

FSC Safety Manual Outline

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Safety and It's Importance

Farm Service Co-op's management and Board of Directors is dedicated to providing the safest possible working conditions for all employees. The Co-op's duty is to furnish each employee with a work environment which is free from recognized hazards that are likely to cause serious physical harm or death.

Farm Service Co-op has established a permanent safety committee devoted to evaluating the work environment and enforcing the safety rules and regulations as presented in this manual. FSC will do its' part to insure the safety of all employees.

HOWEVER, SAFETY IS EVERYBODY'S BUSINESS. Safety cannot be left just to the Co-op. It cannot be left just to other employees. Each employee must be willing to DO HIS/HER PART. Employees must develop a safety conscience attitude to help prevent accidents from occurring. Remember, Safety is Profitable, Accidents are Costly. Costly to you, your family, and your cooperative.

Some typical accident costs are:

<u>Employee</u>	<u>Employer</u>
Bodily injury	Property damages
Medical expenses	Replacement or repair costs
Personal Property	Production Loss
Loss of wages	Employee compensation
Permanent disability	Workman's Compensation insurance
Permanent wage decrease	Accident investigation costs
Job security	Employee replacement

This manual is written to inform employees of the safety practices and policies of FSC. Please take time to read it carefully and ask questions on anything you don't understand. Employees who deliberately disobey FSC's safety rules and regulations as presented in this manual are subject to possible termination.

FIRST AID

First Aid training is a valuable asset for every employee to attain. In case of an accident, it is important to know what can be done or “How can I best help?” until professional help arrives. First aid training benefits the employee not only at work but also in home and community emergency situations.

1. Each main office of FSC has an approved First Aid kit. Each employee must know where the kit is located. In order for supplies to be on hand when needed, please use for only on-the-job injuries or treatment and report immediately to the safety director when supplies are running low.
2. FSC will pay the registration and training fees for all employees who wish to take First Aid and/or Cardio-Pulmonary Resuscitation (CPR) training. A receipt for the fees paid by an employee must be turned in to the safety director after completion of the course before reimbursement will be made.
3. Emergency telephone numbers are posted in each FSC office. Employees must know where the numbers are posted in their office and who to call in each emergency situation.

Accident Reporting

Any accident, no matter its' severity, shall be reported to your supervisor or the Safety Committee Chairman. Even a near accident should be reported.

Any accident involving personal injury will require an investigation and written report by the supervisor to the Safety Committee Chairman. This report shall be completed no later than two business days after the accident.

Visitors

In addition to FSC employee safety, the safety of customers, outside contractors, and visitors is the responsibility of FSC. Safety policies must be observed by customers, contractors, and visitors at all times.

Tours must be approved by the general manager well in advance.

If a stranger is present on any FSC property do not hesitate to ask them for identification.

Security

1. Missing inventory, tools, office equipment, or other property shall be reported to your supervisor immediately.
2. Any vandalism shall be immediately reported to your supervisor.
3. Branch Managers are responsible to see that all plants are locked and secured when leaving for the day.

Signs

Signs are posted for exits, fire extinguishers, first aid, no smoking, and other instructions. Please adhere to them. Remember customers and visitors also must adhere to them.

Smoking

No smoking is permitted in any FSC elevator, feed mill, or wherever NO SMOKING signs are posted. Employees are responsible for asking the customers or visitors to adhere to this policy.

Employees not adhering to the "NO SMOKING" policy will be subject to the following discipline:

- First Offense – written warning
- Second Offense – two days suspension without pay
- Third Offense – automatic dismissal

Liquor & Drugs

Intoxicating substances, hallucinating drugs, barbiturates, or narcotics of any kind shall not be used while on the job. Any employee violating this policy or arriving at work in a condition deemed “unsafe” will be dismissed for one week without pay. Second offense will result in immediate dismissal.

Fires

Report all fires to your supervisor immediately. Minor fires that have been extinguished are included. The possibility of a reoccurrence must be investigated.

The need to notify FSC’s insurance company will be determined by the Safety Committee Chairman and the General Manager.

Lifting

1. Avoid lifting when possible by using machinery.
2. Check objects before lifting. Weight, size, and shape can all be problems. Get help before injuring yourself.
3. Know where you are going and that the path is clear.
4. When lifting use the following procedures:
 - a. Keep your back straight at all times.
 - b. Lift with your legs, not your back.
 - c. Keep the load close to your body.
 - d. Avoid twisting your torso while carrying heavy loads.
 - e. Use your legs when setting the object down-not your back.

Ladder Safety

1. Use a ladder in good condition.
2. Work with another person if possible
3. Don’t over-reach from a ladder.
4. Use both hands when climbing.
5. Place the ladder at a safe angle with the wall.
6. Only one climber on the ladder at any time.
7. Don’t carry material while climbing. Hoist material up after climbing the ladder.
8. Never hurry or take more than one rung at a time.
9. Use a nonconductive ladder when working around wiring or electrical equipment.
10. When not in use store ladder in a horizontal position.

