

Animal health care service

Level - I

Learning Guide -22

Unit of Competence: - Support animal care cleaning activities Module Title: - Supporting animal care cleaning Activities

LG Code: AGRHC1 M7 LO2-LG-22 TTLM Code: AGR HC1 TTLM7 09 19v1

LO 2: Undertake cleaning activities as directed



This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics –

- Following instruction and directions provided by supervisors
- undertaking cleaning activities in safe and environmentally appropriate manner
- Carrying out Interaction with others staffs in a positive and professional manner.
- Observing organisational policies, procedures in relation to workplace practices and handling disposal of materials.
- Reporting problems or difficulties in completing work
- Storing waste material produced during *cleaning activities* designated area.

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, **you will be able to**

- Follow instruction and directions provided by supervisors and clarification is sought when necessary.
- Undertake cleaning activities in safe and environmentally appropriate manner according to organisational guidelines.
- Carry out Interaction with others staffs in a positive and professional manner.
- Observe organisational policies, procedures in relation to workplace practices and handling disposal of materials.
- Reporting problems or difficulties in completing work to supervisor.
- Storing waste material produced during *cleaning activities* designated area according to supervisors' instructions.

Learning Instructions:

- 1. Read the specific objectives of this Learning Guide.
- 2. Follow the instructions described below 3 to 6.
- 3. Read the information written in the information "Sheet 1, Sheet 2, Sheet 3 and Sheet 4".



- 4. Accomplish the "Self-check 1, Self-check t 2, Self-check 3 and Self-check 4" in page -6, 9, 12 and 14 respectively.
- 5. If you earned a satisfactory evaluation from the "Self-check" proceed to "Operation Sheet 1, Operation Sheet 2 and Operation Sheet 3" in page -15.
- 6. Do the "LAP test" in page 16 (if you are ready).



Information Sheet-1 Following instruction and directions provided by supervisors

1. Following instructions

Following **instructions** can preserve one's health and wellbeing, and it is a necessary skill for a quality life. Rules are necessary for every well-functioning society. Professionals that do not **follow instructions** place themselves and other people at a greater risk for injury and death.

The importance of following instructions in the workplace

That is why rules and instructions are made, so our world can run smoothly and become a better place. It is very important to follow instructions and rules in your workplace, because without directions, and the ability to obey given rules/instructions, many unnecessary or unwarranted side effects may occur.

1.1. STEPS of following instructions

Actively listen

• Try to listen intently, not just hear. When you actively listen, you can better understand what you need to do. Here's a trick that may help: pretend that there is going to be a quiz after the conversation. Visually think about what's being said and maybe even repeat it in your head.

Take notes

 Instead of trying to remember everything, write it down. There's nothing wrong with keeping notes; it shows that you are prepared, organized and want to do the job correctly.

Ask questions

 If you are even slightly unsure of what you are being asked to do, don't be afraid to question. Make sure the other person allows you the chance to find out all the needed details to move forward.



Respond with a good attitude

• Just as the person giving directions needs to speak respectfully, it's important to respond respectfully. If you go into the conversation with a bad attitude, it's likely that performing the task will be much more challenging.

Before starting the task, make a checklist

• Whenever there is a job that requires multiple steps, try organizing a to-do list. Check things off as you go to make sure you don't miss anything. Then when you're done, be sure to review your work.

Overall, positive communication and listening are essential when giving and taking instructions. For some jobs, following step-by-step directions is pertinent, but in the case of working in an office, warehouse, restaurant, etc., learning how to provide direction properly and knowing how to take direction make for a smoother and more productive work environment.



Self-Check -1	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. The importance of following instructions in the workplace (5 point)

Note: Satisfactory rating – 5 above points

Unsatisfactory - below 5 points

You can ask you teacher for the copy of the correct answers.

