### LOCKOUT/TAGOUT PROGRAM 29 CFR 1910.147

	for	

#### EMPLOYEES WILL FOLLOW THESE LOCKOUT/TAGOUT PROCEDURES:

- During servicing and/or maintenance of electrical systems, machines and equipment
- During removal or bypassing of a machine guard or other safety device
  - When placing any part of their body into an area where work is actually performed including danger zones with respect to a machine's normal operating cycle

It is the responsibility of the \_\_\_\_\_\_(Maintenance Manager) to develop energy control procedures for each piece of equipment requiring Lockout/Tagout procedures prior to servicing. These procedures have to be documented, and utilized every time the machinery or equipment is locked out and must include:

- Name of machine or piece of equipment
- Energy sources for each piece of machinery and equipment and their location
- The device or method used for Lockout/Tagout
- Specific steps for shutting down, isolating, and controlling hazardous energy
- Testing procedures to determine the effectiveness of the Lockout/Tagout
  - The date of the survey and the initials of the above-mentioned employee acknowledging the accuracy of the information found on this form.

\*The attached survey form for applying lockout / tagout devices can be used as a guide for you documentation procedures.

#### **EXCEPTIONS TO DOCUMENTATION:**

Documented procedures are not required when **all** of the following elements exist:

- No potential for stored energy after shutdown
- There is a single energy source
- Locking out of energy source will completely de-energize equipment
- Equipment is isolated from its energy source during service
- A single lockout device will achieve lockout
- Lockout device is under control of employee performing service only
- Service does not create a hazard for others
- There have been no accidents in the past

### LOCKING OUT A PIECE OF MACHINERY OR EQUIPMENT

All employees should use the following sequence whenever Lockout/Tagout is required:

- 1. Identify the piece of machinery or equipment requiring servicing or maintenance and consult documented Lockout/Tagout procedures that are located at the end of this procedure.
- 2. Note the number and location of energy sources that require locks and or tags for the piece of equipment or machinery being serviced.
- 3. Note the hazards identified for the piece of equipment or machinery.
- 4. Review the surrounding area for other possible sources of energy transmission.
- 5. Inspect the immediate area where locks or tags will be attached.
- 6. Notify all employees in the general vicinity that Lockout/Tagout procedures are being implemented.
- 7. De-energize the equipment so that all sources are at a zero energy state
- 8. Apply Lockout/Tagout devices
- 9. Attempt to start the machine to ensure Lockout/Tagout devices are properly installed

#### MORE THAN ONE PERSON LOCKOUT/TAGOUT

The following procedures should be followed:

- 1. When more than one person will be involved with maintenance or repair of a piece of machinery or equipment requiring isolation of energy source, each should place their locks and tags on the energy isolating device.
- 2. When the machinery or equipment cannot accept more than one lock or tag, an additional hasp or similar energy isolating must be used. Should this technique not be feasible, one lockout device can be used requiring a key, and the key should be placed in a lockout box or cabinet that accommodates multiple employee locks to secure it. As each employee no longer needs to maintain lockout protection, they should remove their locks from the box or cabinet.
- 3. Managers/Supervisors should maintain an awareness of instances where multiple lockout/tagout devices are required.

### RESTORING MACHINES AND EQUIPMENT TO NORMAL OPERATIONS

- 1. When maintenance or servicing has been completed and the machinery or equipment is ready to be placed into normal operations, check out the immediate area to confirm that no one is exposed to any danger.
- 2. Remove or check that all tools have been removed from the machinery or equipment.
- 3. Confirm that all guards, pulleys, and safety devices have been reinstalled and are secure.
- 4. Remove all locks and tags only after one final check to ensure all employees are in the clear.
- 5. Operate the energy isolating devices to restore energy to the machine or equipment.

# **Company Name**

## LOCKOUT/TAGOUT PROGRAM CONTROL OF HAZARDOUS ENERGY SOURCES

### EMPLOYEE ACKNOWLEDGMENT OF RECEIPT OF TRAINING

<b>1</b> ,						
(EMPLOYEE'S NAME) cknowledge receipt of training with regards to the company's Control of Hazardous Energy ources Lockout/Tagout program and procedures. I understand the purpose of having such a plans to reduce injuries resulting from accidental startup of a machine or piece of equipment while indergoing service or routine maintenance.						
have been instructed to identify the piece of machinery or equipment and its energy sources for pplying lockout/tagout devices prior to beginning any lockout/tagout procedures. I have been astructed to fill out my monthly lockout tagout time schedule each time I begin Lockout/Tagout rocedures.						
	me that I begin Locke	ify all co-workers of a machine o out/Tagout procedures. I have been for my own use.				
(IDENTIFICATION NU	MBER OF LOCKOUT I	DEVICE)				
TRAINING WAS RECEIVED ON	THIS DAY OF	, 20				
EMPLOYEE'S SIGNATURE	DATE					
TRAINER'S SIGNATURE	DATE					

# **Authorized Employee LOTO Annual Certification**

The below listed Authorized Employee was observed conducting a Lockout - Tagout. The purpose of this observation is to ensure this employee understands the procedures used at this facility for the control of energy associated with equipment. The below listed employee successfully conducted the Lockout - Tagout and understands the 10 step procedure listed below.