Electrical

1. All electrical covers shall be in place. Keep electrical control rooms closed at all times.
2. Report defective electrical equipment and wiring immediately. Do not continue to use the defective equipment.
3. Only qualified personnel or outside contractors should make electrical repairs.
4. Use extension cords for their intended purpose. Do not overload an extension cord.
5. Use non-conductive ladders when working on electrical equipment or wiring.
6. Do not leave electrical equipment running unattended.

Tools

1. Use the proper tool for the job.
2. Maintain tools in good condition. Replace or repair tools as needed.
3. When a tool is removed for use, return the tool to its' proper place after completing the job.
4. If a tool has a guard-use it. Be sure the guard is in its' proper place after completing the job.
5. Electrical power tools must be grounded if not double insulated.
6. Unplug power tools when not in use.
7. Use personal protective equipment, especially for the eyes.

Machinery Operation

1. Never operate a machine you are not qualified for.
2. Guards, covers, and safety devices shall be in place before equipment is operated.
3. Check to see that all persons are clear before starting any machine or equipment.
4. Machines or equipment that malfunction should be shut down and reported promptly to your supervisor.
5. Maintenance work on all equipment and machines shall be done by qualified persons only.
6. Machines or equipment with "lock out tags" or "Do not start tags" shall not be operated.
7. Never use a machine for a purpose or in a manner for which it was not intended.
8. Never overload a machine's capacity.
9. Always watch any machine while it operates. Do not let it operate unattended.

Tag and Lockout Procedure

Purpose:

To insure that equipment being installed, repaired, adjusted, or otherwise maintained may not be started up, energized or activated until all such work has been completed.

To prevent personnel injury during equipment maintenance and repair operations.

Scope:

1. Each FSC employee shall be trained and knowledgeable in the lockout/tagout procedure used at FSC. Each location employee shall be classified as either authorized or affected regarding the lockout/tagout procedure. An affected employee must be trained in the area of lockout/tagout by reviewing and understanding this procedure with their respective location area coordinator. Affected employees cannot conduct lockout/tagout procedure at FSC. Authorized employees must be trained in the area of lockout/tagout by reviewing and understanding this procedure with their direct supervisor. Authorized employees are approved to conduct lockout/tagout procedure at FSC.
2. Prior to any authorized employee conducting a lockout/tagout procedure, an “FSC Standard Operating Procedure for Lockout/Tagout of Equipment and Machines”, for the specific machine to be locked out will be reviewed, signed and dated by the location area-coordinator, the maintenance and safety supervisor and any other employee involved in the lockout. All affected employees shall be notified of the lockout/tagout procedure to be used by the authorized employee(s) conducting the lockout/tagout procedure. This notification of affected employees will occur before the lockout/tagout procedure begins by authorized employee(s). The above form(s) contain the lockout process to be used on each piece of equipment.
3. A lockout and tag system shall be used when performing maintenance work on equipment or when equipment needs to be out of service for any reason.
4. Before beginning work on any mechanical, electrical, hydraulic or pneumatic equipment, lockout and tag the power source.

Tag and Lockout Procedure cont'd

5. Each employee who works on closed down equipment shall use a padlock. This may result in multiple locks on one piece of equipment. No key or combination shall open more than one lock.
6. Attach a warning tag to the locked out power source and/or the control panel serving the equipment and state the name of the workers, the work being performed and any other special precautions.
7. Before beginning work on the locked out equipment, try the equipment power source and make a visual check to insure the main controls are really "OFF". Be careful of overlapping equipment where activating one piece of equipment starts a second piece of equipment. Relieve or release all potentially hazardous stored or residual energy prior to beginning work on the locked out equipment. After releasing stored energy verify that isolation and de-energization of the machine has been accomplished.
8. Following completion of work on the machine or equipment:
 - a. Inspect work area to ensure non-essential items have been removed and equipment/machines are operationally intact.
 - b. Notify all affected employees that the lockout/tagout procedure is over and safety devices will be removed. Safely position or remove all authorized and affected employees by authorized employee responsible for the lockout/tagout procedure.
 - c. After removing locks/tags, again notify all affected employees that locks/tags are removed and machine or equipment will be started.
 - d. Locks/tags may only be removed by the authorized employee who applied the lock/tag.
9. When outside contractors work on FSC equipment, that equipment shall be locked out and tagged by both the contractor and an authorized FSC location employee in charge of the repair project.
10. Annual documented employee training of lockout/tagout procedures will occur at FSC.

GENERAL:

1. Locks will be kept at each location office and may be checked out from the location branch manager.
2. A safety file will be maintained in the office of each FSC location. The “FSC Standard Operating Procedure for Lockout/Tagout of Equipment and Machines” forms and tags will be kept in these safety files. Branch managers are responsible to maintain an adequate supply of both.