Score =	

Answer Sheet

Name:		

Date: _____

Short Answer Questions



Information Sheet- 2	undertaking cleaning activities in safe and environmentally
	appropriate manner

1. Cleaning procedures in animal care cleaning activities

1.1 Basic Steps of a Cleaning and Disinfection Protocol

There are proper procedures to follow in order to increase the efficiency of the C&D process. If surfaces are not properly cleaned, the disinfection process is ineffective. The basic steps of C&D include:

- Remove all visible gross contaminants from people, vehicles, and all equipment.
- Apply detergent solution onto the surface and allow sufficient time for the detergent to disperse. This allows for the breakdown of the different components of accumulated grime such as fat, protein, and manure.
- Thoroughly rinse the surface using a hose or pressure washer while preventing cross contamination of clean surfaces. Residual detergent may interact unfavorably with the applied disinfectant.
- Apply a standard-registered disinfectant to inactivate disease agents. Follow all safety precautions and use directions specified on the product label. The disinfectant must be left on surfaces for the required contact time per the label instructions.

Cleaning is the most important step in the disinfection process. If an item or material is not adequately cleaned, the application of disinfectant is a waste of time and money because soil (manure, dirt, secretions, and excretions) cannot be disinfected. The cleaning process can be broken down into four basic steps:

- 1) Dry clean
- 2) Wet wash
- 3) Rinse and
- 4) Dry.



Dry Clean— the area to be disinfected should be dry cleaned with a shovel and broom. This step will remove all gross contamination with manure, debris, loose straw, and feed. Any material that cannot be burned should be buried. Scrap wood, wooden gates, wooden feed bunks, and items that are of limited financial value compared to the time and effort required to clean them should be gathered together to be appraised and burned. Ropes, halters, and other items of minimal value that are difficult to clean and disinfect should be appraised and burned.

Begin the process by hauling the manure to a predetermined site for disposal. This may involve moving a number of tons of manure and require considerable time. Stalls, barns, and stanchions that cannot be cleaned out with tractors must be cleaned with manure fork, shovel and broom.

When the dry cleaning step is finished, there will be no loose dirt, dust, feed, bedding, manure, hay, straw or any other loose organic material left within the structure. The surfaces will not necessarily be visibly clean when this step is complete because of organic matter which is tightly adhered to the surface.

Wet Wash— all exposed surfaces, cracks, junctions, joints and mechanical items should be wet washed with a soap solution or detergent. During the wet wash it is necessary to scrub, scrape, or wire brush all surfaces vigorously to break down any biofilm which may be present. Scrubbing can be done with rags on smooth surfaces although commercially available plastic or metal scrub pads are much more efficient. Rough surfaces should be scrubbed with a wire brush to ensure that they are cleaned as completely as possible. Deep cracks, crevices, pits, pores, or other surface irregularities should be given special attention to dislodge accumulated grime. When the wet wash step is completed, the surfaces will be visibly clean. The moisture on surfaces will spread evenly, wetting the surface completely. There will be no beading of moisture which would indicate the presence of oil or grease.

Rinse: Rinse washed surfaces thoroughly to remove all traces of soap or detergent. Residue of soap or detergent should not be left on the surface because it may react in



an unfavorable manner with the disinfectant. When this step is complete, the water film will still "wet" the surfaces in the absence of soap or detergent, and there will be no beading

Dry: The rinsed surfaces should be dried to remove all of the moisture. Removing the moisture promptly will protect equipment and surfaces from deterioration. If left in place, excess moisture will dilute the disinfectant which is to be applied to the surfaces and there is no practical way to compensate for the dilution when mixing the disinfectant. In cool or cold weather, drying can be accomplished by heating the building and circulating the air with auxiliary blowers. In hot weather, drying can be accomplished with blowers or fans alone. In confined areas or on equipment where air circulation from fans is not enough, the use of high pressure air from a compressor or high volume "leaf blowers" will remove excess moisture so drying can take place.

Inspect

All surfaces, junctions, cracks, and mechanical devices in the building should be carefully inspected to assure that the cleaning process has removed all of the organic matter. Rewash any areas *that* may require further attention in order to pass inspection.

2.2 Cleaning animals and animal housing

2.2.1 Special Cleaning and Disinfection Procedures

Concrete or Wooden Construction

All surfaces must first be thoroughly cleaned of all fecal material and organic debris. Any bedding must be burned or buried. If the disease was reportable the directions of the regulatory agent in charge should be followed. The walls and floors should be scrubbed with a hot detergent cleanser solution. A steam cleaner may help, but it does not take the place of mechanical scrubbing. If there are no painted surfaces within the enclosure complete the cleaning with the application of a hot lye solution.

