



ENVIRONMENTAL, HEALTH, AND SAFETY HANDBOOK FOR CONTRACTORS

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ORCHID MT. JULIET ENVIRONMENTAL POLICY

**Environmentally responsible in all areas of business through.
COMPLIANCE, IMPROVEMENT & *PREVENTION***

- Bill Jones, General Manager

PURPOSE

In this handbook are requirements for all contractors and vendors performing work for Orchid International. This handbook was written to help ensure the health and safety of all persons performing work for Orchid International, including contractors, and to ensure that responsible environmental practices are followed at Orchid International facilities. We require all contractors and their employees working for or on the behalf of Orchid International to understand and follow the requirements set forth in this handbook.

SCOPE

The handbook includes emergency procedures, general requirements, required conduct, environmental and safety practices, our environmental policy, and contact information. This manual applies to the Orchid International facility known as Orchid Mt Juliet L.L.C. In the event that there is any question by a contractor/vendor concerning site-specific process or requirements the contractor/ vendor should contact the Manufacturing Engineering Manager.

1 EMERGENCY PROCEDURES

FIRES

In the event of a fire, evacuate the building via the closest exit and gather in the designated area across parking lot in the front of the building. An alarm will sound and an emergency evacuation message will be announced over the intercom and Orchid employee two-way radios. The contractor is responsible for conducting a headcount of their personnel and notifying their Orchid Mt. Juliet contact or other Orchid personnel if anyone is missing. DO NOT reenter the building unless instructed to do so by the Incident Commander (Orchid personnel in charge of emergency response management).

SEVERE STORMS/SHELTERING

If there is a severe storm in the area that presents a serious personal safety hazard (e.g. tornado or other severe weather event), all Orchid personnel and any contractors on site will be instructed to take cover in the break room/bathroom area. This is a central location in the building and provides the greatest protection in the event of a severe storm that warrants sheltering. A take cover announcement will be announced over the intercom system directing all personnel to take cover in the break room/bathroom areas. DO NOT reenter the work area until the Incident Commander has given the "All Clear" and announced that it is safe to exit the storm shelter location.

SPILLS

Spills must be properly managed to prevent harm to the environment and ensure the safety of all persons working for or on the behalf of Orchid Mt. Juliet, including contractors. Also, to prevent spills from being released to the environment by entering the stormwater, sanitary sewer, or other means of release to the environment, all spills of hazardous chemicals are to be reported to your contact at Orchid Mt. Juliet or the Environmental Management System Representative.

In the event of a spill of hazardous, explosive, or flammable chemicals evacuate the area immediately and report the spill to your contact at Orchid Mt. Juliet or the Environmental Management System Representative.

MEDICAL EMERGENCIES

Contract employees, including all vendors, shall report all accidents and injuries to his/her supervisor. In the event of a serious medical emergency while on Orchid property, Orchid's Medical First Responders may administer initial first aid treatment. However, in all cases, contractors are responsible for seeking medical treatment for themselves and their employees.

For life threatening injuries or if the individual cannot be moved, **dial 911**.

If there are any questions, your contact at Orchid or other Orchid personnel can provide further guidance or assistance.

2 GENERAL REQUIREMENTS

The contractor is required to comply with all applicable Occupational Safety & Health Administration (OSHA), Environmental Protection Agency (EPA), state, and local regulations as well as the company's own safety program. In addition, while working at Orchid International (Orchid), the requirements outlined in this handbook must be observed to ensure the safety and health of Orchid employees and contractor employees, and to protect against damage to Orchid property/facilities or the property/facilities of other contractors. The work practices and procedures listed below are not all-inclusive, but are intended to be illustrative of the type of conduct which has always been required of our employees to promote a safe, efficient, and constructive work environment where effective job performance is not disturbed by the disruptive or distracting conduct of others.

- 2.1 Employees are expected to follow all federal, state, local, and company safety rules, procedures and common safety practices when working on Orchid property.
- 2.2 Smoking, other tobacco use, eating, drinking, and/or storage of food are only permitted in designated areas.
- 2.3 PPE is required within the facility. Refer to section 5.4 on PPE requirements.
- 2.4 Never operate any machine or rotating equipment unless all guards and safety devices are in place and in proper operating condition.
- 2.5 Keep aisles, stairways, exits, and emergency equipment clear of obstructions at all times. Work areas must be kept as clean as possible at all times.
- 2.6 Compressed gas cylinders must have protective caps in place and the cylinder valve closed when in transit. Cylinders must be properly secured to prevent tipping during use.
- 2.7 A portable fire extinguisher is required to be close at hand and visible whenever flammable gases are to be used.
- 2.8 Contractors are to provide their own tools, moving equipment, and other supplies unless specific arrangements have been made otherwise.
- 2.9 Each contractor employee is expected to work safely, to use necessary safety equipment, to adhere to all safety rules and procedures, and to report unsafe conditions to his/her supervisor immediately.
- 2.10 Contractor employees must comply with all environmental laws, regulations, and procedures, and to notify his/her supervisor immediately of any deviation from those laws, regulations, and procedures.