Truck Driving – General

1. Know and observe all driving laws. All equipment is to be operated in a lawful manner.
2. Legal speed limits are to be observed at all times. In addition, maximum towing speed of 40 mph is to be followed.
3. Know how to evaluate road conditions and drive accordingly. Gravel, curves, hills, wet, snowy, and icy conditions call for special care.
4. Know and observe the safe load limits for each truck. Do not overload.
5. Conduct a short safety inspection of each vehicle before using for the day. Include a check of tires for condition and inflation, lights, wipers and engine oil before starting the vehicle.
6. Keep equipment clean – especially lights, mirrors, windows and reflectors.
7. Know and observe proper backing procedures. Get out and look before backing to be sure there are no children or obstructions in the way.
8. Know how to check and apply the brakes. Know how to control the speed with the power train.
9. Know how and when to use tire chains.
10. During winter driving, be sure the truck defroster and heater are working. The truck should also be equipped with an ice scraper and paper towels.
11. Report all faulty equipment to the branch manager immediately.
12. Never park a truck in the feed mill or grain elevator over night.

Grain & Grain Handling Safety

Housekeeping

1. Spills, leaks, and dust shall be cleaned up promptly.
2. Distributor and spout leaks should be repaired immediately.
3. All equipment, machinery, motors, and electrical controls shall be properly maintained and kept clean for normal use.
4. Trash and waste shall be properly disposed.
5. Tools and equipment shall be returned to their designate places after each use.
6. Some housekeeping should be done every day. This will keep the task from becoming burdensome.
7. Bin opening covers shall be kept in place except when bin is being entered or inspected.
8. Aisles, doorways, stairs and areas around fire extinguishers shall be kept clean and clear.

General

1. No one will operate grain handling equipment of any kind unless properly trained and authorized to do so.
2. Do not overload manlifts. Manlift capacity is one person only.
3. No smoking in any FSC elevator will ever be permitted. This includes employees, customers, or visitors. First offense will be a written warning. Second offense will result in two days suspension without pay. Third offense will be automatic dismissal.
4. Any injuries, regardless of how minor shall be immediately reported to either branch manager or safety committee chairman.
5. Loose, baggy clothing should not be worn. Tennis shoes are forbidden for elevator operations. Avoid wearing dangling objects such as bracelets, neck chains, etc.
6. Know where fire extinguishers are located and how to operate them. Check them every 30 days for pressure. Always recharge an extinguisher after use.
7. Absolutely no flammable products will be stored in an elevator.
8. Never park vehicles or machinery in elevator drives after their use.

Driveway Procedures

1. Communicate between your co-workers and customers. Know where all customers are before trucks move. Never allow customer to move truck until hoist is totally lowered.
2. Keep driveway clear at all times.
3. Watch for plugged loads of grain or anything out of the ordinary. Grab a tailgate sample if necessary.

Leg Operation

1. Leg must be kept in good working order at all times. Inspect belts, cups, drive motor, and bearings periodically.
2. Keep good belt tension.
3. Maintain proper head pulley lagging.
4. Clean the leg boot area periodically.
5. Never overload the leg. Watch the ammeter to stay at safe capacity.
6. Never leave the leg unattended while loading.
7. Should a leg choke observe the following procedures:
 - a. Stop grain flow to the leg.
 - b. Shut off leg if it does not pull out of the choke.
 - c. Check the leg head, all drive belts, motors, and bearings for possible fire or excessive heat.
 - d. Dig out the choke.
 - e. Again check items in c after cleaning out the choke.
 - f. Inspect periodically the rest of day. Post a watchman if you and your supervisor still suspect a problem.

Grain Dryers

1. Proper training and experience is necessary.
2. Operate only according to instructions.
3. Dryers shall be totally inspected prior to harvest.
4. Shut-down and clean dryers as needed.
5. Report fires or problems to your supervisor immediately.
6. For night drying have two people on site whenever possible.

Harvestvac Operation

1. Operating manual shall be read prior to operation.
2. Person operating machine responsible for all maintenance and repairs as needed.
3. Check belt and chain tension periodically.
4. All guards will be in place when machine is operating.
5. Machine will not be used for cleaning water out of tunnels or boot pit areas.
6. Store all accessories and parts with machine at all times.
7. Operator shall wear ear plugs at all times.

Rail Loading

1. Cars should be cleaned before they are moved into position to load. Never clean cars while cars are being moved and loaded.
2. Never load a car that cannot be cleaned property. If there is any doubt check with your supervisor.
3. When moving cars over crossings position one person at crossing to move for traffic flow.
4. Never cross between or under cars when they are likely to move.
5. Use the car walkway when working on top of cars. Never run on top of cars. Be extra careful on top of cars under windy and icy conditions.
6. Use extra care when attempting to open stuck gates.
7. Cars must be sealed properly.
8. Good communication between loadmaster and trackmobile operator is essential.

Truck Hoist

1. The hoist shall be operated by assigned trained employees only.
2. The truck should be out of gear, brakes released, and engine stopped.
3. All persons shall leave the truck cab and move to the rear of the truck in the clear of the hoist when it is in operation.
4. Do not “bounce” the truck on the hoist to get faster grain flow.

