sanding, grinding, or crushing. Fumes occur when metal is melted, vaporized, then

quickly cooled, creating very fine particles that drift in the air - welding and furnace work are likely to produce fumes. Mists are tiny liquid droplets usually created by spraying, mixing, or cleaning activities. Mists may be a combination of several hazardous ingredients. When hazardous dusts, fumes, or mists are breathed in, they become trapped in the respiratory system causing irritation. Short-or long-term health problems may result, even death.

Gases and Vapors - are invisible contaminants mixed in the air. Gases are substances that become airborne at room temperature. Chemical processes and high-heat operations often produce gases. They drift quickly and

undetected from their source. Vapors are formed when liquids or solids evaporate, typically occurring with solvents, paints, or refining activities. Breathing hazardous gases or vapors irritates the respiratory system, causing either short- or long-term health problems or even death.

Oxygen Deficiency - a lack of oxygen in the air. Oxygen deficiency can be caused by chemical reactions, fire, or displacement by other gases. In confined spaces, where ventilation is very limited or non-existent, aerobic bacterial growth and oxidation of rusting metals can also cause an oxygen deficient atmosphere. Oxygen comprises only a small percentage, about 21%, of the air we breathe. Yet, when levels of oxygen fall below 19.5% (minimal acceptable level), life-threatening health problems begin to occur very quickly. Oxygen deficiency is a very serious situation that can cause loss of consciousness or death in minutes.

Temperature Extremes - extremely hot or extremely cold air can damage the respiratory system, depending on the length of exposure. Activities involving high-heat furnaces and walk-in freezers are subject to this hazard.

How the Program Works

UCD's Respiratory Protection Program is administered by the Office of Environmental Health & Safety (EH&S). The program endeavors to control occupational diseases caused by breathing contaminated air.

Job sites and tasks where workers may be exposed to breathing hazards are carefully evaluated by EH&S Industrial Hygienists using air-monitoring and measuring devices to determine what type of protection is needed, if any. EH&S has three approaches to achieving respiratory protection: The first method of protection is local engineering controls such as fume hoods or exhaust systems - the most effective and efficient means of protecting employees from on-site breathing hazards. Secondly, EH&S recommends administrative controls; these include substituting less toxic materials if possible, reassessing the task to see if exposure can be minimized or eliminated, and the possibility of job rotation to reduce the exposure of any one person to acceptable levels. Third: when the first two methods are not feasible, not yet in place, or cannot provide adequate protection, personal protection equipment is necessary.

Employees requiring respirators are medically screened to identify any health reason that might prohibit or limit their use of a respirator. When medical clearance is received, the employee is fit tested to find the right size and type of mask for them. After a suitable respirator has been selected, they will learn how to properly use, clean, and maintain their equipment. Annual re-evaluations assure that the program is working.

Who Must Wear Respiratory Protection Equipment?

Respiratory protection equipment is required:

For activities that cannot be safely controlled by engineering methods (pesticide applications, for example, require the portability of a respirator).

When the working atmosphere is or may be oxygen deficient (confined spaces such as tanks, boilers, vaults, crawl spaces, and storm drains are examples).

When airborne radioactive or toxic materials could exceed acceptable limits.

For emergency use when loss of life or serious property loss or damage may be involved.

Only those persons who have been designated by their supervisor, principal investigator, or EH&S as being required to utilize respiratory protection equipment, and who have been medically approved, properly fitted, and trained in its use are authorized to utilize such equipment.

How Do You Obtain Respiratory Protection Equipment?

Contact the Office of Environmental Health & Safety at (752-1493). An Industrial Hygienist will evaluate your workplace activities to determine the most effective and efficient means of respiratory protection for your circumstances. A

respirator may not be necessary. If a respirator is indicated, you must satisfactorily complete a pulmonary function tests, medical history questionnaire, respirator fit testing, and training on the use and limitations of the

equipment. When these qualifications have been met, a new or cleaned and reconditioned respirator will be issued. These same requirements must be repeated annually. Utilizing the Respiratory Equipment Selection Guide (Appendix A) and the American National Standards Institute-Practices will select the appropriate type of respirator for Respiratory Protection (ANSI

Z88.2) 1992. The costs will be recharged to the employee's administrative unit.

Appendix B, Procedures for Obtaining Respiratory Protection Equipment, provides a step-by-step guide to the application procedure.

Chapter 6 EMERGENCY PROCEDURES

http://ehs.ucdavis.edu/chem/chem_mnl/clsm_ch1.htm

A. IN CASE OF AN EMERGENCY CALL: 9-1-1 Calmly State . . .

- 1. Your name:
- 2. The building and room location of the emergency:.
- 3. The nature of the emergency: fire, chemical or radioactive spill, poisoning, etc.
- 4. Whether any injuries have occurred.
- 5.Hazards present that may be a threat to responders (chemicals stored on shelves, radioactive materials in use, etc.).
 - 6.A phone number and location at the scene where you can be reached.

While waiting for assistance, stay calm. The dispatcher will contact the necessary emergency services. The dispatcher may ask you to stay on the phone. Do not hang up until told to do so by dispatcher.

Please see the Field House and Vineyard maps to acquaint yourself with the buildings, vineyards, and their UCD emergency addresses.

B. PROCEDURES IN CASE OF FIRE (or EXPLOSION)

- 1.Leave the area of immediate danger; be sure that other people are out.
 - a. Close the Doors!
 - b. Activate the nearest building fire alarm.
 - c. Dial 9-1-1: UC Davis Fire Department will answer.
- 2.If the fire is small, attempt to extinguish it without endangering yourself as follows:
- a. Get the nearest fire extinguisher (appropriate to the type of fire) and keep low with the exit to your back so you have an escape route. (See Section C1 below)
- b. Pull the pin in the handle and aim extinguisher at base of the flames.
- c. Squeeze the handle while sweeping the nozzle back and forth.
 - 3.If the fire becomes large Get out and close the door!
 - 4.If hazardous chemicals are involved Stay away from the area and out of the smoke.
 - 5.Stand by to advise the Fire Department when they arrive:
- a. The Fire Department should be advised if chemicals are involved in the fire.
- b. The Principal Investigator or laboratory supervisor should be contacted to obtain information on the hazardous materials in the laboratory.

C. FIRE PROTECTION

1. Fire Extinguishers

Everyone working in a laboratory should know the location and correct use of fire extinguishers. Fire extinguishers are

designed to fight small fires (trash can size). Your responsibility in case of a fire is to: *report it to the Campus Fire Department at 9-1-1,* and quickly evacuate the area, closing the laboratory door as you leave. Personnel should remain in the area to use an extinguisher only if the fire is limited in size.

It is important to use the right kind of extinguisher for the fire. Not all extinguishers can be safely used on all types of fires.

The following letters identifies the four classes of fire: **A,B,C**, and **D**:

- A. Ordinary combustible solids including paper, wood, coal, rubber, and t
- B. Flammable and combustible liquids, including gasoline, diesel fuel, alcohol, motor oil, grease, and flammable solvents.
- C. Electrical equipment
- D. Combustible or reactive metals (such as sodium and potassium) metal hydrides, or organometallics (such as alkylaluminum).

Each fire extinguisher is clearly marked by the letter(s) of the class of fire that it can extinguish. The Campus Fire Marshal has selected the type of extinguisher placed in each laboratory - typically it will be a dry chemical type. The extinguisher must be stored on its designated hook and not resting on the floor.

All extinguishers operate in a similar fashion:

Pull the safety pin, which runs through the handle. A small, plastic band keeps the pin in place. Twist the pin until the band breaks, then pull the pin.