3 CONDUCT

The following list, which is not all-inclusive, includes acts and behaviors that are prohibited, and for which an employee may be removed from Orchid property:

- 3.1 Failure to follow specific instructions or specifications
- 3.2 Unauthorized use of Orchid materials, tools or equipment
- 3.3 Unsafe practices or acts; violating any safety rule
- 3.4 Violating any environmental law, regulation or procedure
- 3.5 Obscene or abusive language; racial, gender, or ethnic slurs
- 3.6 Deliberately damaging, defacing or misusing Orchid property or the property of others
- 3.7 Removing Orchid property from the premises without proper authorization
- 3.8 Gambling, bookmaking or selling lotteries on Orchid property
- 3.9 Fighting or other acts of physical violence, including horseplay that can result in bodily harm to another individual; threatening violence to or harassing or intimidating any person while on Orchid property
- 3.10 Immoral or indecent conduct; sexual harassment
- 3.11 Reporting to work under the influence of illegal prescription drugs, alcohol, or other prohibited material
- 3.12 Illegally possessing, selling, distributing or manufacturing drugs on Orchid property
- 3.13 Possessing a firearm, ammunition, or any other kind of weapon on Orchid property without specific Orchid authorization.

4 ENVIRONMENTAL PRACTICES

Orchid International is committed to protecting the environment. Our Environmental Management System is designed to minimize our effect on the environment, and our commitments to environmental management are expressed in our environmental policy. All contractors and vendors are to read and understand our environmental policy and follow Orchid International's environmental practices. While working on Orchid International property, it is the responsibility of all contractors and vendors to notify the appropriate Orchid International personnel of any activities, spills, accidents, etc. that may have an impact on the environment.

All waste generated while working on-site at Orchid Mt. Juliet, must be disposed of in the proper manner. Below are examples of types of waste and their methods of disposal. All contractors are responsible for the proper disposal of debris generated at Orchid Mt. Juliet. If unsure of proper waste disposal method, contact Orchid's Environmental Management System Representative or your Orchid Mt. Juliet contact.

- 4.1 **Metal Waste** - Scrap metal waste may be placed in designated metal scrap hoppers located in the maintenance department.
- 4.2 **Aluminum Cans/Plastic Drink Bottles** - Scrap aluminum cans and plastic drink bottles are to be placed in their designated recycling bins.
- 4.3 **Cardboard** - Cardboard waste may be placed in the mobile waste container labeled "Cardboard Only".
- 4.4 **Paper** - Paper-recycling bins are located throughout the plant.
- 4.5 **Construction Waste** - All contractors are responsible for the proper disposal of debris generated at Orchid Mt. Juliet.
- 4.6 **Wastewater** - The most important rule to remember is **NEVER** pour or dump any substance in a plant drain (inside or outside the plant), down a sink, or on the ground (includes pavement and concrete).
- 4.7 **Industrial Waste** - Contractors must make advance arrangements with Orchid Mt. Juliet for the placement of waste collection containers at the work-site if required.
- 4.8 **Hazardous Waste** - Hazardous waste shall not be removed from the site for any reason without prior authorization.
 - a. Any work that generates hazardous waste must be reviewed with the Project Manager.
 - b. The collection, management, and disposition of any hazardous waste generated by contractors must be approved in advance.

5 SAFETY PRACTICES

5.1 Safety Infractions

- a. Orchid may conduct environmental/health/safety visual audits of contractor work.
- b. If a contractor commits an environmental/health/safety infraction, Orchid retains the right to suspend all work until the violation is corrected.

5.2 Chemicals

- a. MSDS sheets must be provided to Orchid for chemicals brought on-site.
- b. All contractors will be required to remove any unused portions of chemicals that they have brought onto Orchid property.

5.3 Emergency Provisions

- a. If the contractor will require any additional safety & emergency equipment (safety showers, eyewashes and medical treatment of employees), the contractor shall provide the equipment. All spills or splashes are to be reported to your contact at Orchid or the Environmental Management System Representative immediately.
- b. The contractor shall provide spill containment and clean up, decontamination of any affected clothing, equipment, or facilities.