Welding Procedures

1. You must get permission from your supervisor before beginning any welding or cutting.
2. The following 17 welding and cutting procedures shall be reviewed with your supervisor before beginning any welding or cutting.
3. If possible remove and do the work outside of the elevator.
4. Only experienced welders who are familiar with elevator hazards should be allowed to do this work.
5. Clean the area the day before and do the welding first thing in the morning. Open all doors and windows to air out before starting.
6. The elevator shall be shut down at least 30 minutes prior to starting. This includes locking out and tagging any machinery involved.
7. Wet the immediate floor and surroundings with water. All floor or wall openings within 35 feet shall be sealed or covered with a non-combustible material. This includes any spout openings.
8. Have both dry chemical fire extinguishers and water available.
9. Inform all employees where and when welding or cutting work is being done.
10. Wait 30 minutes after completing the work to start the equipment.
11. Inspect the area several times after the work has been completed. Check again at closing time and post a fire watch if there is any doubt.
12. Welding and cutting operators should never carry matches or lighters in their pockets.
13. Use an igniter, avoid matches or cigarette lighters to light cutting torches.
14. Cutting operations should never be done directly over hoses or on concrete floors.
15. Do not watch or allow others to watch cutting operations without proper eye protections.
16. Any oxygen and acetylene cylinders must be secured to a wall, post, or cart in an upright position.
17. Acetylene cylinder key must be kept on the stem while the cylinder is in use.
18. Close the valves on both cylinders when cutting operations are complete.
19. Empty and full cylinders must be securely stored in an upright position, with valve protections caps on and in separately posted areas.

Bin Entry

1. Permission must be granted by your supervisor before entering a bin. It shall be the supervisor's responsibility to abide by the following bin entry procedures.
2. Warn all employees. All equipment connected with the bin shall be marked "Man in bin" before entering. Also mark the board as to which bin number is being entered.
3. Never enter a bin alone. At least one other person shall be in attendance.
4. Suitable bin entry equipment should be used. This includes but is not limited to a safety line or boatswain chair, safety harness, hard hat, and proper lighting.
5. When entering a bin test the air with your nose. If you suspect problems get out. Low oxygen will give you a warning at times, such as dizziness. If you suspect low oxygen exist check with an oxygen meter or ventilate.
6. When breaking down bridged material stay above it at all times. Never stand on top of or jump on top bridged material.
7. Avoid working in a bin with the gate open unless using a safety line. This shall be avoided unless cleaning out final small amounts.

Fumigation

1. Any personnel involved with the fumigation of grain must be a certified fumigator.
2. Always read and follow manufacturer's instructions.
3. Never fumigate alone.
4. Always inform other employees or visitors ahead of time.
5. After fumigating post signs on all elevator entry points. Leave the signs until the elevator has been re-opened and properly ventilated.

Grain Probe Operator

1. Know the location of the probe before operating the controls.
2. Store the probe in a retracted position when not in use.
3. Lock out the controls before cleaning and repairing.
4. Use tools, not fingers, to remove obstructions.
5. Move probe slowly.
6. Do not operate probe when someone is in the grain box to be sampled.
7. Inspect probe weekly for breakage or malfunction indications.

Crop Safety

Dry Spreader Delivery Job Safety Requirements

1. Know and observe safe towing speeds (highway, gravel, hilly areas).
2. Use safety chains.
3. Know turning restrictions.
4. Know safe stopping distances –use 8 second rule.
5. Know clearance required when entering intersections from a stop.
6. Check to see that spreader is out of gear before moving.
7. Check to see that tires are properly inflated.
8. Use proper hitch pin for the load.
9. Use pin safety catch or cotter key, or a washer and spring are preferred.
10. Anticipate road conditions ahead.
11. Secure PTO shaft in holder before moving spreader.

Tender Truck Safety Rules

1. Slow down for curves.
2. Watch for power lines.
3. Follow truck driving general safety rules.
4. Watch auger when backing.
5. Be cautious when climbing on box.
6. Keep away from moving parts.
7. Do not overload.
8. Check hitch.

Skid Loader Operator Job Safety Requirements

1. Wear seat belt at all times.
2. Keep loads low when moving.
3. Make sure engine is cool or protected before fueling.
4. Make certain there are no solid objects in your path when pushing snow.
5. Know where all personnel in area are located when using the loader. Watch for kids and customers.
6. Set parking brake when not in use.
7. Watch for “fertilizer slides” when loading from tall piles.
8. Verify that bulkheads are properly blocked up.

Fertilizer Plant Operation

1. Keep aisles and doorways free of obstacles and trash.
2. Follow a scheduled equipment lubrication and maintenance program.
3. Provide adequate ventilation in buildings when operating equipment inside.
4. Observe all fire precautions; check fire extinguishers every 30 days.