- > Swing the nozzle or hose away from the extinguisher and aim it at the base of the flames.
- > Squeeze the handle of the extinguisher and hold down. A loud noise may be heard as the extinguishing agent is discharged. The extinguisher will "shoot" for about 20-30 seconds.
- > Sweep the nozzle from side to side at the flames while extinguishing.
- Fire extinguishers are supplied and maintained by the UC Davis Fire Department. If an extinguisher has been discharged or is missing, contact the Fire Department immediately to request a replacement. Fire Department personnel as part of the building maintenance program periodically check all extinguishers. Report all fires of any size, after extinguished, to the UC Davis Fire Marshal.

2.Fire Blankets

Fire blankets may be available in some laboratories. Blankets are used to wrap a burn victim whose clothes are on fire, thus smothering the flames. Fire blankets are useful for maintaining

a shock victim's temperature, as well as for modesty and warmth while irrigating under an emergency shower after a chemical spill.

D. IN CASE OF A HAZARDOUS CHEMICAL SPILL OR RELEASE OF GAS, CHEMICAL SMOKE OR VAPOR

- 1. When a spill occurs hold your breath, evacuate the area, and close all doors.
- 2.Call 9-1-1 to report the incident.
- 3.If someone has been splashed with the chemical, remove all contaminated clothing and begin flushing the contaminated area immediately with water. Continue flushing the affected area for 15 minutes.
 - 4. Notify people in the immediate area and your supervisor that a spill has occurred.
- 5.Laboratory personnel should be prepared to clean up small or low hazard spills in their area. Refer to SafetyNet 13 (available on the EH&S web site at www.ehs.ucdavis.edu for general spill information.
- 6.Hazardous Materials Emergency Response Team (HazMat Team) will coordinate and supervise cleanup of large or dangerous chemical spills. Re-enter area only after the spill is cleaned up and clearance has been given by the HazMat Team and EH&S.
- 7.If a dangerous quantity of gas, smoke, mist, or vapor is released outside your immediate area or building, *call 9-1-1* immediately. Advise people to stay upwind or as far away from the airborne chemical release as possible.

E. IN CASE OF EARTHQUAKE

- 1. Take cover under a desk or strong doorframe during the shaking.
- 2.Remain under cover indoors until the shaking subsides. Evacuate the building only after the shaking is over.
 - 3. Report any ruptured or broken utility services to 9-1-1.
 - 4.Help injured persons get medical attention.
 - 5.Be prepared! Become familiar with your department's emergency action plan.

F. REPORTING ACCIDENTS

In the event of an injury or illness, notify the supervisor and the Worker's Compensation Office immediately by phone (752-7243) Follow

up with a UCD Employer's Report of Occupational Injury or Illness form within 24 hours of the injury or illness. Serious injuries and

illnesses should also be immediately reported to Environmental Health and Safety. *Call 9-1-1 in case of a medical emergency*.

Chapter 7 Pesticide Safety

Richard Hoenisch, the VEN VYD manager, is the authorized Staff member in charge of pesticide use, safety, training, and record keeping. Please see http://www.yolocounty.org/org/ag/

1. Mixing Pesticides

- a. Once again, read the label.
- b. Determine rate of pesticide needed in the mix and the amount of total mix needed for the immediate job. Remember that extra spray mixes must be disposed of properly, so be exact!
- c. Mix the material in an area that can be cleaned easily should an accident occur and away from work and eating areas.
- d. Measure pesticides carefully, accurately, and safely.
- e. A face shield or goggles must be worn while mixing the material.
- f. A cartridge respirator must be worn while mixing and applying Gramoxone.
- g. Rubber gloves must be worn while mixing the material.
- h. After measuring and weighing the correct amount of pesticide...
- i. Mix the pesticide into the agitating tank half-filled with water.
- j. Continue to fill the agitating tank with water, thus thoroughly mixing the chemical.

1. Calibrating flow

The main reason for calibration is (1) effective pest control; (2) protecting human health; (3) preventing waste of resources; and (4) to comply with the law. Methods are described on pages 324 - 356 of the DANR <u>Safe and Effective Use of Pesticides</u> (see reference below).

One needs to know:

- a. Capacity of the tank
- b. Speed of travel
- c. Type of nozzle
- d. Flow rate

2. Application of pesticide

- a. Safe application techniques require working with the weather, preventing drift or problems associated with inversions. Know:
 - 1. Wind intensity
 - 2. Wind direction
 - 3. Air temperature
 - 4. Humidity
 - 5. Keep an eye on the local weather reports.
- b. Knowing the proper speed required for thorough application.
- c. Controlling droplet size and deposition
- d. Being aware of your surroundings,
- e. Controlling entry into the application area

- f. Posting the area
- g. Being very careful of your personal safety and the safety of others
- h. And...use common sense!

3. Record Keeping

- a. Have a valid applicators license or Yolo/Solano permit, or work with someone who does. The Armstrong block is in Solano Co.
- b. Record immediately (don't procrastinate) pesticide use in the appropriate logbook for the appropriate area. The VEN VYD book is kept in the pesticide equipment storage locker in the VYD Field House workshop. The pages are according to block(D·2, D-5, D-12, F-4, and Armstrong), shade house, and greenhouses (19, 62). Fill in all the categories and calculations per application.
- c. Reports are due to the Yolo/Solano Ag Commissioner by the 10th day of each following month.
- d. Copies of the reports are kept in the VEN VYD office

e.

4. Rinsing:

- a. According to CalOsha standards, check label of pesticide for any special instructions. The empty spray tank should be cleaned in an area where runoff will not drain into groundwater, watercourses, or splatter onto sensitive plants.
- b. The outside of the equipment should be washed down with water and a small amount of detergent.
- c. The inside of the tank should be washed with water and with an appropriate tank cleaning material.
- d. Be sure to run pumps and agitators, and to flush all hoses, and to clean nozzles, in-line filter, and screens.
- e. Do not leave residue in tank longer than 12 hours (overnight). Do not leave Friday's mix in to use on Monday, etc.
- f. . Clean up area and pesticide storage area after cleaning equipment, and return equipment to designated storage area.

5. Disposal of Pesticide Containers

- a. Empty pesticide containers are considered hazardous waste and must be disposed of according to the provisions of Water Quality Board, Department of Health Services, and Yolo or Solano County's regulations.
- b. Metal, glass, and plastic containers must be triple rinsed at the time of use. The rinse fraction should be put into the spray tank and applied back over the area of application.
- c. Metal, glass, and plastic containers that have been triple rinsed at the time of use must be transported to an approved Class 2 disposal site (UCD dump). If these containers have not been triple rinsed, they can be taken only to a Class 1 disposal site.
- d. Plastic containers, after having been triple rinsed, must have at least 3 holes punched in them (so they can't be reused)
- e. Paper containers (bags from sulfur and copper fungicides) can be burned in an area where the smoke will not harm humans or animals, or disposed of in a Class 2 disposal site.

6. Personal Cleanup

After using pesticides, your must:

- a. Clean your personal protective equipment
- b. Shower thoroughly (shower located in Men's bathroom, Field House)
- c. Change into clean, uncontaminated clothing
- d. Clothing that was worn during pesticide application should be immediately placed in a plastic bag until it can be laundered separately from other household laundry.
- e. Never eat, drink, smoke, or use the bathroom until you have thoroughly washed.

Bibliography:

The Safe and Effective Use of Pesticides. University of California, Statewide IPM Project, DANR, Publication

Disposal of Pesticide Containers 3324, 1988

UCD POLICY & PROCEDURE MANUAL Section 290-95 - Pesticide Applications 10/31/96

I. PURPOSE

This section outlines policy and procedures regarding the

safe storage, handling, use, and application of agricultural pesticides on campus. This section supplements and does not replace local, State, and Federal requirements.