• Broiler Poultry Houses:

Because of the extent of the broiler industry in the State of Georgia special consideration should be given to the cleaning and disinfection of these facilities,



especially after a disease outbreak or flooding. The first step in cleaning and disinfection of a poultry house is to treat the poultry house to eliminate litter beetles and flies. Some producers treat the house after birds are removed from the house before the insects have a chance to move in. Others prefer to wait until the litter has been removed and apply the approved pesticide as part of the wash down procedure. If a residual soil treatment is used, it should be applied to the dirt floors after the completion of all cleaning and disinfecting and before fresh litter is put down. Whatever litter beetle pesticide is used the label directions of the product must be followed exactly.

If not already in place rodent control should also be instituted at this time. The best method to control rodents is to close all access routes into buildings. Cats, traps, and rodenticides have all been used to control rats and mice in poultry houses. If rodenticides are used make sure all birds are out of the house, and precautions should be taken to insure no pets or other animals are allowed into the house or come in contact with the poison or poisoned rodents as they may also be poisoned. Follow all manufacturers' directions.

Next, remove all moveable equipment from the house. Clean and then disinfect this equipment and leave it outside to dry in the sun while completing the rest of the cleaning and disinfection.

All litter/manure must then be removed from the house. If the litter/manure is stored on the premises, it should be moved as far away from the houses as possible, at least a minimum of 100 yards. The litter/manure should be covered with plastic if it is to be stored for more than a few days. The litter should be composted if possible.

After the litter has been removed, the dust and cobwebs should be removed from the walls, ceilings, curtains, fan blades, louvers, equipment, etc. After removing the litter and any remaining dust and debris, the house should be thoroughly washed. The washing procedure is best performed using a high-pressure spray washer. (Note that



high-pressure washers can damage ceilings and curtains.) Add detergent to the water to increase the water's cleaning action. Make sure the detergent used is compatible with the compound subsequently used for disinfection. The water temperature in the sprayer should be at least 200°F to aid in the killing of any microbes.

Fan motors, switch boxes, outlets and other electrical equipment should be covered before washing down the house to prevent burn-out of equipment and possible electric shock and fires. Clean these types of equipment with a blower, dry brush, or rag before them. Start at the top of the house and work down. It is crucial to remove all dust, dirt, litter, and manure from the house. Ledges, braces, air intakes, and all other places where dust, dirt, feathers, and waste accumulate must be cleaned. Most disinfectants are less effective if used in the presence of organic material. The dirt and fecal material bind the disinfectant that would otherwise be available to kill the microorganisms that cause disease. All disinfectants work best on a clean surface.

Fumigants have been used in the past to disinfect poultry houses. Today, there is some concern over the safety of many of these products as some, such as formalin, are quite poisonous or carcinogenic. Great care must be used when using fumigants. Label directions must be closely followed. Only products that are approved for poultry house disinfection should be used. Fumigation is most effective when the house can be closed airtight.

Disinfection of the house comes after cleaning has been accomplished. There are numerous types of disinfectants that can be effective when used properly. The most accepted types of disinfectants for poultry houses are synthetic phenols, coal tar distillates, and quaternary ammonia compounds. These compounds are best suited for use because they are not as susceptible to deactivation by organic material, and they are relatively non-corrosive to equipment. Even within these families of disinfectants, some are more effective than others when organic debris is present. Whatever



disinfectant is used the label directions must be read and followed exactly, and the product used in the manner for which it is intended. In most cases, the best way to

apply a disinfectant is by spraying or foaming it on with a medium pressure sprayer. Steam cleaning (at 285°F) with water alone is also a very effective way to disinfect if the necessary equipment is present. After disinfecting, allow the house to dry completely.

All feeders, hoppers, and feed bins must be thoroughly cleaned and disinfected. Scrape and scrub the feeding system to completely remove all the old feed. Also, remove the feed bin boot and clean out any remaining feed. Clean the bin with a high-pressure sprayer and then disinfect it with a 10% chlorine bleach solution. The boot can be left off until the bin is completely dry, but it must be reassembled before the first feed delivery arrives. Waverers must also be cleaned and disinfected. Water lines must be flushed out and any tanks, proportioners, medicators, etc., must also be cleaned and disinfected.