General Chemical Safety

1. Do not wipe your hands on your clothing if chemical has been spilled on your gloves. This will contaminate your clothing and the chemical may be absorbed by your skin.
2. If a concentrate is spilled on the floor or ground, clean it up or dilute it to reduce possible hazard of contact. Some chemicals in the concentrated form will remain in toxic quantities in the soil for many months.
3. Use separate equipment for applying hormone type herbicides (such as 2, 4-D) in order to avoid accidental injury to susceptible plants.
4. Check your application equipment frequently to insure proper function and dosage rate.
5. Do not blow out clogged hoses, nozzles or lines with your mouth.
6. Do not contaminate apiaries, fish ponds, lakes, streams or canals.
7. Do not apply pesticides when drift will be a problem.

General Chemical Safety – cont'd.

8. Do not work in drift or runoff.
9. Provide proper supervision of employees.
10. Do not leave pesticides unattended in the field or at the site of operation.
11. Do not leave application equipment partially filled with unused chemicals at the end of the operation. Pesticides should be used immediately after mixing to avoid possibility of chemical changes occurring in the tank.
12. Plan your application carefully so that you will not have to dispose of large quantities of left-over chemicals.
13. Bathe and change clothing at the end of the day.
14. Launder clothing after each day's use.

General Safety Instructions for Mixing and Applying Pesticides

1. Wear clean and proper clothing and other protective devices when called for. Goggles are required at all times when mixing chemicals. First offense for not wearing goggles – written warning. Second offense – two days suspension without pay. Third offense – automatic dismissal.
2. Change respirator filters as frequently as called for by the manufacturer.
3. Never work alone when handling hazardous pesticides.
4. Workers should observe each other carefully for any change in their normal manner of action.
5. Do not allow children or other unauthorized persons in the vicinity of mixing, loading, or application.
6. Never eat, drink, or smoke when handling pesticides.
7. Always wash thoroughly immediately after handling pesticides.
8. Read the label AGAIN; check contents again; follow precautions given on the label.
9. Follow label directions for mixing and applying chemicals. Do not deviate from these directions.
10. If it is absolutely necessary to handle toxic pesticides at night, make sure there is adequate light.
11. Mix chemicals outside where there is adequate ventilation.

General Safety Instructions for Mixing and Applying Pesticides cont'd.

12. Use only recommended amounts and double check your measurements.
13. Do not combine pesticides unless the combination is called for on the label or until you have consulted an authority.
14. Handle concentrated chemicals with extreme care.
15. Pour liquids, powder and dusts slowly to avoid splash, spill or drift.
16. Open sacks with a knife rather than tearing.
17. Always stand upwind when mixing or loading pesticides.
18. Avoid inhalation of chemical, dust and fumes.
19. Avoid skin contact with concentrated chemicals.
20. If the concentrate is spilled or splashed on your skin or in your eyes, wash immediately.
21. If the concentrate is spilled or splashed on clothing, wash and change immediately. Contact a physician anytime concentrate is swallowed or gets in eyes.

Floater Operator Job Safety Requirements

1. Read and understand all operating manuals.
2. Check wheels and tires for loose lug nuts, inflation, cuts, etc.
3. Shut down applicator before making adjustments.
4. Check brakes (foot & parking) for proper adjustments, fluid levels, worn and broken parts.
5. Check steering system daily for adjustment, leaks, or broken parts.
6. Check U-clamps on wheel springs.
7. Remove fill caps from hydraulic reservoirs, radiators and foam tanks very carefully because of pressure. Check at beginning of the day before start-up.
8. Use a piece of cardboard (not fingers) to check for high pressure leaks.
9. Shut engine "OFF" to refuel and do not smoke in area.
10. Do not leave floater unattended with engine running.
11. Always work off to the side of chemical inductor – wear gloves and goggles.

Floater Operator Job Safety Requirements cont'd.

12. Follow all requirements for safe truck driving.
13. Keep windows and lights clean, carry window washer and paper towels.
14. Do not “push” floater beyond limits of either weight or speed.

Floater Operator Safety Rules

1. Wear gloves and goggles when using chemicals.
2. Don't exceed speed limit as recommended on tires.
3. Follow Tuck Diving General rules.
4. Don't use hands to check high pressure leaks.
5. Shut down machine before making adjustments.
6. Don't push above limits of machine and operator.
7. Watch out for livestock.
8. Drive cautiously on narrow roads.

Anhydrous Ammonia Delivery Job Safety Requirements

1. Know requirements for wearing protective clothing: Gloves and goggles are both required when working with NH_3 . First offense – one week suspension without pay. Second offense – automatic dismissal.
2. Know how to use gas mask.
3. Know requirements for carrying water – 5 gal. minimum.
4. Know requirements for using safety chains and safe hitch pins.
5. Know how to check hose attachment.
6. Check to see that valves are closed before moving unit.
7. Check tires and wheels for tire inflation and tightness.
8. Make sure wagon won't roll away when unhooked. Use chock blocks.

NH³ Delivery Safety Rules

1. Observe 40 mph towing speed.
2. Know how to use gas mask.
3. Hook safety chain.
4. Check safety water.
5. Hand tighten the valves.
6. Check tires.
7. Make sure tank won't roll away when unhooked.