II. POLICY

UC Davis sets the highest example of environmental citizenship in the use of all pesticides, including insecticides, fungicides, herbicides, rodenticides, nematicides, plant growth regulators, fumigants, and desiccants. This program is designed to provide protection for the pesticide applicator; reduce adverse environmental effects due to the use of pesticides; protect the health, safety, and well-being of farm workers, students, staff, faculty, and neighboring human populations; protect wild and domestic animals; and, whenever practical, encourage the use of chemical and non-chemical pest mitigation alternatives that reduce environmental impacts. It is the policy of UCD to comply with the California Code of Regulations (CCR) and Federal and local regulations pertaining to the use of pesticides.

A. AUTHORIZATION

- 1. University personnel engaged in official duties relating to agricultural use of pesticides are exempt from the need to obtain an agricultural pest control advisor license. It is required that personnel handling or applying restricted pesticides or the supervising applicator obtain a State Qualified Applicator Certificate.
- 2. Written approval must be obtained from the Dean of the College of Agricultural & Environmental Sciences and Environmental Health & Safety (EH&S) for application on campus by aircraft.

B. SAFETY REQUIREMENTS

- 1. Departments using pesticides on campus are responsible for ensuring that posting, personnel, storage, and disposal safety requirements are met in accordance with the procedural guidelines below and the requirements of CCR Titles 3 and 8.
- 2. All efforts will be made to apply pesticides with the use of ground applicators. In exceptional cases, the following policy regarding the use of aircraft for the application of pesticides will be followed:
 - a. Application by aircraft will be approved only when absolutely necessary, where such application is not hazardous to the health of people, animals, or living organisms other than the target organism in or near the area being treated, and where such application does not cause undesirable noise pollution.
 - b. Application by aircraft is prohibited on University property east of State Route 113 and north of Interstate 80.
- c. Application is permitted west of State Route 113 and south of Interstate 80 provided that:
 - 1) No application is made within 200 horizontal yards of any inhabited dwelling, 100 horizontal feet of any dwelling, or 100 horizontal

non-inhabited dwelling, or 100 horizontal

- feet of any public road, highway, or bike path.
- 2) No low-flying aircraft fly within 1,000 horizontal feet of State Route 113, 500 horizontal feet south of Russell Boulevard, or 500 horizontal feet of any housing tract.
- 3) All applications by airplane are made after 7:00 a.m. Applications should be made as soon after 7:00 a.m. as possible.
- d. At least 24 hours before application, the department making the application must notify all departments with property adjacent to the area to be treated.
- 3. Any person applying pesticides must be trained prior to the use of each pesticide, regardless of toxicity. Training must be updated annually. A record must be made of each employee applying pesticides and evidence of training certified by the trainer/supervisor. Copies of the record form will be kept by the employee and the department and be available to EH&S and local and State officials.
- 4. University personnel anticipating or actually engaged in the application of cholinesterase-inhibiting carbamates or organophosphates must be aware of the necessity to obtain cholinesterase level readings (see Section 290-60).
- 5. The department will provide protective clothing and equipment to University personnel engaged in the application of pesticides on campus as stated in CCR Title 3 and the manufacturer's label. (See Section 290-50.)
- 6. The department will ensure that all employees whom may enter areas within 30 days of a reentry interval have current training required by the Environmental Protection Agency (EPA) Worker Protection Standard.

III. PROCEDURES

A. REPORTING OF PESTICIDE USE

Each department using pesticides on the Davis campus must complete and return the State of California Monthly Summary Pesticide Use Report to the Yolo County Agricultural Commissioner's Office by the tenth of each month following application.

B. APPLICATION OF RESTRICTED MATERIALS

Departments that plan to apply restricted materials must obtain a Restricted Materials Permit from the County Agricultural Commissioner's Office.

C. POSTING OF APPLICATION SITES

The department will post the area of application, both prior to and after application, with an approved sign showing the type of material applied and the authorized reentry date.

- Approved signs are available from the pesticide manufacturer. All such signs will bear the legend "Danger--Pesticide Spray--Keep Out," name of the chemical, date of spraying, permissible reentry date, and name and phone number of the responsible applicator.
- 2. All applications of pesticides requiring posting as outlined in the State regulations must be posted prior to application; such posting should include names of the pesticides to be applied, date of application, means of application, and any other information necessary to the safety of individuals who may wish to enter that field. Any variance from these restrictions must be approved prior to application by the County Agricultural Commissioner.

D. STORAGE AND DISPOSAL

The department chairperson will designate one person to be responsible for all containers in his/her area that hold or have held a pesticide. That person will ensure that the following requirements are met.

1. All pesticide storage locations must be posted with visible warning notices legible from a distance of 25 feet from any direction and worded substantially as follows:

DANGER POISON STORAGE AREA ALL UNAUTHORIZED PERSONS KEEP OUT KEEP DOOR LOCKED WHEN NOT IN USE

- 2. Empty pesticide containers must be rinsed and drained on site by the user, at the time of use, using the triple-rinse method.
- 3. Leftover pesticides and pesticide rinsate that will not be used must be disposed of properly. Departments should call EH&S (752-1493) to pick up the waste. All containers must be capped and labeled with the contents. Inaccurate labels must be removed or obliterated. Rinsate containers must be labeled with the following information: name of product, number of gallons, percentage dilution (if known), and name and phone number of a person who is familiar with the waste contents. A Chemical Waste Contents form must accompany containers picked up by EH&S.
- 4. Triple-rinsed, punctured, and defaced pesticide containers must be disposed of at the campus landfill. One of two designated department representatives must fill out an Empty Pesticide Container Disposal form and attach it to each container prior to delivery to the landfill. Empty insecticide containers or bags can be disposed of in the same manner.
- 5. Small spills of pesticides should be cleaned up immediately. For major toxic pesticide spills, follow Chemical Emergency Procedures and call 911.
- 6. For greenhouse application, only the amount of pesticide spray needed for the area to be treated should be prepared. Rinse solution should be applied to the treated areas.

E. MEDICAL SURVEILLANCE

- 1. The testing, intervals for testing of new employees, and interpretation of tests will be determined by the Occupational Health Physician.
- 2. Employers and supervisors must have an Accident Response Plan available at the mixing and loading dock or work site. This includes a phone number of the employer, an emergency phone number, and the name and phone number of the nearest hospital (off-campus sites should also have the name of an available doctor). In the event of accidental exposure due to spills or splashes, IMMEDIATE examination and testing by a physician is necessary. Call 911 if appropriate, or ensure that the affected person is taken immediately to the Employee Health Services Clinic, 501 Oak Avenue (Oak and Russell), Davis (752-2330). Researchers experimenting with new, unregistered pesticides should have a copy of the Technical Release Data with them at the time of application, in case of a spill or emergency.
- 3. Departments must submit a Medical Surveillance-Pesticide Use form to Employee Health Services
 monthly for each employee handling Organophosphate
 or n-methyl-carbamate pesticides. Copies of the
 form are available from EH&S.

F. RESEARCH AND EXPERIMENTAL APPLICATIONS

1. With few exceptions, pesticide laws, regulations, and policies apply to all materials--both registered and non-registered--used for research and experimentation. When University employees are using pesticides on crops for which they are not registered in the course of their employment, a Research Authorization (filed with the State) is not required. When a pesticide will be applied to more than 10 acres of crop for which it is not registered, an Experimental Use Authorization from the EPA is required. When the toxicity of a material is unknown or only partially known, it should be considered to belong in Category I and the necessary safety precautions taken. These

precautions include the proper storage, labeling, training of personnel, and use of personal safety equipment as outlined in this section. All oncampus experimental unregistered use of pesticides must be reported to EH&S at least 24 hours before the application. Experimental applications are subject to EH&S review and approval.