Fresh air and sunlight are excellent at reducing the numbers of microbes present. Let as much light and air into the house as possible during the down time. No wild birds or any other animals should be allowed to enter the house at any time, but especially after it has been disinfected. Wild birds and other animals can carry viruses and bacteria on their fur and feathers and recontaminate the house, negating the effects of cleaning and disinfecting.

In addition to cleaning and disinfecting the inside of the house, the immediate area around the exterior of the house must also be cleaned and disinfected. Keep vegetation surrounding the poultry structures mowed short. Disinfect 10 feet around the outside of the buildings. Clean and disinfect entrances to the house. These areas must be as free of litter/manure and feathers as possible.

The following is a summary checklist for cleaning and disinfecting a broiler house:

- Treat the house for litter beetles, flies, and rodents
- Remove all removable equipment



- Clean and disinfect the removed equipment; and store in a sunny location.
- Sweep out all litter and manure from the house.
- Wash down the house completely from top to bottom.
- Cleanse and disinfect the watering system and the entire feeding system from the bins to the pans.
- Fumigate the house if necessary and follow the manufacturer's directions.
- Spray the entire house with a disinfectant approved for use in poultry houses.
- The house and equipment should be completely dry before returning the equipment to the house.
- Allow at least 12-14 days down time between flocks before introducing new birds back into the house. Bringing birds back into the house prematurely will increase the chance of cycling diseases from flock to flock.
- Poultry layer house:

A complete cleaning and disinfection between each brood of pullets is highly recommended. Cage layer houses and equipment must be thoroughly cleaned and disinfected after each flock is removed from the premises and before a new flock is introduced. Again, the information for broiler houses will also apply here with notable exceptions to the type of equipment that is used.

Remove any manure from the house and place it as far away from the house as possible or a minimum of 100 yards. Cover dry manure and compost it if possible. Runoff from manure piles should not be allowed to contaminate the driveways or entrances to the poultry houses. Sweep the house from top to bottom to remove cobwebs, feathers, etc. Institute vermin control. Floors, lighting fixtures, fan blades, air inlets, louvers, beams, ledges, walls, cages, and walkways must be thoroughly cleaned. Burned out light bulbs should be replaced and all other bulbs should be cleaned. Clean the facility by working from top to bottom.

A pressure sprayer is recommended for cleaning. A pressure of 750-2,000 psi is recommended but at this high pressure special care and personal protective garments



are needed as this pressure can cut human skin. Care must be taken to follow the manufacturer's instructions for the use of the pressure sprayer. Use sprayer attachments and nozzles that permit washing of hard-to-reach areas. Wash the ceilings, walls, walkways, steps and cross-over platforms, egg rollers, all egg conveyors, cross belts, floors under conveyors, stairs to the pit, outside stairs, and concrete pit floors. Clean everything completely.

Special attention must be paid to clean and disinfect not only the top, but also the underneath sides of troughs and the surfaces of all chains and augers. Extreme care must be given to the egg elevator. Check for cleanliness from every angle possible, especially from the underside of the pit and from behind rollers. Remove all traces of egg breakage and spillage. If slats are used they should be removed and taken outside of the house for cleaning. They should be scraped of any manure, pressure washed to remove any residual material, disinfected, and left outside to dry in the sun. Any removable equipment should be taken outside, cleaned thoroughly, and then disinfected and allowed to dry in the sun.

Wash egg rooms, storage rooms, egg coolers, hallways, break, wash and restrooms.

Manually clean any areas that have resisted prior cleaning. Cover both sides of the curtains completely and thoroughly with spay to remove dirt, dust, and down. The curtains should be up and completely extended when cleaning and spraying. When dry the curtains may be dropped. The house should be allowed to air out completely.

After thoroughly cleaning the ceiling, curtains, wall, partitions, cages, feeders, waterers, and other equipment, they must all then be disinfected. Disinfection should occur within 24 hours of cleaning. The disinfectant should be applied at the rate recommended by the container label. Care should be taken not to get any water or spray into electric motors.

