FIRE SAFETY MAINTENANCE INFORMATION for Agricultural Livestock Structures

Building Name: _____

Building Address: _____

_____

Plan Prepared By (please print): _____

Date: _____

Revision Date	Comments	Approval

FIRE SAFETY
MAINTENANCE INFORMATION
for
Agricultural Livestock Structures

INDEX

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INTRODUCTION

The implementation of Fire Safety Maintenance helps ensure effective utilization of life safety features in a building to protect people from fire. The Fire Safety Maintenance should be designed to suit the resources of each individual building or complex of buildings.

Fire Safety Maintenance is also used to provide training to the building's supervisory staff on instructions in the fire safety procedures as described in this document. Supervisory staff shall be available on notification of a fire emergency to fulfill their obligation as described in their roles and responsibilities, although it is not necessary that supervisory staff be in the building on a continual basis.

SELF ASSESSMENT OF A FARM BUILDING

		Yes	No
Structure			
1.	The largest, separate fire compartment size is less than 4,800 m^2 (51672 ft^2)?		
2.	Buildings are located at least 30 m (100 ft) from each other or have properly constructed (1 hour) fire rated walls separating the individual fire compartments?		
3.	Properly constructed fire stops exist I the attic at 30 m (100 ft) intervals?		
4.	No unsealed gaps or passageways in attic fire stops?		
5.	Interior sheathing materials have low Flame Spread Ratings and Smoke Developed Classifications as outlined in Table 3.4?		
		Yes	**No**
Electrical System			
6.	Electrical inspection completed within the past year?		
7.	Thermographic inspection of the entire electrical system, completed during the period when the barn is at its peak electrical demand, completed within the past year?		
8.	Any wiring passing through concealed spaces is enclosed in conduit?		
9.	All electrical connections are hard wired (no extension cords)?		
10.	An electrical/mechanical room contains components, including the main electrical panel, and is separated from the livestock air space with properly constructed fire rated walls (1 hour minimum)?		
11.	All electrical equipment used in the barn displays a Canadian electrical approved stamp (e.g. CSA, ULC)?		

		Yes	No
Heating System			
12.	Open flame box heaters or radiant tube heaters (that draw combustion air or exhaust directly into the barn space) are not used in a barn where methane gas can accumulate in significant concentrations?		
13.	Sufficient space exists between all heating appliances and combustible building features (minimum clearance requirements maintained)?		
14.	Heat shields for all heaters are in place (if required)?		
15.	Maintenance checks of all heating devices have been completed as per the manufacturer's recommendations (minimum once per year)?		
16.	Bollards are used to protect propane and liquid fuel tanks and gas valves from vehicle impact?		

		Yes	No
Stored Products			
17.	Less than a two-day supply of hay, straw, sawdust, feed or similar products are stored within the barn?		
18.	Separate buildings are used to store larger quantities of hay, straw, sawdust, feed or similar products. Buildings are separated by a minimum distance of 30 m (100 ft) or by using a fire separation with a minimum rating of 1 hour (i.e. providing exterior walls)?		
19.	Clutter and combustible products are removed from the barn on a regular basis?		
20.	Flammables (diesel, gas, propane) are stored in approved containers that are regularly inspected (minimum once per year)?		

		Yes	No
Laneway and Water Supply (verify these items with local fire department)			
21.	An all-weather laneway provides adequate fire truck access to the required sides of the building?		
22.	Roadway is regularly maintained (snow removed, adequately graded)?		
23.	Adequate, year-round accessible water is available on-farm for fighting fires?		
24.	A standard remote connector (hydrant) is installed adjacent to the water supply for direct connection by the local fire department?		

		Yes	No
Safety, Exit and Lighting			
25.	Sufficient number of exits is available to allow safe exit from all storeys and rooms?		
26.	Emergency lighting and signage is available to mark the location of all exits?		
27.	Proper ladders and stairs are used for exterior exit from upper storeys?		
28.	Fire extinguishers are in place and all employees are trained for proper use?		
29.	A clear path of travel to and through all exits is in place?		

Section 1 ALARMS & EVACUATION SYSTEMS

Alarm Systems (If no fire alarm is present in the building, leave this blank and go to the Fire Protection Devices section below) If fire alarm present, it must be indicated on building diagram**.**
Type of Alarm (check the appropriate box below)
☐ Single Stage ☐ Two Stage ☐ Interconnected Smoke Alarms ☐ Monitored
☐ Security/Intrusion ☐ Partial System ☐ Sprinkler System used as Fire Alarm
Fire Protection Devices (Check any that are present in your building)
☐ Smoke Alarms (Battery or hardwire in units) ☐ Emergency Lighting (Battery powered)
☐ Smoke Detectors (Alarm System) ☐ Carbon Monoxide Detectors
☐ Heat Detectors ☐ Fire Extinguishers
☐ Other

Evacuation Information / Must be indicated on your building diagram
☐ Meeting Place Exterior Location: (Assembly location after leaving building during evacuation)
☐ Re-entry Procedures: _____

FIRE PROTECTION

Water Supply
Is there a fire hydrant within 90 meters of your building's front door? Yes ☐ No ☐
If you answered no, is there another year-round source of water on your property (dry hydrant, reservoir, pond, etc….)? Yes ☐ No ☐

Sprinkler System
Do you have a sprinkler system in your building? Yes ☐ No ☐
If yes, does it cover your whole building? Yes ☐ No ☐
If no, what areas are sprinklered?