- 2. All University personnel working off-campus with regulated pesticides and biological materials should also operate under the requirements of the Division of Agricultural and Natural Resources Administrative Handbook Section 281 (Pesticide and Related Chemical Use and Experimentation) and Section 580 (Use of Agricultural Research and Extension Centers).
- 3. University personnel doing experimental work with pesticides on private lands are exempt from the requirement of filing an Experimental Use Permit with the State, provided they follow all other applicable laws and regulations and the policies set forth in Policy Communication 18.
- 4. University personnel doing experimental work with pesticides at any UC field station must contact the superintendent of the station and operate under Administrative Handbook Section 580.

IV. FURTHER INFORMATION

Further information dealing with the use of pesticides on University lands is available from EH&S (752-1493).

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UCD PPM Home Page

Chapter 8

Protocol for use of the VEN Field Facility's Workshops' and Vineyards' Equipment and Tools

One must be thoroughly trained in the use of the particular piece of equipment or tool according to the Protocol for Training Sessions. Please check the guidelines of California Division of Occupational Safety and Health (CalOSHA) http://www.dir.ca.gov/DOSH/dosh1.html, the California Environmental Protection Agency (Cal/EPA) http://www.calepa.ca.gov/, the Environmental Health and Safety Department of the University of California, Davis, http://www.ehs.ucdavis.edu/, the Division of Human Resources,

http://www.hr.ucdavis.edu/, and the County of Yolo Department of Agriculture, http://www.yolocounty.org, as well as the protocols established by the Department of Viticulture and Enology (VEN), UC Davis, are the normative rules governing the operation of equipment, the use of pesticides, and activities in the department of Viticulture and Enology Field Facility workshops and vineyards.

VEN VYD resources are limited and need to be shared in an orderly way. Because of the acreage of land and projects the Vineyard Staff must care for, the Vineyard Staff has first priority in the use of equipment and tools. When equipment and tools are needed by UC Davis VEN researchers and their staff, at least a 48 hour notice must be given if that particular piece of equipment or tool is being or is in use by the VEN Staff or needed during that same period. If the piece of equipment or tool is not being used, adequate notice should be given to the VEN Staff if help is needed with attaching implements (if needed) and check-out. The designated Staff member must check out the equipment with the proper equipment protocol. If the equipment is in use by the VYD Staff, equipment may be rented from Agricultural Services (Ag Services) at 752.1147(contact: Fred Valov). The Equipment Use Calendar in the VYD Staff work/lunch room in Bldg. A is normative for the reservation of such implements. Communication is important in ascertaining when equipment will be needed. This can be done in person, by telephone, or by email. Email is the preferred mode of requesting equipment, because the message can be shared with all the VEN VYD Staff and printed into a hard copy.

Protocol for Use of VEN VYD Material Resources

The VEN VYD Staff sees to it that material and supplies for the nursery and vineyard operations are in good and ready supply. The VYD Staff provides various grafting machines and has outfitted cold and warm rooms used for propagation. The VEN Staff also maintains resources used by the Staff and VEN 101 classes for propagation and planting the various blocks associated with both the viticulture (VEN 101A,B,C) and enology classes (VEN 123, 124), as well as establishment of new production blocks for the future UCD winery. These supplies, including propagation material (rootstock and scion wood cuttings) callus and planting mixes, wax, labels, plastic bags, paper and plastic pots, and flats, all cost money. Due to budgetary restraints, the following policy governs the use of the VEN VYD resources.

The following are requested of the faculty/staff/students doing research projects at the UCD VEN Davis Field Facility:

- 1. The name of faculty/staff/student making the request; and dept contact information.
- 2. The names and any others participating and their departmental contact info.
- 3. The start date and end date of the project.
- 4. The materials, area, and/or labor requested.
- 5. A short description of the research (at most 1 paragraph)
- 6. Objective/hypothesis being tested
- 7. The experimental design
- 8. The anticipated outcome
- 9. The signatures of applicant and at least one VEN faculty.

Protocol for Breakage and Repair

Within the inventory of equipment and tools of the VEN VYD, there are many items that are quite old and worn. These include the Kubota tractor, the post pounder, the undercutting plow, and the Honda ATV. As funding becomes available, these implements are being replaced with new, more up to date and more efficient models, such as the Environist "Undavina" and "Spray Dome" herbicide sprayers. As a consequence of age and wear, the equipment must be carefully maintained, serviced, and repaired often. If the equipment or tool breaks due to normal "wear and tear," the VEN VYD staff will have it repaired or replaced. At times the VEN VYD Staff has the ability, resources, and/or the time to make minor repairs on a particular item. However, if the repair is beyond the scheduling or scope of the VYD Staff, Agricultural Services' repair shop (phone: 752.1147- contact: Fred Valov) is the official campus site for repairs. If Ag Services cannot repair the implement, and then it must be sent to the authorized dealer for repair. As with equipment, repairs and maintenance must also be scheduled to accommodate the VEN VYD Staff schedule. It often takes time to obtain replacement parts and repair the item.

If breakage or damage of equipment and tools occur due to misuse or negligence in contravention of the VEN training protocols, then the research group must pay for repairs or replace the item.

Implements, tools, pick pans, scales, pruning shears, etc., that are borrowed from the store of the VEN VYD, are to be noted on an index card in filing system in the VEN VYD workroom in Bldg. A, located to the right of the sink. On the card must be noted the name of the person, his/her telephone or email, the item(s), and the date borrowed. If the item(s) is lost or broken the borrower must replace it. Borrower or their research group. Repeated abuse will result in the suspension of borrowing privileges.

50 gallon herbicide sprayer, the Undavina Enviromist sprayer, and the Enviromist Spray Dome

Lewis Woody is the authorized VEN VYD Staff member for training and checking the pesticide spray equipment.

50 Gallon Herbicide Sprayer Instructions

7. Before you begin...

- a. Check engine oil
- b. Check pump reservoir, and if oil is needed, add 30-weight oil to below the indicator level.
- c. Check the gasoline supply.
- d. Check tire pressure
- e. Check that all the bolts, nuts and hitches are sufficiently tightened.
- f. Are the nozzles and filters clean?
- g. Are the hoses sound?
- h. If using a restricted material (such a Gramoxone), has a Notice of Intent (N.O.I) been filed with the county at least 24 hours in advance?
- i. Read instructions and warning on the pesticide label
- j. Mark clearly the contents and emergency number on the tank.
- k. Wear proper clothing and protection according to the label
- 1. Post the area that is being sprayed according to CA State instructions.
- m. Requests for the use of the Sprayer must be made at least 48 hours in advance.

Enviromist "Undavina" and Pull Behind "Spray Dome" Herbicide Applicators

- 1. Enviromist equipment must not be operated at pressures above 10 psi. Optimal pressure is 3.5 psi.
- 2. Use only the standard nozzles supplied
- 3. Any alteration to standard equipment will reduce performance
- 4. If there is surplus hose for a smaller width of application, secure the hoses with a tie to prevent snagging
- 5. When filling the tank with water and chemical, pour everything through the tank strainer. The nozzles are very fine and clog very easily.
- 6. The tank and applicators must be rinse after use.
- 7. Requests for use of this sprayer must be made at least 48 hours in advance.

Some common sense tips for use of the Environist

- A. The Environist "Undavina" sprayer costs \$3,800.00
- B. The Environist "Spray-Dome" costs \$2, 250.00)

- C. When travelling to and from the spray area, raise the heads upright so they do not hit the ground.
- D. Check all hoses and hose connections before operating
- E. Turn the Environist sprayer off before making adjustments
- F. To adjust the boom for varying row width, loosen the setscrews on the boom, carefully pull the shaft (not the head) to move the spray dome until it is just touching the vine on either side. Re-tighten the setscrews.
- G. The height of the spray dome should be adjusted so that the "horse hair" skirting is just touching the target weeds.
- H. ALWAYS, ALWAYS keep an eye on your surroundings and watch out for potential snags and hazards.