Use of pressure sprayers is advisable to help force the disinfectants into wood pores, cracks, and crevices that protect microorganisms. Spray pressures of 500-1,000 psi have been suggested. Work from back to front and from top to bottom. Dirt floors are almost impossible to fully disinfect. In situations where dirt floors could not be



concreted, disinfectant has been applied to the floor at the rate of one gallon diluted disinfectant per 10 square feet. Clorox has been used for this purpose.

Disinfect egg-handling equipment (elevators, egg belts, etc.) in accordance with recommendations provided by equipment and disinfectant manufacturers. The use of steam, vats of water at pasteurization temperatures, or soaking in disinfectant to disinfect egg belts has been suggested but not fully evaluated for effectiveness or harmful effects on the belt. After the facility has been disinfected, it must be dried. Space heaters have been used to speed the drying process in cold or damp weather.

2.2.2 Cleaning and Disinfection of Vehicles/Equipment: Vehicles traveling between farms, livestock markets, and packing or rendering plants provide an excellent vector for spreading disease from one site to another. This fact is recognized as a main biosecurity threat. To prevent the spread of diseases during cleaning and disinfecting procedures vehicles involved in the process will also require cleaning and disinfection to reduce the risk of spreading diseases from one farm to another as well. Recommended procedures for cleaning and disinfecting vehicles involve the following principles:

2.2.3 Exterior of the vehicle:

- Ensure the crew involved in cleaning the vehicle is wearing clean and disinfected waterproof, protective clothing.
- Remove any deposits of mud, straw, or dirt from the wheels, wheel arches, mudguards, and exposed chassis of the vehicle.
- Remove all food, bedding, and dung from the trailer bed with brushes, scrapers, or shovels.
- Clean and disinfect the outside of the vehicle by starting at the top of the vehicle and working down each side, paying special attention to the wheel, wheel arches, and mudguards.
- Wash the tail gates and lifts thoroughly.
- Wash all vehicle equipment, tools, and the inside of the trailer.



After washing is complete, a high-pressure rinse should follow to clean all surfaces with clean water and to check to make sure there is no muck or debris.

2.2.4 Disinfection of the vehicle cab:

- Take out all removable items from the cab and brush any debris or mud into a bucket or dustpan.
- Wash the floor of the cab, the floor mats, and vehicle pedals with a detergent such as Biosolve® allowing 10 minutes for the detergent to penetrate and loosen dirt.
- Use a clean cloth soaked in a disinfectant to disinfect the cab floor, mats, and foot pedals.
- All items removed from the cab must also be cleaned and disinfected in a similar manner.

Finishing:

- Park the vehicle on a slope to dry.
- Once the vehicle is removed from the wash area, rinse the concrete surface with a detergent, making sure no muck or debris remains.
- Disinfect overalls and boots with Virkon.



Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

- 1. Define cleaning (2 points)
- 2. List the four step of cleaning (4 points)

Note: Satisfactory rating – 2 and 4 above points Unsatisfactory - below 2 and 4 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score =	
Rating: _	

Name: _____

Short Answer Questions



Operation Sheet 1	undertaking cleaning activities in safe and environmentally
-	appropriate manner

1. Basic Steps of a Cleaning and Disinfection Protocol

There are proper procedures to follow in order to increase the efficiency of the C&D process. If surfaces are not properly cleaned, the disinfection process is ineffective. The basic steps of C&D include:

- Remove all visible gross contaminants from people, vehicles, and all equipment.
- Apply detergent solution onto the surface and allow sufficient time for the detergent to disperse. This allows for the breakdown of the different components of accumulated grime such as fat, protein, and manure.
- Thoroughly rinse the surface using a hose or pressure washer while preventing cross contamination of clean surfaces. Residual detergent may interact unfavorably with the applied disinfectant.
- Apply a standard-registered disinfectant to inactivate disease agents. Follow all safety precautions and use directions specified on the product label. The disinfectant must be left on surfaces for the required contact time per the label instructions.



	Carry out Interaction with others staffs in a positive and
Information Sheet- 3	professional manner.

3. The Importance of Interaction in Workplace Issues

Great business leaders and human resources professionals know the benefits of effective working relationships. These are relationships between co-workers, managers and staff, and employees with the public.