UTILITY PROVISIONS

Electrical, Utility & Fuel Supplies (check all that apply)	
☐ Water Main Shut off	☐ Main Electrical Shut off
☐ Natural Gas/Propane Shut off	☐ Fuel Oil/Diesel Shut off
☐ Emergency Generator Location:	
All of the above checked items **must be indicated** on your building diagram.	

EXITS

Location of Exits / All exits including principal entrance for Fire Department response must be indicated on your building diagram	
1.	11.
2.	12.
3.	13.
4.	14.
5.	15.
6.	16.
7.	17.
8.	18.
9.	19.
10.	20.

Section 2 POSTED EMERGENCY PROCEDURES TO OCCUPANTS

These procedures are to be posted to assist staff/public at the time of a fire. The owner must customize the procedures to fit the building and its facilities. These instructions may be posted in conspicuous areas or given in printed form to each staff/visitor, in addition to posting publicly.

IF YOU DISCOVER FIRE

- LEAVE THE FIRE AREA IMMEDIATELY
- CLOSE DOORS
- SOUND THE FIRE ALARM
- LEAVE BUILDING VIA NEAREST EXIT
- CALL 911

IF YOU HEAR THE FIRE ALARM

- LEAVE THE BUILDING VIA THE NEAREST FIRE EXIT
- CLOSE DOORS BEHIND YOU

IF YOU ENCOUNTER HEAVY SMOKE

- IT MAY BE SAFER TO STAY IN YOUR AREA
- CLOSE DOOR
- CROUCH LOW TO THE FLOOR IF SMOKE ENTERS THE ROOM
- IF TRAPPED CALL 911, INDICATE LOCATION, AND WAIT TO BE RESCUED
- REMAIN CALM – DO NOT PANIC

Section 3 OWNER'S RESPONSIBILITIES & INSTRUCTIONS TO SUPERVISORY STAFF

OWNER'S RESPONSIBILITIES

The building owner has numerous responsibilities related to fire safety and maintenance and must ensure that the following measures are incorporated into the Fire Safety measures:

1. Establishment of emergency procedures to be followed at the time of an emergency.
2. Appointment and organization of designated supervisory staff to carry out fire safety duties.
3. Instruction of supervisory staff and other occupants so that they are aware of their roles and responsibilities for fire safety.
4. Ensure you, or your supervisory staff, are available upon notification of a fire emergency to fulfill your obligation as described in the Fire Safety Maintenance document.
5. Holding of fire drills, incorporating Emergency Procedures appropriate to the building.
6. Control of fire hazards in the building.
7. Maintenance of building facilities provided for safety of the occupants.
8. Post and maintain at least one (1) copy of the fire emergency procedures. Keep a copy of the approved Fire Safety Maintenance document on the premises in an approved location.
9. Notification of the Chief Fire Official regarding changes in the Fire Safety Maintenance.
10. Review Fire Safety Maintenance document as often as necessary, but at intervals not greater than 12 months to ensure that it takes account of changes in the use and other characteristics of the building.
11. Designate and train sufficient alternates to replace supervisory staff during any absence.
12. Ensure the 911 system has been activated (i.e. alarms/horns activated). Call 911 to ensure fire alarm received by Fire Department.
13. Supervise the evacuation of the occupants.
14. Upon arrival of firefighters, inform the Fire Officer regarding conditions in the building and coordinate the efforts of supervisory staff with those of the Fire Department.
15. Provide access and vital information to Firefighters (e.g. master keys for offices, service rooms).

INSTRUCTIONS TO SUPERVISORY STAFF

These are provided as a guide to the owner. The owner should identify each supervisory position and describe the individual responsibilities of that position. For example, the farm manager is not going to have the same responsibilities as the head of maintenance. Take some time and think through what you want to have your staff do when they encounter smoke or fire.