Training Checklist for 50 gallon Herbicide Sprayer

Checking of	out	
Boom	1.	Bar - straight and unbent?
	2.	Filters clean?
	3.	All 7 nozzles present?
	4.	All fittings tightened?
Tank	1.	Tank clean and free of residue?
	2.	Cap on the tank?
	3.	Tank free of holes, cracks, leaks, or dents
Tires	1.	Tires are inflated and free of leaks?
	2.	Lug nuts on wheel are properly tightened?
	3.	Tires are in good working order
Hoses	1.	All hoses are free of leaks and cracks?
	2.	All hose claps are tightened?
Spray gun	1.	Nozzle is present on the gun?
	2.	Nozzle is clean, unclogged, and in working order?
General	1.	Is the spray rig clean inside and out, according to all rules and regulation
Signature of	f Trair	nee / Operator Signature of Trainer

Checking in

2.	Filters clean?		
_,	3. All 7 nozzles present?		
	4. All fittings tightened?		
Tank	1. Tank clean and free of residue?		
	2. Cap on the tank?		
	3. Tank free of holes, cracks, leaks, or dents		
Tires	1. Tires are inflated and free of leaks?		
	2. Lug nuts on wheel are properly tightened?		
	3. Tires are in good working order		
Hoses	1. All hoses are free of leaks and cracks?		
	2. All hose claps are tightened?		
Spray gun	1. Nozzle is present on the gun?		
	2. Nozzle is clean, unclogged, and in working order?		
General	1. Is the spray rig clean inside and out, according to all rules and regulations?		
Signature of	Trainee/ Operator Signature of Trainer		
Date			

Check list for the Enviromist Undavina and Spray Dome

Check out

General 1. Is the spray rig clean inside and out, according to all rules and regulations?

Electrical Connections 1. Is there power to the unit?

- 2. Are all connections plugged in?
- 3. Is the electrical system in working order?

Tank 1. Is tank secured and clamps tight?

	2.	Is tank clean and free of residues?
	3.	Are cap and screen in place?
Boom and Heads	1.	Are the boom and heads in working order?
	2.	Is boom straight and undamaged?
	3.	Are the 6 set screws secure and tightened?
	4.	Are heads clean and free of mud, pesticide residue, etc.?
Signature of Trained	e / Operator	Signature of Trainer
Date		
Check in		
General	1. regulations?	Is the spray rig clean inside and out, according to all rules and
Electrical Connectio	ns 1.	Is there power to the unit?
	2.	Are all connections plugged in?
	3.	Is the electrical system in working order?
Tank	1.	Is tank secured and clamps tight?
	2.	Is tank clean and free of residues?
	3.	Are cap and screen in place?
Boom and Heads	1.	Are the boom and heads in working order?
		om straight and undamaged?
3.		screws secure and tightened?
	4.	Are heads clean and free of mud, pesticide residue, etc.?
Signature of Trainee / Operator		Signature of Trainer
Date		

Operation of ATV Honda 250

The Honda 250 All Terrain Vehicle (ATV) is designed for use "off the road." According to the State of California, the ATV is a motor vehicle. All safety rules and regulations that apply for any motor vehicle apply for the ATV also. Common sense safety rules also go vern the use of the ATV.

- 1. Maximum "off road" speed is 10 mph
- 2. Maximum speed on paved roads is 10 mph

UC Davis, Department of Viticulture and Enology, Davis Field Facility Safety and Training Policy

- 3. Only the driver is allowed on the ATV no other passengers!
- 4. The Honda ATV is gasoline powered (no diesel). Gasoline is highly flammable!
- 5. The operator must be 16 years of age or older.
- 6. Absolutely NO HORSEPLAY is tolerated with this vehicle.
- 7. No one under the influence of drugs and/or alcohol may operate this vehicle.
- 8. A safety helmet is required when operating this vehicle.
- 9. Requests for the ATV is to be made at least 48 hours before intended use.

Training Sheet

Check Out

Check Out	
General	1. Is the ATV clean and free of spray residue and mud?
Body	1. Is the body of the ATV whole and sound, free of cracks, dents, scratches, and other types of damage?
Tires	 Are all four tires inflated at proper pressure? Are all four tires sound, without punctures, cuts, slices, or other damage? Are all four tires properly tightened with lug nuts?
Fuel	 Is tank filled with gasoline? Is gasoline filter clean? Is gasoline cap present? Is gasoline cap properly attached with the indicator arrow pointing upwards?
Lubrications	 Is 30-weight oil up to the fill line, as indicated by the dipstick on the left side of the ATV? Is the oil clean?
Brakes	1. Are brakes in good working condition?
Problems	 Anything unusual in the operation of the ATV? a. Abnormal motor sounds? b. Fan not working? c. Temperature light on? d. Excess exhaust or smoke?
Signature of Train	nee / Operator Signature of Trainer
Date	

Check in		
General	1.	Is the ATV clean and free of spray residue and mud?
Body	1.	Is the body of the ATV whole and sound, free of cracks, dents, scratches, and other types of damage?
Tires	1. 2. 3. A	Are all four tires inflated at proper pressure? Are all four tires sound, without punctures, cuts, slices, or other damage? re all four tires properly tightened with lug nuts?
Fuel 2.	3.	Is tank filled with gasoline? soline filter clean? Is gasoline cap present? gasoline cap properly attached with the indicator arrow pointing upwards?
Lubrications	1. side o	Is 30-weight oil up to the fill line, as indicated by the dipstick on the left of the ATV? Is the oil clean?
Brakes	1.	Are breaks in good working condition?
Problems	1.	Anything unusual in the operation of the ATV? e. Abnormal motor sounds? f. Fan not working? g. Temperature light on? h. Excess exhaust or smoke?
Signature of Trai	nee / Op	erator Signature of Trainer
Date		

Echo and Stihl Chain Saws

 $\frac{http://www.echo-usa.com/prods_list.asp?Category=CHAINSAW}{http://www.stihlusa.com/chainsaws/}$

1.Safety first!

The use of any chainsaw may be hazardous. The chainsaw has many sharp cutters. If the cutters contact your flesh, they will cut you, even if the chain is not moving. Please read the Stihl owners manual in the Stihl chainsaw case before operating the Stihl chainsaw. Please read the Echo chainsaw's owner's manual, located in the case, before operating the Echo chainsaw. The safe use of the chainsaws involves:

- 1. the operator
- 2. the chainsaw
- 3. the use of the saw

Richard Crum is the authorized instructor and check-out VEN VYD Staff member.

B. The Operator

The operator must be in good physical condition and mental health and not be under the influence of any substance (drugs, alcohol) which might impair vision, dexterity, or judgment. Do not operate the chainsaw when you are fatigued. Tiredness may result in lack of control. Be alert to your surroundings, the saw, the chain-blade, the object you are cutting, the terrain, the weather, and the position of your own body.

A. Proper clothing

Clothing must be sturdy and snug fitting, but allow complete freedom of movement. AVOID loose fitting jackets, scarves, jewelry, flared or cuffed pants, unconfined long hair, or anything that could become entangled with the saw or brush.