5.4 Personal Protective Equipment

- a. The following protective equipment is required in work areas at all times
 - i. Safety glasses with side shields
 - ii. Protective footwear
- b. The following protective equipment may also be required depending on the scope of work being performed:
 - i. Hand protection
 - ii. Hearing protection
 - iii. Respiratory protection (contractor must have a written program per OSHA standards)
 - iv. Protective clothing
 - v. Welding mask/curtains
 - vi. Face shields or goggles

5.5 Welding, Cutting & Hot Work

- a. Welding & Cutting
 - i. All exposed combustible materials below welding and cutting operations must be removed to a safe location or covered with flame retardant material.
 - ii. A fire extinguisher must be within in 30 feet of any welding or cutting work.
 - iii. No welding or cutting is to be done on a closed vessel or tank, or on any vessel previously in use unless it has been decontaminated.
 - iv. The user must inspect all leads, grounds, clamps, welders, hoses, gauges, torches and cylinders before use.
 - v. Electric welding machines must be de-energized at the end of each shift or when not in use for extended periods.
- b. Compressed Gas Cylinders
 - i. Flammable gas cylinders must be kept at least 25 feet from oxidizers.
 - ii. Cylinders must be properly labeled with a description of the chemical contents.
 - iii. Valve protection caps shall be in place when compressed gas cylinders are transported, moved or stored.
 - iv. Equipment that uses flammable gas with oxygen or other oxidizing gases is to be protected with check valves or flash back arrestors
 - v. Cylinders shall be kept at a safe distance or shielded from welding and cutting operations. Cylinders shall not be place where they can contact an electrical circuit.
 - vi. If a hazardous gas leak is detected, shut down operations immediately and notify Orchid personnel.
 - vii. Cylinders should be stored in an upright position and securely fastened to prevent them from falling.
 - viii. NEVER carry a cylinder by crane, hoist or lifting magnet

5.6 Electrical Work and Lock Out/Tag Out (LOTO) Rules

- a. Electrical Work
 - i. All electrical wires and circuits are to be considered energized unless power is definitely disconnected and the switches are suitably locked and tagged.
 - ii. Do not operate any electrical apparatus, electrical switches or controls without authorization from your contact at Orchid Mt. Juliet.
 - iii. Before working in any area where there is danger of contact with electric wires, notify your foreman and your contact at Orchid Mt. Juliet.
- b. Lock Out/Tag Out (LOTO) Rules
 - i. All contractors shall have their own established LOTO program.
 - ii. When working on equipment where there is ANY risk of injury from release of stored energy, ALL energy sources are to be locked and tagged, including but not limited to:
 - 1. Electricity
 - 2. Compressed air
 - 3. Steam
 - 4. Gases
 - 5. Stored mechanical energy – gravity, springs, etc.
 - 6. Chemicals
 - 7. Hydraulics
 - iii. Contractors are responsible for supplying LOTO tags and locks
 - iv. Contractors are required to adhere to OSHA standard 29 CFR 1910.147 on LOTO requirements.

5.7 Work Area Protection - Barricading

- a. Barricades are required around holes, opening in floors, roofs, elevated platforms, around certain types of overhead work, and whenever necessary to warn people against falling objects. Use barricading every time you perform work above or below floor level or grade.
- b. Barricading is intended to alert pedestrians to the potential hazards, such as falling objects.
- c. Barriers must be 42 inches high made of wood, metal or sturdy plastic fencing and properly braced.
- d. Do not permit personnel who are not actively part of the work into the barricaded area.
- e. Yellow plastic tape is not acceptable protection for most activities; refer to your contact at Orchid Mt. Juliet with any questions.

5.8 Working Surfaces

- a. Scaffolds - All scaffolds shall be erected and maintained in accordance with OSHA 29 CFR 1910.451.
- b. Ladders
 - i. Each user must inspect ladders visually before using. Be sure to check safety feet and safety dogs or latches on extension ladders
 - ii. Use all ladders per manufacturer recommendations. Never alter ladders without permission of manufacturer.
 - iii. If it is necessary to place a ladder in or over a doorway, barricade the door and/or post warning signs.
 - iv. Metal ladders must not be used for electric welding or near electric lines or services.
 - v. Be sure ladder is long enough for the job.
 - vi. Always use both hands while climbing the ladder. Keep both feet on the rungs and face forward.
- c. Roof Work
 - i. On roof areas where there will be construction traffic, it will be the contractor's responsibility to install any necessary safety equipment.
 - ii. The contractor shall remove all construction debris from all roof area(s) on a daily basis.
 - iii. It shall be the contractor's responsibility to secure any material and equipment to prevent injuries and/or property damage.

5.9 Fall Protection

- a. All work areas more than 47" above floor level must have suitable ladders or other appropriate means of access, such as OSHA approved scaffolds or power lifts.
- b. A suitable means of fall protection conforming to OSHA regulations shall be used for building construction, roofing repairs, and all other building repairs where the operator must perform work more than 10' above the adjacent or ground surfaces.
- c. All fall protection must be provided by and inspected by the contractor.