Loading and Unloading NH³ Job Safety Requirements

1. Know proper procedure for sequencing opening of valves for loading and unloading.
2. Repair leaks immediately. Have rubber seals available at plant and in each vehicle.
3. Release pressure between valves before unhooking.
4. Replace damaged hoses immediately.
5. Chock wheels before loading or unloading.
6. Wear goggles and gloves when working with equipment containing ammonia or operating the plant.
7. Hand tighten the valves. Do not use wrenches to tighten.
8. Fasten (secure) riser valves when not in use.
9. Know location of respirator and protective clothing. Make sure it is readily available at the plant or work site.
10. Never fill tanks over 85% full. Observe gauge frequently while filling to ensure that gauge is not sticking.
11. Do not hook up hoses to a tank hitched to a vehicle or tractor. Pull the pin!
12. Know the function and purpose of all valves.
13. Check water tanks and fill as needed.

Loading and Unloading NH³ Job Safety Requirements cont'd

14. Know where ammonia first aid kit is located and how to use it.
15. Know where to quickly find emergency phone numbers.
16. Check seats on valves before connecting.
17. Close valve on main tank when not in use.
18. Do not overload equipment.
19. Close valve on main tank when not in use.
20. Lock all valves when leaving the plant for extended periods of time and overnight.

Loading and Unloading NH³ Safety Rules

1. Wear gloves and goggles.
2. Whenever possible have two people present when unloading at night. Have a supervisor or second person assigned to check periodically whenever people are not available.
3. Have safety water available.
4. Make sure all valves are open before turning the pump on.
5. Unhook tank from towing vehicle.
6. Do not fill beyond 85%.
7. Release pressure between valves.
8. Replace damaged hoses immediately.
9. Know where first aid kit is located.
10. Know emergency phone numbers.
11. Close main valve.
12. Hand tighten the valves.
13. Have extra washer available.
14. Have safety water on towing vehicle.
15. Secure riser valves when not in use.

Feed Mill and Feed Delivery Safety

Bulk Feed Delivery

1. Check for overhead electrical wires before moving auger.
2. Be familiar with type of feed truck being used.
3. Take care when being towed.
 1. Hook only to an approved tow hook.
 2. Be sure PTO is off
 3. Make sure chain or cable is big enough for the tow.
4. Keep all gear and chain guards in place.
5. Follow general truck driving rules.
6. Don't overload delivery truck.

Bag Feed Delivery

1. Center the load in truck box. Do not stock feed on the tailgate.
2. Pile feed that it will not slide off the side or back of truck.
3. Handle one 50# bag at a time.
4. Follow general truck driving rules.
5. Don't overload delivery truck.

Pellet and Feed Mill Operator

1. Do not overload legs or motors. (grinder, cracker, etc.)
2. Be aware of the equipment you are operating. (pellet or feed mill).
3. Know how to operate all equipment safely. (pellet or feed mill).
4. Never attempt to operate (feed or pellet mill) unless you are completely trained for the job.
5. Be aware of lock out procedure for all repair work or cleaning.
6. Obey man-lift rules. One person at a time and weight capacity.
7. Clean up spills and dust daily.
8. No smoking rule. (No Exceptions).

Pellet and Feed Mill Operator cont'd.

9. Enforce procedures (welding and cutting torch).
10. Know where magnets are and clean daily.
11. Use caution in handling feed additives.

Feed Bagger and Forklift Operator

1. Use ear protectors when noise levels are high. (examples are the grinder and cracker).
2. One person shall run bagger and scale.
3. Forklift shall be run only if:
 - a. Load carried low.
 - b. Load close to the main body of forklift.
 - c. Careful overhead stacking (2 or more pallets).
 - d. Be sure of clearance height.
 - e. Back slowly.
 - f. Handle poisonous chemicals with care.
 - g. All stacks are stable. (2 or more pallets).
 - h. Floors of trucks shall be approved for forklift.
 - i. Horn must be used for crossing traffic in warehouse.
 - j. Operator knows weight limit of machine.
 - k. Never leave machine running and unattended.
 - l. Use dust mask if working in dusty area.

Propane Safety

LP Cylinders Delivery

1. All 100# cylinders must have safety caps on.
2. Cylinders must be upright and secured to be transported.
3. Don't over-fill LP cylinders
4. Handle LP cylinders safely to avoid injury (lifting and dropping on feet).
5. Delivery truck must have flammable sign.
6. Use proper tools to connect LP cylinders.
7. Check with customers before opening cylinder valves after delivery.
8. Open and close valves by hand pressure only.
9. Check for leaks at LP cylinders valves.
10. Inspect equipment of new customers.
11. Know requirements of Pamphlet 58-LP laws and installation regulations.
12. Follow the no smoking regulations.

