

## Department of Agricultural, Food and Nutritional Science

Faculty of Agricultural, Life & Environmental Sciences

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# <u>Safety Evaluation For New, Transferred Or Significantly Modified Equipment</u> Procedure

Office of Administrative Responsibility	Agri-Food Discovery Place
Approver	Executive Director
Scope	Compliance with this procedure extends to all employees, faculty, students, researchers, clients, contractors, sub-contractors, visitors and suppliers at Agri-Food Discovery Place. This procedure applies to all new, transferred or significantly modified machinery and equipment, and will be reviewed by management as required

#### Overview

Health and Safety is an integral part of all our business and research activities at Agri-Food Discovery Place, and we are continually working towards making measureable improvements in the health and safety aspects of our workplace on an ongoing basis.

#### **Purpose**

To ensure that provisions for the Safety and Health of employees have been adequately planned and implemented prior to the purchase, construction, installation and start-up of new, transferred, or significantly modified equipment.

#### **Responsibilities**

#### **Executive Director(s)**

- Provide resources and support to ensure new, transferred or significantly modified equipment is inspected and certified to Canadian Standards electrical certification, as the full package; consideration for expansible fluid at pressures greater than 103 kPa (>15 psi); and consideration for vessel pressure limitations by the Alberta Boilers Safety Association (ABSA) stand, prior to being put into service.
- Ensure all employees responsible for the purchase of equipment have been trained on this standard.
- Ensure all deficiencies noted during the Safety Evaluation shall be rectified prior to commissioning and/or operation of equipment.

#### Managers/Supervisors

- Ensure all equipment that is being considered for purchase, transfer or modification is evaluated according to the procedure developed below.
- Ensure all employees responsible for operating equipment have been trained on this procedure.
- Do not permit any equipment or machinery to be put into operation that has not been properly evaluated using this procedure.

#### **Engineering Technician**

Ensure all applicable equipment is installed, commissioned and operated in accordance with this
procedure.



#### **Procedure**

- I. AFDP can minimize employee exposure to the potential safety and health hazards of new, transferred and modified processes and equipment by conducting a series of safety reviews.
  - a. The review process must start at the Requisition stage and continue through to actual installation and operation.
- II. All equipment coming into AFDP must be approved by a Wing Manager prior to being brought into the building.
- III. Contact must be made with vendors and/or other qualified personnel (trades, ergonomist, health and safety, industrial hygiene, biosafety, radiation safety) if assistance is needed in evaluating the potential hazards of an installation and in proposing techniques for minimizing employee exposure to these hazards.
- IV. The Agri-Food Discovery Place Equipment Commissioning Form will help identify the following issues:
  - **a.** Provide for an integrated installation of new, transferred or significantly altered equipment into AFDP
  - b. Ensure all equipment has relevant instructions for operating and maintenance.
  - **c.** Ensure all equipment is listed in the equipment inventory and has a preventative maintenance schedule set up.
  - d. Identify the hazards of the process or equipment to which an employee could be exposed.
  - **e.** Provide for process and equipment safety and health devices that will minimize the risks of exposure to identified hazards.
  - **f.** Provide Personal Protective Equipment (PPE) to each employee in situations where such risks cannot be adequately minimized through engineered solutions.
  - g. Develop SOPs.
  - h. Provide employees with a training program, which details both the hazards to which they could be exposed, and SOPs, which will minimize exposure to these hazards.
- V. Completed forms must be forwarded to the Engineering Technologist with a copy to the appropriate Wing Manager.