5.10 Tools & Guarding

- a. Power Hand Tools (Electric)
 - i. Safety features such as ground-fault circuit interrupters (GFCI), three-prong plugs, double insulated tools and safety switches are to be used.
 - ii. Contractors should conduct regular inspections of tools, cords and accessories and repair/replace any damaged/problem equipment.
 - iii. Proper guarding should be used.
- b. Portable Sanders, Saws or Grinders
 - i. Circular saws must be equipped with guards above and below the base plate. When the saw is withdrawn from the work, the lower guard must automatically and instantly return to the covering position.
 - ii. Belt sanders must be guarded against accidental contact. Guards are needed at all nip points and covering the unused run.
 - iii. Rules for pedestal and bench grinders:
 - All hand grinding machines must have work rests.
 - Keep a 1/8" maximum gap between the wheel and work rest and between the wheel and the explosion guard.
 - The angular exposure of the wheel must not be more than 90 degrees.
- c. Air Powered & Electric Grinders
 - i. All attachments for air tools must have an RPM rating equal to or greater than the rating of the tool.
 - ii. All hand held grinders and cutoff wheels must be guarded to protect the user from flying fragments.
 - iii. Cup wheel guards must be adjusted so that only 1/8" of the wheel is exposed below the guard on the side toward the user.
 - iv. Vertical portable grinders and cutting-off wheel guards must cover a minimum of 180 degrees of the wheel.
- d. Misc. Guarding Requirements
 - i. One or more methods of machine guarding must be provided to protect the operator and other workers in the area from hazards created by point-of-operation, on-going nip points, rotating parts, pinch points, or flying dirt, sparks or chips.
 - ii. Guarding must conform to the appropriate standards and must be designed and constructed as to prevent the operator from having any body part in the danger zone.
 - iii. All machines must have a positive means provided for rendering the machine inoperable while repairs and/or adjustments are made.
 - iv. Only authorized personnel may remove a machine guard or override a safety interlock device. The device then should be disconnected and locked out and appropriate warning signs displayed.

5.11 Ventilation and Exhaust Systems

- a. All power must be locked out and tagged out when working on the system.
- b. Proper safety procedures must be followed when the work-site is at heights above 4ft.
- c. Equipment must be approved for the environment it's being used in.

5.12 Gas, Diesel or LP Powered Equipment Approval

- a. No gas-powered equipment may be used within the plant without prior approval from Orchid Mt. Juliet personnel.
- b. All gas-powered equipment must be refueled outside away from the buildings.
- c. Gasoline may not be stored within the building. Spare gas cans and gasoline must be removed from the plant at the end of each work shift.
- d. Fire extinguishers must be readily available when using any gas, diesel or LP equipment.

5.13 Flammable Liquids

- a. Flammable liquids are not to be used or stored in any location where sources of ignition exist within a 25 foot radius.
- b. All flammable liquids in containers of 5 gallons or more are to be used and stored within secondary containment.
- c. Dispensing and mixing of flammable liquids is to be done only in locations approved by Orchid Mt. Juliet personnel.

5.14 Chemical and Hazard Communication Standard

- a. All products and chemicals must be:
 - i. Approved by Orchid Mt. Juliet prior to usage.
 - ii. In approved containers, including all flammable substances.
 - iii. Labeled as to the contents and denoting any physical and/or health hazards.
- b. Each contractor shall have a Hazard Communication Program including but not limited to:
 - i. Complete MSDS sheets on hand at the work-site for each chemical used.
 - ii. Chemical inventory
 - iii. Labels for all containers.
 - iv. Adequate training for all personnel that covers:
 - Physical and health hazards of all products
 - Proper handling of the products
 - Personal protective equipment
 - Locations and use of eyewashes and showers
- c. All contractors working on-site at Orchid Mt. Juliet are responsible for educating their employees on Hazards Communication.

5.16 Confined Spaces

- a. Beware of confined spaces and recognize the signs placed at confined space entry points.
- b. Know the Orchid standards plus OSHA 29 CFR Part 1926 construction requirements.
- c. Coordinate with the Orchid Project Manager on the hazards of the confined space prior to beginning work.
- d. Employees must be properly trained in confined space work.
- e. The contractor must have calibrated atmospheric testing or air monitoring equipment.
- f. The trained personnel shall conduct air monitoring to determine the conditions within the space.
- g. Post entry supervisor at entry point, if required.
- h. Use retrieval devices (tripods, etc) for emergencies or disabled persons
- i. The contractor must provide documentation of their Confined Space Entry Program including training of personnel, proper calibration of equipment, and entry permit form.
- j. If in doubt, ask the Project Manager or appropriate contact.

END