Positive interactions increase good feelings, increase morale and improve work satisfaction.

Negative interactions create confusion, anxiety, tension and uncertainty, which adversely affect work efficiency and company productivity. As a business leader, don't leave workplace interactions to chance. Take the time and energy to help everyone in the organization develop the skills for positive interactions, whenever possible. There are many benefits to having effective working relationships.

Positive interactions start with basic pleasantries. These include answering the phones in a professional, pleasant way, keeping in mind the old school idea that people can "see your smile" over the phone. A positive interaction also starts with greeting people who are walking into the establishment, perhaps even opening the door for them, as they enter.

But interaction goes well beyond politeness and communication between people. Interaction is an experience that other workers and consumers have when working with someone for a short time or for an extended period of time.

3.1 Tips on how to best interact with your team members or staffs.

> Schedule regular open meetings

When communicating with team members through e-mail, text, instant message, and other forms of digital media, the meanings of messages can be easily misinterpreted.



The best team interaction often takes place in open, face-to-face meetings. In this type of setting, team members will both hear the words of your intended communication and the tone of voice you use while giving it.

> Use appropriate body language.

The look on your face can say more than a thousand words. For instance, when a team member wears a scowl on his or her face while listening to a fellow employee's ideas, the interaction between the two people will likely be boring. Using positive, body language conveys interest, sincerity, and cooperation to team members. Examples of positive, body language include:

- Smile
- Make eye contact
- Give thumbs up
- Nod or show that you are actively listening to what they have to say
- Give high fives, fist bumps, or shake hands

> Speak simply

When addressing team members, don't attempt to wow them with your impressive vocabulary. Speaking with simple words and phrases will improve the likelihood of effectively communicating your message while decreasing the probability of appearing like a show-off.

> Utilize visuals.

Some of the members on your team might learn better when listening to a lecture. Other employees may comprehend new concepts more easily after looking at visuals. To accommodate a variety of different learning styles, create informative visuals to display when giving a presentation at a team meeting. Also, understanding the behavioral pattern of your team members will ensure you address certain needs, like preferring to read information before meeting as a group to discuss something.



> Value every team member's ideas.

Effective teams contain team members who value each other's ideas. If team members are belittled or ignored after offering input, they will likely stop engaging in team discussions and other activities. When this occurs, collaboration is stifled. Some team members are not naturally driven to initiate conversation. Taking the time to understand who is driven to talk things through versus those who is not will allow you to make sure everyone is given appropriate airtime.

> Establish ground rules for the team.

Establishing ground rules for a team will encourage order, efficiency, and healthy communication at meetings. Every member of the team should have a voice in the rule creation process. Rules should be agreed on by consensus. A few rules that might improve interaction among team members include:

- Every team member will arrive at meetings on time
- Each team member is allowed to offer suggestions and provide ideas
- Only one team member will speak at any given time

> Encourage debate.

When team members are afraid to disagree with one another, they might blindly make important decisions without feeling confident about them. In this type of environment, only one or two team members might be responsible for making most, if not all, of the team decisions. Healthy debates inspire creativity and collaborative brainstorming. Keep in mind that in order to feel comfortable engaging in debate, your team has to be comfortable with each other. Regular team building exercises may be helpful to make people more comfortable and trusting enough to debate without fear of offending anyone.

> Show appreciation.

Most people respond better to courtesy than they react to impoliteness. Showing appreciation makes team members feel like they matter. Expressing gratitude, even for



small acts, creates goodwill. Examples of displaying appreciation to team members include:

- Congratulating a team member for developing a great idea for a new project
- Thanking a team member for finishing an assignment before a deadline
- Thanking team members for taking the time to listen to a presentation.



Self-Check -3	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

- 1. What is the Importance of Interaction in Workplace Issues (2 points)
- 2. Differentiate positive and negative interaction (4 points)

Note: Satisfactory rating – 2 and 4 above points Unsatisfactory - below 2 and 4 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score =	
Rating: _	

Name: _____

Date: _____

Short Answer Questions



Information Sheet- 4	Observing organisational policies, procedures in relation to
information oneer- 4	workplace practices and handling disposal of materials.