#### **Related Documents**

**AFDP Health and Safety Policy (UAPPOL)** 

AFDP Health and Safety Responsibility Procedure (UAPPOL)

Agri-Food Discovery Place Equipment Commissioning Form AFDP Website and Google Docs)

Approval:

**Executive Director** 

Date

Date

Chair WHSC



# Agri-Food Discovery Place Equipment Commissioning Form

# 1. Completed by person ordering equipment

<b>Equipment Na</b>	me											
Model #												
Serial #												
Lead Member			_			ji.						
commissioni	100 404	1		4								
Shipping Height Actual Height	11	3,22,55		Width Width		Length		200		Weight	_	
Hallway doors	. 7'v E'	0 F" or	212cm v 1		5.50		Length	6599		Weight	00000f	
Fork lift Capac					Oka							
Preferred Loca		JUID Pai	net jack ca	ipacity:250		Location	n in the R		2013	(1) a mentagras (1)		
Equipment fits		anacit	, line un ci	ring.		Location	n in the K	oom			Vac	AL-
Equipment ne	Willic	apacity	ine up si	iring:							Yes	No
Deguised Feed												
Required Feed Electrical	5.	Amp		Volts		Pha		100000000	Fra		115	
Requirements		Amp	5	VOILS		Pna	se		Free	quency		
Natural Gas	Yes	Beerg.	No	Size		Dros	sure					
Compressed	Yes		No	Size			sure			Volume		
Air			140	3126		Fies	suie			Volume		
Water	Yes		No	RO		22	nestic I Water			Domestic Hot Wate	10000	
Steam	Yes		No	Clean		High Pres	ssure			Low Pressure		
Cooling	Yes		No	Temp				Rate	18			
Expected Feed	Mater	ial				0.0000						
Discharge Stre	ams:			_								
Venting	Yes		No	Type								
Drain Access	Yes		No	1								
Other Waste Streams	Yes		No	If Yes de	scribe					THE STATE OF THE S		
Responsible Pa	rty for	Installa	ation									
	.,											
Speed Code												
Speed Code							<u> </u>					



# 2 Work Request Placed for installation of:

Electrical	Yes	No	Initial:
Natural Gas	Yes	No	Initial:
Compressed Air	Yes	No	Initial:
Water	Yes	No	Initial:
Steam	Yes	No	Initial:
Cooling	Yes	No	Initial:
Venting	Yes	No	Initial:
Misc Installation Describe below	Yes	No	Initial:

## **3 Pre Use Equipment Check**

Equipment received in good order	Yes	No	Initial:
Manual Existing	Yes	No	Initial:
Manual has been read	Yes	No	Initial:
Electrical connections free of fraises, cracks or bare wires	Yes	No	Initial:
Is there anything broken or scratched?	Yes	No	Initial:
Did the manual come with the equipment	Yes	No	Initial:
Electronic copy of manual received	Yes	No	Initial:
<b>Equipment rated according to specs</b>	Yes	No	Initial:
Equipment turns on	Yes	No	Initial:
Motors run in correct direction	Yes	No	Initial:
All valves operate properly	Yes	No	Initial:
Tanks have had volumes calibrated	Yes	No	Initial:
Safety devices work	Yes	No	Initial:
All transportation equipment has been removed	Yes	No	Initial

# **4 Hazard Management**

CSA Inspection and Certification completed	Yes	No	Initial:
AFDP Hazard Assessment and Control document has been completed and given to Wing Manager	Yes	No	Initial:
Draft SOP written	Yes	No	Initial:
Wing Manager approved running of equipment	Sign:		Date:



### **5 Test Run**

Test run completed based on draft SOP	Yes	No	Initial	
SOP has been reviewed	Yes	No	Initial:	
Wing Manager approved the above SOP	Yes	No	SOP#	
Wing Manager Signature:				Date

## **6 Equipment Maintenance**

Manuals given to Maintenance	Yes	No	Initial
Regular maintenance set up	Yes	No	Initial:
Manuals filed	Yes	No	Initial:
Equipment placed on website	Yes	No	Initial:
Consumables ordered	Yes	No	Initial:

<b>EQUIPMENT READYD FOR CL</b>	IENT USE	
Purchaser/Lead Name: Print	Signature:	Date:
Operator name: Print	Signature:	Date:
Maintenance: Print	Signature:	Date:
Wing Manager: Print	Signature:	Date:

**Chair WHSC** 

Sept. 9, 2011
Date