LP Service Work

1. Refuse to install or fix equipment unless it meets code and regulations.
2. Check all new installations for leaks before lighting equipment.
3. Set all LP tanks according to Pamphlet 58.
4. Never use a match to check for leaks. Use liquid detergent.
5. Never enter a building that has a smell of gas – properly ventilate first.
6. When using a ladder around livestock – two people are required.

LP Gas Delivery

1. Follow general truck driving safety rules.
2. No smoking in truck cab.
3. Use chock blocks when truck is stopped for a delivery or filling.

LP Gas Delivery cont'd

4. Static strap must be used when filling truck tank.
5. Things to check regularly on load out and tanks to be filled.
 - Valves Wiring
 - Piping Belts
 - Hoses Acme fitting o-rings
6. Make delivery only when roads are acceptable.
7. Don't over-fill storage tanks 85% maximum on customers' tanks.
8. Do not fill 100# cylinders from delivery truck.
9. Never park truck inside a confined structure.
10. Wear protective gloves when connecting or disconnecting fill hose to tanks.

Petroleum Safety

1. Observe all safe driving rules. No smoking in truck cab.
2. Make sure tanks and lines are marked properly on truck and at plant.
3. Do not smoke where prohibited.
4. Use chock block when loading and unloading.
5. Inspect fire extinguishers monthly.
6. Know how to use ladders safely.
7. Check bulk tanks and lines regularly for leakage.
8. Make sure all wiring is of Class 1, Group D specifications.
9. Use approved load-out nozzles.
10. Post emergency phone #'s around plant.
11. Post "No Smoking" signs around plant.
12. Have plant properly diked.
13. Know proper method for lifting and moving oil drums.
14. Observe rules of NFPA pamphlet 30, Flammable and Combustible Liquids Code.

Respirator Program

For use in the environments that are faced on a day to day basis at FSC, we would normally find four different types of equipment available to enhance the quality of air supply to the body. A brief description of these follows.

I. DUST MASKS

Dust masks are effective only at filtering out dust particles and should not be used where organic vapors or anhydrous ammonia is the problem. Two basic types of dust masks that are available are:

DISPOSABLE NUISANCE DUST MASKS

These are paper disposable masks with no instructions included and are functional only at filtering dust particles from the atmosphere.

NON-TOXIC DUST MASKS

Non-toxic dust masks are a chin type mask with a replaceable paper or foam filter. They are for use only in non-toxic atmospheres, and are used only to filter out dust.

Since neither of these masks are acceptable in a toxic environment the only operating instructions are to place the gear on your head so that normal breathing is done through the mask filtering system.

Dust masks should be used whenever and wherever abnormally dusty conditions exist. Examples are for use in the feed mills, grain elevators, when sweeping floors, etc.

II. CHIN TYPE MASKS

The second type of air quality purifying equipment is the "chin type" mask. This NIOSH/NESA approved mask is simply a face piece with filters on each side.

This mask is mounted on the head and must be tested for a tight seal by holding your hands over the filters to stop the air flow through them. If you can still inhale, the mask is not sealed and the mask needs to be adjusted by changing the strap setting. People with beards and moustaches may have to apply petroleum jelly to their faces to attain a proper seal.

The "screw-on" filters on the sides of the mask are replaceable and available for anhydrous ammonia, pesticides, paints, and organic vapors.

Be sure to read specific instructions on the mask container before using the mask.

A chin type mask with filter designated for painting shall be used at all times when painting is done with a sprayer in an enclosed area.

Respirator Program cont'd

III. FULL FACE GAS MASK

This gas mask is a compact air purifying unit which furnishes respiratory protection against those harmful gases and vapors listed on the canister label. Inhaled air is drawn through the canister which contains chemicals that absorb or chemically neutralize the harmful gases or vapors. The purified air then passes through the corrugated rubber tubing which leads the air into the molded channels of the face-piece. These channels direct the purified air over the lens, thus reducing fogging.

During exhalation, exhaled air is expelled from the face-piece through the exhalation valve assembly. Design of this assembly also allows it to service as a vent for moisture which may condense from breath within the face-piece. An inhalation valve at the bottom of the canister prevents the exhaled air from being expelled through the canister. Because gas masks are purifying devices, they must only be used where there is sufficient oxygen to support life (19.5%). Additionally, concentrations of toxic gases or vapors must not exceed the use limitations stated on the canister label. Should the oxygen content be less than 19.5% or a possibility of exceeding the specific gas mask concentration limitation exists, a self-contained breathing apparatus must be used.

No one canister will provide protection against all gases and vapors. Each canister is specifically labeled and color-coded to indicate the type of protection it affords. The two basic types of canisters for use at FSC are: Yellow-organic vapors and Green-NH³.

Canisters used in emergency situations should be replaced after each use. Gas mask canisters should also be replaced when any of the following occur:

1. Their "use before" shelf life date has been exceeded.
2. Leakage is detected by smell or taste, or if the eyes, nose or throat becomes irritated.
3. High resistance to breathing develops.
4. Inhaled air temperature is uncomfortable.
5. Any symptom of distress, nausea or dizziness develops.