Employee	Date
Department	
Selected Piece of Equipment	
10 Step Procedure Installing Locks and Tags  ☐ Notified Affected Employees ☐ Shutdown equipment ☐ Isolated all energy to the equipment ☐ Locked and Tagged energy controls ☐ Released stored and/or residual energy ☐ Tested controls to ensure inadvertent startup is not poss Restoring from LOTO ☐ Notified Affected Employees - Locks and Tags to be re ☐ Checked equipment to ensure all guards in place and to ☐ Ensured controls were in Neutral or Off position	moved
Properly removed Locks and Tags & made equipment in Changes or Recommendation in Procedure	ready for use
Inspector Signature Employee Signature	

# **Sample Completed Forms**

# **Lockout/Tagout Machine Specific Procedure**

**Equipment or Process: Baler** 

**Location of Equipment: Box Room** 

A tag is required on each **Isolation Location** listed below The <u>Specific</u> **Type of Lock** must be applied at the location listed

Date prepared Prep
--------------------

Type of Energy	Isolation Location	Type of Lockout Device
Electrical	Control Panel	Key
Electrical (Main)	Breaker – rear of machine	Lock
Potential (Stored)	Hydraulic Ram	Block
Kinetic (in-motion)		
Pneumatic (air - gas pressure)	Glue air nozzle	Quick discnnect
Hydraulic	Pressure Bleed switch	Valve Lock
Thermal	Hot Glue	Cool down
Chemical		

Special Hazards	Procedure for Control of Special Hazard
Control Panel energized	If work on control panel – Main breaker must be off.

### **Special Procedures**

### **Stored Energy Release Procedure**

Bleed hydraulic pressure and block ram.

#### **Notes**

**Isolation Location** shall positively identify the exact breaker, valve, switch or other disconnect or blocking device to be locked and tagged to isolate the source of energy from the work area.

**Type of Lockout** shall specifically name the exact type of locking device needed to ensure the disconnect or blocking device stays in the isolated condition/position. i.e.. Breaker Clip, Valve Handwheel Cover, Blank Flange, etc.

**Equipment or Process: Ammonia Vacuum Pump** 

**Location of Equipment: Vacuum Rooms** 

A tag is required on each Isolation Location listed below The Specific Type of Lock must be applied at the location listed

Date prepared	Prepared By	/:: X	ΚXX

Type of Energy	Isolation Location	Type of Lockout Device
Electrical	Water Pump- breaker Vacuum Motor - breaker	Breaker locks
Potential (Stored)		
Kinetic (in-motion)		
Pneumatic (air - gas pressure)		
Hydraulic		
Thermal		
Chemical	Anhydrous Ammonia Tanks	Valve lock and bleed procedure
Special Hazards	Procedure for Control of Special Hazard	
Ammonia	Bleed Ammonia in water only – follow	bleed procedure
	Special Procedures	

Ammonia bleed procedure

### **Stored Energy Release Procedure**

#### **Notes**

Isolation Location shall positively identify the exact breaker, valve, switch or other disconnect or blocking device to be locked and tagged to isolate the source of energy from the work area.

Type of Lockout shall specifically name the exact type of locking device needed to ensure the disconnect or blocking device stays in the isolated condition/position. i.e.. Breaker Clip, Valve Handwheel Cover, Blank Flange, etc.

Equipment or Process: Mushroom Sorters

Location of Equipment: Packing

A tag is required on each Isolation Location listed below

The Specific Type of Lock must be applied at the location listed

Date prepared \_\_\_\_\_ Prepared By:: XXX

Type of Energy	Isolation Location	Type of Lockout Device
Electrical	Plug Main switch – east wall	Unplug – LOTO if needed Breaker lock
Potential (Stored)		
Kinetic (in-motion)		
Pneumatic (air - gas pressure)		
Hydraulic		
Thermal		
Chemical		
Special Hazards	Procedure for 0	Control of Special Hazard

### **Special Procedures**

None

### **Stored Energy Release Procedure**

#### **Notes**

**Isolation Location** shall positively identify the exact breaker, valve, switch or other disconnect or blocking device to be locked and tagged to isolate the source of energy from the work area.