4. Workplace practices and the handling

- Effective animal housekeeping can eliminate some workplace hazards and help get a job done easily and properly. Poor animal housekeeping can frequently contribute to accidents by hiding hazards that can cause injuries
- Replace any worn, ripped or damaged flooring that poses a tripping hazard.
 Repair all trap doors and railings.
- Trap doors, cages or railing should be present at hay chutes to prevent anyone from accidentally falling into them. Cut down and remove weeds and brush from around buildings the orderly storage and movement of materials from point of entry to exit.
- Workers need to know how to protect other workers such a posting signs and reporting any unusual

Tools and equipment

- Tool and equipment for animal housekeeping is very important, whether in the tool room, on the rack, in the yard, or on the bench.
- Returning of tools prompotly after uses reduces the chance of being misplaced and lost
- Worker should regularly inspect, clean and repair all tools and and take any damaged or worn tools out of service

Maintain light fixtures

All building and yard should be adequately lighted. Light fixtures should be free of dirt as dirty light fixtures reduce essential light levels.



- Clean light fixtures can improve lighting efficiency significantly light fixtures in storage areas containing combustible materials should be protected against breaking (i.e. explosion proof fixtures).
- Maintain lighting evenly, shadows mixed with light spots inside animal handling facilities will increase the animal's fear and tension.

Floors and other areas

- > Clean up oils and spills on floors immediately.
- > Maintain floors free of debris and accumulations of dust.
- Areas that cannot be cleaned continuously, such as entranceways should have anti-slip flooring.

Spill control

- > The best way to control spills is to stop them before they happen.
- Regularly cleaning and maintaining machines and equipment is one way to; another is to use drip pans and guards where possible spills might occur.
- When spil do occur; it is important to follow cleanup procedures as indicated on the Material Safety Data Sheet.
- Spills must be cleaned up immediately. Absorbency material is useful for wiping up greasy, oily or other liquid spills. Used absorbents must be disposed of properly and safely.

4.1. Methods of waste disposal

a) Bury

- Burial site should have no risk of:
 - ✓ Pollution to surface water or groundwater.
- Should buried to 1 meter depth
- The area should have fence and warning signs (fig. 1)
- Keep the record of burial date and material buried



Fig. 1- fence and warning sign where chemical wastes are buried

b) Burn of wastes

- Burning should takes place in an open space at least 15 metres from any public or livestock area.
- All containers are opened and placed on a very hot fire, a few at a time.
- Supervise the fire constantly.
- Avoid breathing any smoke produced.
- Extinguish the fire after use

4.2 Medical waste disposal

The Medical Waste: any solid waste that is generated in the diagnosis, treatment, researching or immunization of human beings or animals.

4.2.1 Types of Medical Waste

1. Infectious waste: describes waste that has the possibility of causing infections to humans. It can include

- Human or animal tissue (blood or other body parts),
- blood soaked bandages,
- discarded surgical gloves,
- Cultures or swabs to inoculate cultures. Much of this category, including human or animal tissue, can also be labeled as pathological waste, which can only be treated using specific methods

2. Hazardous waste: describes waste that has the possibility to affect humans in non-infectious ways. This type of waste includes

- Sharps instruments such as
- Needles, syringes, scalpels lancets, culture dishes and other glassware.

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- Hazardous waste can also include chemicals, both medical and industrial.
- Some hazardous waste can also be considered infectious waste, depending on its usage and exposure to human or animal tissue prior to discard.

3. Radioactive waste describes waste resulting from nuclear medicine treatments, cancer therapies and medical equipment that uses radioactive isotopes. Pathological waste that is contaminated with radioactive material is treated as radioactive waste rather than infectious waste.

General waste makes up at least 85% of all waste generated at medical facilities, and is no different from general household or office waste, and includes paper, plastics, liquids and any other materials that do not fit into the previous three categories.

4.3 Treatment and disposal of medical waste

The primary methods of treatment and disposal of medical waste are:

- Incineration
- Autoclaves
- Mechanical/Chemical Disinfection
- Microwave
- Irradiation



Self-Check -4

Directions: Answer all the questions listed below. Use t the next page:	he Answer sheet provided in
 List the type of medical wastes (2points) Describe type of waste disposal? (4 points) 	
<i>Note:</i> Satisfactory rating – 2 and 4 above points Upoints	Insatisfactory - below 2 and 4
You can ask you teacher for the copy of the correct answers. Answer Sheet	Score = Rating:
Name: Da	ate:

Written Test



Information Sheet- 5 Reporting problems or difficulties in completing work

5. Reporting Problems or difficulties to supervisors

> Abide by statutory regulations and all health and safety rules, policies, procedures and practices.