- 1. Wear overalls or jeans with reinforced cut retardant insert or cut retardant chaps.
- 2. Wear heavy duty, non-slip gloves to improve your grip and protect your hands.
- 3. Good footing is important. Wear sturdy boots with non-slip soles. Steel-toed safety boots are recommended.
- 4. To reduce risk of injury to your eyes, NEVER operate a chainsaw unless wearing goggles or properly fitting safety glasses with adequate top and side protection.
- 5. Wear an approved safety hard hat to protect your head.
- 6. Chainsaw noise may damage your hearing. Always wear sound barriers, earplugs or ear mufflers.

C The Use of the Chainsaw

- 1. Be <u>thoroughly</u> trained and signed off by the appropriate staff person before handling the chainsaw (see protocol check list for use of the chainsaw)
- 2. Always stop the engine before putting a chainsaw down or carrying it. Carrying a chainsaw with the engine running is extremely dangerous.
- 3. Avoid touching the hot muffler. This will cause serious burns.
- 4. When transporting the chainsaw in a vehicle, keep the chain and bar covered with the chain guard. Properly secure your saw to prevent it from falling over, fuel spillage, and damage to the saw.

- 5. The chainsaw is a one-person saw. Do not allow other persons to be near the running chainsaw. Start and operate the saw without assistance!
- B. Training for the use of the Chainsaw
 - 1. The person wishing to use the chainsaw must be thoroughly trained and signed off by the designated and competent VEN VYD Staff member.
 - 2. Read the appropriate manual thoroughly to learn the safe operation of and hazards involved with the saw.
- D. WARNINGS! The manual is full of warnings for operating the chainsaw. Some of them (but not all) are as follows:
 - 1. The chainsaw is gasoline operated and produces poisonous fumes (e.g. carbon monoxide). Run the chainsaw only in well-ventilated areas.
 - 2. Even an oil mist (from chain lubrication) and sawdust are health hazards.
 - 3. DO NOT operate the chainsaw without the chain guard or catcher. If the saw is damaged, do not use it. <u>JB's Power Equipment</u>, 946 Olive Drive, Davis, CA, 95616, phone 530.756.9150, is the authorized dealer and repair site for the two chainsaws.
 - 4. Avoid stumbling on obstacles such as stumps, vines, holes, etc.
 - 5. Use both hands while operating the saw
 - 6. DO NOT cut any material other than wood or wooden objects! Beware of metal trellis parts and wires in the vineyard.
- C. KICKBACK occurs when the moving saw chain near the upper quadrant of the bar nose contacts a solid object or is pinched. This may fling the bar up and back in an uncontrolled arc. Under some circumstances the bar can move towards the operator, who may suffer severe or fatal injury. Wear a safety helmet!

TO AVOID KICKBACK

- 1. Hold the chainsaw firmly with both hands and maintain a secure grip.
- 2. Be aware of the location of the guide bar nose at all times
- 3. NEVER let the nose of the guide bar contact any object. Do not cut limbs with the nose of the guide bar. Be especially careful when cutting small, tough limbs and small size brush (such as grapevines).
- 4. Don't overreach
- 5. Don't cut above shoulder height.
- 6. Begin cutting and continue at full throttle.
- 7. Cut only one unit at a time.
- 8. Use extreme caution when reentering a previous cut.
- 9. Do not attempt to "plunge cut" if you are not experienced with these cutting techniques.
- 10. Be alert for shifting of the log or other forces that may cause the cut to close and pinch the chain.
- 11. Maintain saw chain properly. Cut with a correctly sharpened, properly tensioned chain at all times.
- 12. Stand to the side of the cutting path of the chainsaw.

13. If KICKBACK occurs, both the Stihl and the Echo saws have an automatic Kickback device, which stops the chain from turning. In order for chain to resume cutting, the handle on top of the saw must be reengaged.

ONCE AGAIN, if the chainsaw is damaged in any way or you feel you do not have adequate training, stop immediately. Bring the chainsaw in for repair. Get further training from the VEN VYD Staff.

Training sheet for chainsaws

- 1. Read the appropriate chainsaw manual and VEN VYD safety guide.
- 2. Is the chainsaw in proper working condition
- 3. Trainer describes each part and function of the chainsaw
- 4. Trainer demonstrates the chainsaw
- 5. Trainer discusses dangers and cautions
- 6. Is clothing appropriate for the job?
- 7. Safety equipment, including helmet and eye protection
- 8. Ear protection
- 9. Gloves
- 10. Work boots steel toed are preferred
- 11. Trainee demonstrates the proper use of chain saw
- 12. Trainer signs the training sheet if all the above are in order.

Check Out for Chainsaw

General

1. Is the chainsaw in good working order?

Fuel

1. Is the fuel tank filled with a 5:1 (5 gasoline to 1 2-

stroke oil?

Please note: Stihl oil mix is needed for the Stihl saw.

Echo oil mix is needed for the Echo saw.

Check label on fuel container

- 2. Is the fuel clean?
- 3. Is there sufficient fuel for the particular saw for the job at hand?
- 4. Is fuel container clean and safe?

Lubrication

1. Is there proper and sufficient "bar" oil in the reservoir? (30-wt. oil will suffice)

Chain

- 1. Is the chain sharp and in good working order?
- 2. Is there proper tension on the chain?
- 3. Does the chain move freely and properly?
- 4. Is the chain self-lubrication functioning?

Bar

- 1. Is the bar straight (without cracks or bends)?
- 2. (for the Echo saw) Is the bar greased through the

fitting toward the front of the bar) (use wheel-bearing lubricating

grease)

3. Is the space between the bar and chain clean and free

of sawdust and other residue?

Carrying Case

- 1. Is the carrying case present and unbroken?
- 2. Are the proper instructions in the carrying case?

G • 4		TD •	. ^	
Signature	0İ	Trainee/	U	perator

Signature of Trainer

Date Out

Check In

General

1. Is the chainsaw in good working order?

Fuel

1. Is the fuel tank filled with a 5:1 (5 gasoline to 1 2-

stroke oil?

Please note: Stihl oil mix is needed for the Stihl saw.

Echo oil mix is needed for the Echo saw.

Check label on fuel container

- 2. Is the fuel clean?
- 3. Is there sufficient fuel for the particular saw for the iob at hand?
- 4. Is fuel container clean and safe?

Lubrication

1. Is there proper and sufficient "bar" oil in the reservoir? (30-wt. oil will suffice)

Chain

- 1. Is the chain sharp and in good working order?
- 2. Is there proper tension on the chain?
- 3. Does the chain move freely and properly?
- 4. Is the chain self-lubrication functioning?

Bar

- 1. Is the bar straight (without cracks or bends)?
- 2. (for the Echo saw) Is the bar greased through the fitting toward the front of the bar) (use wheel-bearing lubricating grease)
- 3. Is the space between the bar and chain clean and free of sawdust and other residue?

Carrying Case

- 1. Is the carrying case present and unbroken?
- 2. Are the proper instructions in the carrying case?

Signature of Trainee /Operator	Signature of Trainer
Date Returned	

Protocol for the Use of the Weed Eater (Trimmer) with Brush cutter attachments

<u>Lewis Woody of the VEN Vineyard Staff is the designated trainer and inspector for the Weed Eaters (Trimmers)</u>

A weed eater is a motorized implement for cutting grasses and small weeds. A heavy nylon filament line that is gradually released from the head of the machine does this. The brush cutter attachments are heavy nylon blades that are used for cutting thicker and drier plant material. The VEN Staff has two models of weed eaters, a Husqvarna 322R http://www.husqvarna.com/ and http://www.husqvarna.com/ and http://www.echo-tools.com/prod_1.htm. Please visit the web sites for descriptions of the weed eaters (trimmers) and their manuals. The hard copy manuals for these can be found in the VEN Vineyard Manager's office in Bldg. A (Q047) of the VEN Field House.