**Type of Lockout** shall specifically name the exact type of locking device needed to ensure the disconnect or blocking device stays in the isolated condition/position. i.e.. Breaker Clip, Valve Handwheel Cover, Blank Flange, etc.

**Equipment or Process: Basket Washer** 

**Location of Equipment: Washroom** 

A tag is required on each **Isolation Location** listed below The <u>Specific</u> **Type of Lock** must be applied at the location listed

Date prepared	Pre	pared By	:: XXX
- a.o p. opa. oa	 	p w ,	

Type of Energy	Isolation Location	Type of Lockout Device
Electrical	Control Panel Main Breaker – NW corner	Lockout switch – lock Breaker lock
Potential (Stored)		
Kinetic (in-motion)		
Pneumatic (air - gas pressure)		
Hydraulic		
Thermal	Hot water ball valve	Valve lock
Chemical		

Special Hazards	Procedure for Control of Special Hazard
Energized control panel	LO main breaker

### **Special Procedures**

If working on the control panel, main breaker must be locked out.

### **Stored Energy Release Procedure**

#### Notes

**Isolation Location** shall positively identify the exact breaker, valve, switch or other disconnect or blocking device to be locked and tagged to isolate the source of energy from the work area.

**Type of Lockout** shall specifically name the exact type of locking device needed to ensure the disconnect or blocking device stays in the isolated condition/position. i.e.. Breaker Clip, Valve Handwheel Cover, Blank Flange, etc.

**Equipment or Process: Mushroom Wash Line** 

**Location of Equipment: Washroom** 

A tag is required on each Isolation Location listed below The Specific Type of Lock must be applied at the location listed

Date prepared	Prepared By:: XXX
---------------	-------------------

Type of Energy	Isolation Location	Type of Lockout Device
Electrical	Plugs Main Breaker – East wall	Unplug effected equipment Breaker lock
Potential (Stored)		
Kinetic (in-motion)		
Pneumatic (air - gas pressure)		
Hydraulic		
Thermal		
Chemical		
Special Hazards	Procedure for Control of Special Hazard	

Special Hazards	Procedure for Control of Special Hazard	
	I	

# **Special Procedures**

### **Stored Energy Release Procedure**

#### **Notes**

Isolation Location shall positively identify the exact breaker, valve, switch or other disconnect or blocking device to be locked and tagged to isolate the source of energy from the work area.

Type of Lockout shall specifically name the exact type of locking device needed to ensure the disconnect or blocking device stays in the isolated condition/position. i.e.. Breaker Clip, Valve Handwheel Cover, Blank Flange, etc.

Equipment or Process: (slicer 1 & 2, scales, packaging) East side packing

**Location of Equipment: (old packing room)** 

A tag is required on each **Isolation Location** listed below The <u>Specific</u> **Type of Lock** must be applied at the location listed

Date prepared	Prepared By:: XXX
---------------	-------------------

Electrical	Unplug affected machine Main buss bar – north side	Unplug and LO if needed
	East side – breaker box SE corner	Breaker lock
Potential (Stored)		
Kinetic (in-motion)		
Pneumatic (air - gas pressure)		
Hydraulic		
Thermal		
Chemical		
Special Hazards	Procedure for Control of Special Hazard	

#### **Special Procedures**

### Stored Energy Release Procedure

#### **Notes**

**Isolation Location** shall positively identify the exact breaker, valve, switch or other disconnect or blocking device to be locked and tagged to isolate the source of energy from the work area.

**Type of Lockout** shall specifically name the exact type of locking device needed to ensure the disconnect or blocking device stays in the isolated condition/position. i.e.. Breaker Clip, Valve Handwheel Cover, Blank Flange, etc.

# **Blank Form**

# **Lockout/Tagout Machine Specific Procedure**

Equipment or Process:		
Location of Equipment:		
A tag is required on each <b>Isolation Loc</b> The <u>Specific</u> <b>Type of Lock</b> must be app		
Date prepared	Prepared by	
Type of Energy	Isolation Location	Type of Lockout Device
Electrical		
Potential (Stored)		
Kinetic (in-motion)		
Pneumatic (air - gas pressure)		
Hydraulic		
Thermal		
Chemical		
Special Hazards	Procedure for Contr	ol of Special Hazard
	Special Procedures	
	Stored Energy Release Procedure	
	Notes	
<b>Isolation Location</b> shall positively iden be locked and tagged to isolate the sou		r other disconnect or blocking device to

**Stored Energy:** Following the application of the lockout or tagout devices to the energy isolating devices, all potential or residual energy will be relieved, disconnected, restrained, and otherwise rendered safe.

device stays in the isolated condition/position. i.e.. Breaker Clip, Valve Handwheel Cover, Blank Flange, etc.

Type of Lockout shall specifically name the exact type of locking device needed to ensure the disconnect or blocking