- > Work in a manner that will not endanger themselves or others at work.
- > Actively participate in all training programs and report to a supervisor
- > Any lack of understanding or knowledge to perform the work activities safely.
- > Participate with the employer to promote health and safety.
- > Report unsafe acts or conditions to a manager/supervisor/researcher.
- > Report all injuries and incidents.
- Assist with incident/injury investigations and comply with the recommended corrective action(s).
- > Report the following illnesses to a supervisor:
- > Generalized rash or skin lesions that are vesicular, pustular or weeping,
- Jaundice, or
- Illness that does not resolve within a reasonable period of time (e.g. cough persisting for more than 2 weeks, gastrointestinal symptoms for more than 3-4 days, fever > 103°F (39.5°C) for more than 2 days). Workers should also report:
- Pregnancy
- Illness or medication that may compromise the immune system (e.g. corticosteroids)
- > Open wounds, burns, fresh tattoos or piercings on exposed body surfaces
- Reporting can be daily, weekly, monthly, quarterly or yearly basis.



Self-Check -5	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. List some problems during completing work (2points)

Note: Satisfactory rating – 2 above points

Unsatisfactory - below 2 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _	
Rating: _	

Short Answer Questions

Date: _____



Information Sheet-6

Storing waste material produced during *cleaning activities* designated area.

6. Storing Waste material

- Stored materials should allow at least one meter (or about 3 feet) of clear space under sprinkler heads. Stacking cartons and drums on a firm foundation and cross tying them, where necessary reduces the chance of their movement.
- Stored materials should not be obstruct aisles, stairs, exits, fire equipment, emergency eyewash fountains, emergency showers, or first aid stations
- > All storage areas should be clearly marked.
- Manure should be stored outside confinement buildings above ground, uncovered and enclosed by an adequate fence.
- Store away hay ropes and pitchforks to avoid accidental hangings and puncture wounds
- Storage equipment, as the name suggests is used to store materials, components and assemblies.

➤ The level of complexity of this type of equipment is wide ranging, from a welded Cantilever steel rack to hold lengths of stock materials to a powered vertical carousel system. Also within this category are pallet racks, mobile shelf units, and plastic, wood and steel containers.



Self-Check -6	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

 How to store wastes material produced during cleaning activities designated area (6 points)

Note: Satisfactory rating – 6 above points

Unsatisfactory - below 6 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score =	
Rating: _	

Date:

Short Answer Questions



Reference

1.Clauer. Phillip J.Biosecurity of Poultry. Virginia Tech and Virginia State University. Virginia Cooperative Extension. 1997.

http://www.ext.vt.edu/pubs/poultry/408-310/408-310.html#L8

2.Fowler, M. E.Sanitation and Disinfection. in Murray E. Fowler, Ed. Zoo and Wild3.Animal Medicine. Pp 23-29. First edition. W. B. Saunders Company. 1978.

4. Gordon, John C. and Morishita, Teresa Y. Cleaning and Disinfection of Poultry

Facilities. The Ohio State University Extension. 2002.

http://ohioline.osu.edu/vme-fact/0013.html

5. Gordon, John C. and Morishita, Teresa Y. Cleaning and Disinfection of Poultry Facilities. The Ohio State University Extension. 2002.

http://ohioline.osu.edu/vme-fact/0013.html

6. Halvorson, David A., DVM. Good Management Practices for Salmonella Risk

Reduction in the Production of Table Eggs.College of Veterinary Medicine. University of Minnesota Extension Service. 1997.

http://www.extension.umn.edu/distribution/livestocksystems/DI6054.html

7. Hygiene and Disease Security Procedures in Poultry Breeding Flocks and Hatcheries. OIE, Appendix 3.4.1. 2004.

http://www.oie.int/eng/normes/mcode/en_chapitre_3.4.1.htm