Safety equipment needed to operate these machines are the following:

- **Helmet** A helmet is required if cutting material overhead or woody material
- **Ear Protection** Ear protection offering sufficient dampening effect should be used
- **Eye Protection** Blows from branches or objects thrown by the rotating cutting equipment can damage the eyes
- ➤ Gloves should be worn when necessary, e.g., when assembling cutting equipment
- **Boots** Use close-toed, anti-slip and stable boots
- ➤ Clothing Wear clothing made of a strong fabric and avoid loose clothing that can catch on shrubs and branches. Always wear heavy-duty long pants. Do not wear jewelry, shorts, or go barefoot. Secure hair so it is above shoulder level.
- First aid kit A first aid kit should be carried by operators of clearing saws, brush cutters, or trimmers

Important Information

- Incorrect or careless use of the weed eater (trimmer) and brush cutter attachment can turn it into a dangerous tool that can cause serious or even fatal injury to the operator or others. It is extremely important that you read and understand the contents of the manual.
- ➤ When using a weed eater or brush cutter, protective equipment (listed above) approved by the appropriate authorities must be used. Personal protective equipment does not eliminate the risk of accidents, however it can reduce the effects of an injury in the event of an accident.
- ➤ If the machine is broken or in poor repair, do not use it. Use only proper parts for the specified machine. Do not use the machine with defective safety equipment

- The guard must be in place around the blade or nylon trimmer
- ➤ Over exposure to vibrations can result in blood vessel or nerve injury to persons suffering from blood circulation problems. Seek medical attention if numbness, a lack of feeling, tickling, pain, or a change in skin color occur
- The motor and catalytic converter can become quite hot and could burn the skin or start a fire in dry grass and brush.
- ➤ Bear in mind that exhaust fumes contain carbon monoxide and other compounds
- Never start the machine indoors or close to flammable materials
- Always stop the engine before cleaning, refueling, or adjusting the machine
- The machine operator will ensure while working, that no persons or animals come close than 50 feet from the area of operation
- ➤ Use a 1:50 (2%) two-stroke oil/ gasoline mix. The gasoline should be at least 87 octane. Be extremely careful when working with gasoline. Gasoline is very explosive and the fumes are dangerous

Check out and training

General

- 1. Is the weed eater in good working order?
- 4. Are the safety guards in place?
- 5. Has the manual been read and understood?
- 6. Have the safety considerations listed above been review?
- 7. Is the operator wearing proper clothing and safety equipment?

Fuel

- 1. Is the fuel tank filled with a 50:2 or 2% 2-stroke oil mix with >87 octane gasoline?
- 2. Check label on fuel container for proper mixture. Is the fuel clean?
- 3. Is there sufficient fuel for the particular saw for the job at hand?
- 4. Is fuel container clean and safe?

Blades

- 1. Are the blades or monofilament line in good condition
- 2. Do we need to reorder blades/mono-filament/bolts?
 - 3. Is the operator using the proper blade/mono-filament for the job?

Signature of Trainee / Operator	Signature of Trainer
Date Out	

Check In

General

1. Is the weed eater in good working order?

\sim		41	C 4	1	•	1 0
7.	Are	the	satety	guards	1n	nlace?
	1110	uic	Barety	Saaras	111	prace.

Fuel

- 1. Is fuel clean?
- 2. Has the container with cap and nozzle been returned?

Blades

- 1. Are the blades or monofilament line in good condition
 - 2. Do we need to reorder blades/mono-filament/bolts?

Signature of Trainee / Operator	Signature of Trainer	
D / D /		

Date Returned_____

Instructions for the use of the "Post-pounder"

Lewis Woody is the designated Trainer for the Post Pounder

The post pounder was purchased in 1985 from Solex Co., Dixon, CA (707.678.5533). It is in the year 2001, 16 years old. Because of its age and long use, one must be careful while operating this device.

The official instructions are in the Instruction Binder, found in the VEN VYD workshop in Bldg. A.

The Driving Ram is operated hydraulically and is very powerful. The force of the ram and the moving shaft can cause serious injury and/or death. The operator and assistants must be thoroughly trained and advised as to the hazards before using the post pounder. W. Lewis Woody is the authorized operator and instructor for this implement.

1. Instructions for using the Post Pounder

- A. Insert the road lock bolt before driving out to the work area.
- B. The tank of the Kubota should be filled with DIESEL fuel only.
- C. Safety helmet, glasses, and heavy gloves must be worn. These are to be provided by the Researcher/Lab
- D. No loose clothing, kerchiefs, hat ties, long belts, or anything that can be caught in the moving parts., should be worn.
- E. `Drive out to the area and position the pounder at the desired area.
- F. Remove the road lock bolt before operating
- G. Set brakes or place automatic transmission in park to drive posts.
- H. Stand at a 45-degree angle to the driver. DO NOT STAND IN FRONT OF THE DRIVER. THIS CAN LEAD TO SERIOUS INJURY AND/OR DEATH.
- I. Use the safety post holder to start the posts. Then remove your hand (so as not to crush it) to finish driving posts.
- J. There must be at least a 1" distance between the ram and the post. Otherwise, the driving ram will fail to fall or fall slowly.

K. If the post pounder is not operating properly, set the road lock bolt and return it to the VEN VYD field house and contact the responsible staff member or Ag Services.

Training record

(see Instructions for Using the Post Pounder)

- 1. Trainer will point out the parts of the Post Pounder
- Trainer will demonstrate the use of the Post PounderTrainer will point out the safety hazards involved with the Post Pounder

signature(s) of trainee(s) / operator

signature of trainer

date

Post Pounder Check out list:

1.General

- 1. Is the lock bolt in place?
 - 2. Are the four (4) pounder bolts tightened?
 - 3. Are welds, valve, and parts whole and in good working order?
 - 4. Is the shaft greased? (Use 90 wt oil)

2.Safety

- 1. Do the ones using the Post Pounder have safety helmet, glasses, and heavy gloves?
- 2. Are all the participating workers trained?

Check In

1.General

- 1. Is the lock bolt in place?
- 2. Are the four (4) pounder bolts tightened?
- 3. Are welds, valve, and parts whole and in good working order?
- 4. Is the shaft greased? (Use 90 wt oil)

signa	ture of trainee / operator	signature of trainer
date		
Inst	ructions for the Use of the	Stake Press
Lew	is Woody is the designated tra	niner for the Stake Press
		om Nick, of Cortland, CA. There is no official instruction book tions should suffice to guide the operator in proper use and
4. 5. 6. 7. 8. 9. 10.	designated VEN VYD Staff memb The Stake Press is operated hydrau The Stake Press works by means or (see instructions and warnin If the stake does not smoothly and softened by irrigation or rainfall. If The operator(s) must wear safety h The operator(s) must be beware of The operator(s) must not wear loos catch in the moving parts.	readily enter the ground, then the soil is too hard and must be if the ground is too hard, the stake will also bend. The melmet, glasses, and heavy gloves. If the moving parts of the press. The clothing, kerchiefs, hat ties, neckties, or anything that can
Trai	ning Sheet for the Stake Press	5
1. 2. 3.Tra	Trainer will point out the parts of the Trainer will demonstrate the use of the iner will point out the safety hazards	f the Stake Press
signa	ture(s) of trainee(s) /operator	
signa	ture of trainer	
date		

Post Pounder Check out list:

1.General	1. Are welds, valve, and parts whole and in
	good working order?
	2. Are all three-point clips in place?
	3. Is the shaft greased? (Use 90 wt oil)
2.Safety	1. Do the ones using the Stake Press have
-	safety helmet, glasses, and heavy gloves?
	2. Are all the participating workers trained?
Check In	
1.General	1. Are all three-point clips in place
	2. Are welds, valve, and parts whole and in
	good working order?
	3. Is the shaft greased? (Use 90 wt oil)
signature of trainee/operator	signature of trainer
3-4-	
date	

Instructions for the Use of VEN Vineyard Tractors

Lewis Woody is the designated trainer for the Tractors and Implements

Any faculty/staff/student requesting training on the VEN Vineyard Tractors must have a valid California driver's license. Because tractors are large and powerful machines, one must be thoroughly trained on the controls, the power-take-off (PTO) drive, and the various parts of the tractor. The following safety guidelines are from "New Holland Ford Operator's Manual" published in 1993. This manual can be found in the VEN Vineyard Office library, located in Building A (Q047) of the VEN Field Facility.