BEFORE USING GAS MASK

1. Remove canister from shipping carton and attach canister to gas mask assembly by means of the threaded connector.
2. Insert canister into plastic holder making sure canister is located in place by pressing in on the bottom rear of the canister until it locks or snaps into position.

Respirator Program cont'd

TO PUT ON THE GAS MASK

1. Examine all gas mask parts, connections and fittings to insure gas tightness.
2. Remove the inlet seal on the bottom of the canister
3. Adjust the canister harness so that the weight of the canister is carried by the neck strap rather than by the breathing tube. Adjust the body strap to hold canister securely.
4. Loosen both ratchet adjustments on the tite-seal molded plastic headgear. Place mask on face with tite-seal-headgear-raised over the head, fitting the mask against chin first. Grip outlet valve at front with one hand to hold gas mask face-piece against face. With the other hand, move molded headgear down over the head.
5. Tighten each ratchet adjustment for a comfortable fit. Once the tite-seal headgear has been fitted; it can be removed by simply flipping the headgear forward with no further adjustment to the ratchet.

TO PUT ON GAS MASK WITH STRAP HEADGEAR

1. Pull all headstraps out to the end tabs. Clasp temple and neck straps with respective hand, as close to the face-piece as possible, and stretch straps over head, fitting mask against the chin first. Pull neck strap first as tightly as necessary to obtain a snug fit (at this stage mask may still hang lower than desired). Pull temple straps next, tightening enough to insure snug fit. Pull top forehead straps last, completing air-tight seal. To avoid forehead kinks, pull these two straps toward each other.
2. Test for tightness by closing the air inlet on the bottom of the canister with the palm of the hand or reuse of the inlet seal. If a good facial fit seal has been obtained, the face-piece will collapse on inhalation and remain collapsed while breath is held; otherwise, the face-piece should be readjusted. If other than facial seal leakage is detected, inspect complete assembly until leakage is located and eliminated. Test for face-piece fit can also be accomplished by bending the breathing tube into a "U" squeezing tightly and inhaling. Face-piece will collapse on inhalation if a proper fit has been achieved.

MAINTENANCE

All parts of the mask must be carefully examined for wear. Damaged parts must be immediately replaced. This device should be minimally inspected every 30 days since it must be available in first class condition at a moment's notice. Parts should be check out for, but not limited, to the following:

Respirator Program cont'd

1. Ratchet slippage on headgear.
2. Worn or broken straps on headharness.
3. Secure attachment of tite-seal headgear to lens retainer.
4. Lens is held securely in position by lens retainer and is not cracked or broken.
5. Exhalation valve assembly is properly assembled.
6. Hose and canister gaskets are in place.
7. Face-piece is not cut or punctured.
8. Clamps on exhalation valve assembly and breathing tube are secure.
9. Canister is correctly threaded to the face-piece assembly.
10. Breathing tube is flexible and not cracked or otherwise broken.

CLEANING AND DISINFECTION

The gas mask should be cleaned and disinfected after each use. Disconnect the breathing tube from the canister. The rubber and metal parts may be washed by hand brushing using a good detergent in warm water, rinsing and air drying in a clean place.

Proper replacement parts supplied by manufacturer must be always used.

STORAGE

When not in use keep the bottom seal on canister and keep gas mask assembled in a carrying case ready for use. The gas mask should be located at a conspicuous and easily accessible place away from dampness, heat, extreme cold, dust or damaging chemical contaminants. Gas mask not routinely used, but kept ready for use, should be inspected at least monthly to insure they are always in first class condition.

IV. SELF-CONTAINED BREATHING APPARATUS

The fourth type of unit is the self contained breathing apparatus (similar to a SCUBA unit).

Since FSC does not have one of these units, it does not warrant our explanation in this booklet. However, if the situation arises that an employee must use one, specific instruction on the unit should be followed.

The proper maintenance and parameters for determining the use of respirators is explained in the American National Standards Institutes pamphlet Z88.2-1980.

This pamphlet entitled "American National Standard Practices for Respiratory Protection" has been adopted by FSC's safety committee as our "standard of operation" for respirators. A copy of this pamphlet will be available at all times to all employees at all locations.

Respirator Requirements

Farm Service Co-op shall provide a minimum of two (2) full face gas masks with NH³ canisters at each location. Masks are to be repaired or replaced immediately if damaged.

FSC shall maintain a minimum of two (2) spare NH³ canisters at each location.

The crop department manager at each location shall be responsible for providing training on respirator use to every employee who will be involved in handling anhydrous ammonia. This shall include all employees who will be involved in the filling and/or delivery of NH³ nurse tanks.

Training shall include the following:

1. Checking a mask before use.
2. Property fitting of masks. (How to check for an air-tight seal.)
3. Proper canister selection
4. Danger signs to know when using a mask.
5. Maintenance of masks.

Training shall be provided before the start of each spring and fall NH³ season. Training shall also be provided to each new employee before he is allowed to work with ammonia.