Upon Discovery of Fire

- Leave fire area immediately and close doors. Alert occupants.
- Sound Fire Alarm and follow the fire alarm supervisory procedures.
- Call 9-1-1 from a safe location.
- Exit the building via the nearest exit.
- Await the arrival of Fire Department at the main entrance.
- Building Address: _____

Upon Hearing of a Fire Condition

- Ensure that the other occupants have been notified of the emergency conditions.
- Notify the Fire Department of the emergency condition. Dial 9-1-1. If it is safe to do so, supervise the evacuation of all occupants, including those requiring assistance.
- Upon the arrival of the Fire Department, inform the fire officer of the conditions in the building and coordinate the efforts of the Supervisory staff with those of the Fire Department.
- Provide access and vital information to the Firefighters as to location of persons, master keys for this occupancy and service rooms, other hazards, etc.
- Building Address: _____

Related Duties – In General:

- Keep the doors in fire separations closed at all times. This includes service/mechanical room doors and separation doors.
- Keep EXITS and access to exits, inside and outside, clear of any obstructions at all times, which includes vegetation, snow and ice accumulation.
- Maintain sufficient lighting in exits and corridors.
- Do not permit combustible materials to accumulate in quantities or locations that would constitute a fire hazard.
- Promptly remove all combustible waste from areas where waste is placed for disposal, if applicable.
- Keep access roadways, fire routes and fire department connections clear and accessible for fire department use.
- Maintain the fire protection equipment in good operating condition at all times.
- Have a working knowledge of the building fire and life safety systems.
- Ensure the building fire and life safety systems are in operating condition.
- Be available upon notification of a fire emergency to fulfill your obligation as described in this plan.
- Arrange for a substitute in your absence.

Record of Supervisory Staff Training of Fire Safety Plan Review

Name (print)	Signature	Address	Date	Owner Name/Signature

Section 4 MAINTENANCE PROCEDURES

(*To assist you in fulfilling your obligations, included is a list of some portions of the Fire & Life Safety devices which require periodic checks, inspections and/or tests to be made on equipment and systems within facilities. You must read over this list and identify the required checks, inspections and/or tests and identify who is going to perform them. All the procedures that do not apply to your building must be deleted.)*

DEFINITIONS FOR KEY WORDS ARE AS FOLLOWS:

CHECK Means a *visual* observation to ensure that devices or systems are in place, and no obvious damage or obstructions to proper operation exist.

INSPECT Means a *physical* examination to determine that the devices or systems will apparently perform in accordance with its intended function.

TEST Means *operation* of the devices or systems to ensure that it will perform in accordance with its intended operating functions. It is generally required to have a certified system technician perform tests.

PORTABLE FIRE EXTINGUISHERS
(reference should be made to NFPA 10-1990 for exact details)

Action	Inspection Frequency
Inspect all portable extinguishers	Monthly (Staff)
Subject to maintenance	Annually (Contractor)
Hydrostatically test carbon dioxide and water extinguishers	Every five years (Contractor)
Empty stored pressure type extinguishers and subject to maintenance	Every six years (Contractor)
Hydrostatically test dry chemical and vaporizing liquid type extinguishers	Every twelve years (Contractor)

EMERGENCY POWER SYSTEMS
(Reference should also be made to CSA C282 - 1977 for exact details)

Action	Inspection Frequency
Check all components of the system	Monthly (Staff)
Test	Annually (Contractor)
Maintain written records of check, inspect and test	Staff
Check instructions for switching and starting are provided	Monthly (Staff)
Check fuel sufficient for 2 hours of operation	Monthly (Staff)
Drain and refill fuel, unless achieved by replenishment during normal tests	Annually (Contractor)

MEANS OF EGRESS

Action	Inspection Frequency
Inspect all doors in fire separations	Monthly (Staff)
Check all doors in fire separations to ensure they are closed	As required (Staff)
Maintain exit signs to ensure they are clear & legible	As required (Staff)
Maintain exit lights to ensure they are illuminated and in good repair	As required (Staff)
Maintain corridors are free of obstructions	As required (Staff)

FIRE DEPARTMENT ACCESS
(Reference also made to property site plan conditions under Section 41 & 51 of the Planning Act)

Action	Inspection Frequency
Fire access routes and access panels or windows provided to facilitate access for fire fighting operations shall not be obstructed by vehicles, gates, fences, building material, vegetation, signs or any other form of obstructions.	Daily (Staff)
Fire department connections shall be clearly identified and maintained free of obstructions for use at all times. (dry hydrant)	Daily (Staff)
Ensure streets, yards and private roadways provided for fire department access are kept clear. access routes.	Daily (Staff)

Section 5 FIRE EXTINGUISHMENT – CONTROL OR CONFINEMENT

CONFINE

- Leave the fire area immediately
- Close doors
- Sound the fire alarm
- Leave building via nearest exit
- Call 911 Address: _____

CONTROL

- In the event a small fire is discovered.
- Fire may be extinguished provided the smoke and fire do not present an immediate hazard to staff or public and that fire is never between you and the exit.
- Where a fire cannot be extinguished with the use of a portable fire extinguisher or the smoke presents a hazard to the operator, then the fire door to the area should be closed to confine and contain the fire. Leave the fire area, ensure the Fire Department has been notified, and wait for them outside at meeting place.

SUGGESTED OPERATION OF PORTABLE FIRE EXTINGUISHERS

Remember the (**PASS**) acronym

P – Pull the safety pin
A – Aim the nozzle
S – Squeeze the trigger handle
S – Sweep from side to side (watch for fire restarting)

Ensure extinguishers are properly recharged after use and that a temporary replacement is provided.

Keep extinguishers in a visible area without obstructions around them.