The Tractor

- 1. Read the Operator's Manual carefully and be safety-trained before using the tractor.
- 2. Only allow properly trained and qualified persons to operate the tractor.
- 3. Lewis Woody of the VEN Vineyard Staff is the designated trainer.

- 4. Do not permit anyone but the operator to ride in or on the tractor.
- 5. Read the safety decals affixed to the tractor
- 6. Remember that the tractor, if abused or incorrectly used, can be dangerous and become a hazard to both the operator and to bystanders.

Servicing the Tractor

1. The Agricultural Services department of UC Davis services the VEN tractors. If there is any problem with the tractor, contact the VEN Vineyard Staff and call 752.1147 for service.

Operating the tractor

- 1. Apply the parking brake, place the PTO lever in the "off" position, the lift control levers in the down position, the remote control valve levers in neutral before starting the tractor.
- 2. Do not start or operate the tractor while standing beside it. Always sit in the tractor seat when starting the engine or operating the controls.
- 3. Do not get off the tractor while it is in motion.
- 4. Turn off the tractor before getting off.
- 5. If the front end of the tractor tends to rise when heavy implements are attached to the three-point hitch, install front end or front wheel weights. Do not operate the tractor with a light front end.
- 6. Always set the hydraulic selector lever in position control when attaching equipment and transporting equipment. Be sure hydraulic couplers are properly mounted and will disconnect safely in case of accidental detachment of the implement.
- 7. Do not leave the equipment in the raised position.
- 8. Ensure that only approved equipment and attachments are used.
- 9. Ensure that the implements are in good repair.

Driving the Tractor

- 1. Watch where you are going, especially at row ends, on roads and around trees and low overhanging obstacles.
- 2. Be on the lookout for any faculty/staff/students working in the vineyard.
- 3. To avoid overturns and accidents, drive the tractor with care and at speeds compatible with safety, especially when operating over rough ground, when crossing ditches or slopes and when turning corners.
- 4. If the tractor becomes stuck in the mud or soft soil, reverse the tractor to prevent overturning.
- 5. Use the flasher/turn signal lights, and SMV sign when travelling on roads, both day and night.

Operating the Power Take Off (PTO)

- 1. When operating the PTO driven equipment, shut off the engine and wait until the PTO stops before getting off the tractor and disconnecting the equipment.
- 2. Do not wear loose clothing when operating the PTO or when near rotating equipment. Be careful of long hair, scarves, and jewelry around the PTO.
- 3. To avoid injury, do not clean, adjust, unclog or service PTO driven equipment when the tractor image is running.
- 4. Make sure the PTO guard is in position at all times and always replace the PTO cap when the PTO is not in use.

Training Sheet and Check out for the for the Ford 5030 Tractor

Lewis Woody is the designated trainer for the Tractors and Implements

The manual for the Ford 5030 Tractor is in the Vineyard Manager's office located in Building A	(Q047)
of the VEN Field Facility, or it can be obtained on line at:	

http://www.newholland.com/na/Products/

http://www.newholland.com/na/shopping_cart/items.asp?productlineid=3&modelid=9768&catalog_id=855&prev_page=model_search

1. Has the trainee read the tractor manual? General 2. Has the trainee been instructed as to cautions and warnings? 3. Has the various parts and controls of the tractor been explained and demonstrated to the trainee? > Servicing Does the trainee know what to do in case of malfunction or need for fuel/lubricants/hydraulic fluid? Ag Services can be contacted at 752.1147. > Driving 1. Does the trainee have a valid California driver's license? 2. Does the trainee demonstrate "good sense" in the operation of farm equipment? 3. Does the trainee know the rules and regulations concerning safe driving and speed limits in the VEN Vineyard. Have the trainees tractor driving skills been tested and approved? 4. > PTO Have the dangers of PTO been demonstrated to the trainee? 1. 2. Has the trainee been trained in the attaching and removal of the proper PTO driven implements? Is the trainee wearing loose-fitting clothes, scarves, or jewelry that can 3. be caught in the PTO? **Trainee /Operator** Trainer

Date

Training Sheet and Check out for the for the Kubota L3450T Tractor

Lewis Woody is the designated trainer for the Tractors and Implements

The manual for the Kubota L3450T Tractor is in the Vineyard Manager's office located in Building A (Q047) of the VEN Field Facility, or it can be obtained on line at

http://www.kubota.com/lseries.cfm

http://www.newholland.com/na/shopping_cart/items.asp?productlineid=3&modelid=9768&catalog_id=855&prev_page=model_search

- ▶ General
- 1. Has the trainee read the tractor manual?
- 4. Has the trainee been instructed as to cautions and warnings?
- 5. Has the various parts and controls of the tractor been explained and demonstrated to the trainee?
- > Servicing 1. Does the trainee know what to do in case of malfunction or need for fuel/lubricants/hydraulic fluid? Ag Services can be contacted at 752.1147.
- Driving
- 1. Does the trainee have a valid California driver's license?
- 5. Does the trainee demonstrate "good sense" in the operation of farm equipment?
- 6. Does the trainee know the rules and regulations concerning safe driving and speed limits in the VEN Vineyard.
- 7. Have the trainees tractor driving skills been tested and approved?
- > PTO
- 1. Have the dangers of PTO been demonstrated to the trainee?
- 2. Has the trainee been trained in the attaching and removal of the proper PTO driven implements?
 - 4. Is the trainee wearing loose-fitting clothes, scarves, or jewelry that can be caught in the PTO?

Instructions for the Use of the Clark Genesis Forklift

A Clark Genesis Forklift has been purchased (March 2002) by the USDA Germ Plasm Repository. The training and safety manual is located in a pocket on the back of the driver's seat. A cable attaches it to the machine. Training material for forklift safety is available on the Clark Material Handling Company web site or through UCD EH&S http://www.osha.gov/Training/PIT/pit_slides/sld001.htm

The VEN Field Facility possesses a model 1940 Clark 3500 forklift. Because of the complicated nature of the gears and the worn condition of the machine itself, it is recommended that only the Vineyard Staff operate it.

EH&S has purchased additional forklift training videos in response to the increased demands by departments using the videos as part of forklift safety training and certification. An updated set of the current training videos, including three new videos, is now available. To reserve these videos, contact either Steve Ball at 754-5876 or Bonnie Murillo at 752-1493. Videos can be checked out for up to ten days. The updated EH&S forklift safety video inventory is as follows:

Operations (2) (12 minutes)
Safe Driving Skills (2) (14 minutes)
The Professional Driver (11 minutes)
Battery Changing and Refueling (8 minutes)
OSHA Forklift Training Update (5 minutes)

After viewing the training videos EH&S has a document entitled "Forklift Safety Quiz" (May 1, 2001). This quiz can be found in the VEN Field Facility Office. It is not on the EH&S web site. Successful completion of this test is required to operate the VEN forklifts. Paul Green (plgreens@ucdavis.edu), in the VEN Winery is a certified forklift trainer.

Questions or comments concerning the EH&S forklift safety program should be directed to Steve Ball at 754-5876.