Appendix B: Plant Risk Assessment Liftmaster Ecolift

PLANT HAZARD CHECKLIST

Date:	***18th August 2008***
Assessment No.:	-
Plant/Asset No.:	-
Plant Name:	Ecolift Binlifter
Plant Location:	Fallshaw Casters 2A Ayton Street, Sunshine
Description:	.The Ecolift Binlifter is designed to lift 240 Litre and 120 litre Plastic wheelie bin and invert them so that the contents will run from the wheelie bin into a larger receptacle, such as a skip. The Ecolift Binlifter is operated by a hand winch. **As the Ecolift Binlifter is manually operated, it is not Plant as defined in the Occupational Health and Safety Regulations, 2007.**

Assessment Team:

Name	Position
Graeme Nightingale	Principal Consultant – NSCA, Vic.

Notes:

- Consider the hazards in relation to the affect they may have on plant operators, anyone working, or in the near vicinity of the plant, visitors and contractors
- Consider the hazards for the Start Up, Operation, Cleaning, Maintenance, Shut Down, and Modification phases.
- Refer to the Victorian OHS Regulations (2007) and associated Code of Practice for Plant (1995) for specific details.
- If 'yes' is the answer to a question in the following checklist, the plant, parts of the plant and/or the situation associated with the hazard, should be identified on the checklist.

The following information is based upon the Victorian WorkCover Authority Plant Hazard Check-sheet (1995).

PLANT HAZARD CHECKLIST

A	ENTANGLEMENT	
1	Can anyone's hair, clothing, gloves, necktie, jewellery, cleaning brushes, rags or other materials become entangled with moving parts of the plant, or materials in motion?	**No**

B	CRUSHING	
1	Can anyone be crushed due to:	
c.	Material falling off the plant?	**No** The bin is locked into the lifting device and is supported during the lift. It is also protected on each side by the rubbish chute.
d.	Uncontrolled or unexpected movement of the plant or its load?	**No**
c.	Lack of capacity for the plant to be slowed, stopped or immobilised?	**No**
d.	The plant tipping or rolling over?	**Yes.** In the event where it is being operated on unstable ground or on a steep incline. Safety notes on instruction recommend slopes no greater than 6 Degrees.
e.	Parts of the plant collapsing?	**Yes.** The potential exists for the winch cable to break causing the lifting arm to fall. This can be avoided by using the equipment within its recommended operation limits, and regular inspection and maintenance. .
f.	coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair?	**Yes.** In the event where maintenance activities are being performed the lifting arm elevated.
g.	Being thrown off or under the plant?	**No.**
h.	Being trapped between the plant and materials or fixed structures?	**No.**
i.	Other factors not mentioned?	**No**

C	CUTTING, STABBING & PUNCTURING	
1	Can anyone be cut, stabbed or punctured due to:	**No**
a.	Coming in contact with sharp or flying objects?	**No.**
b.	Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair of the plant?	**No.**
c.	The plant, parts of the plant or work pieces disintegrating?	**No.**
d.	Work pieces being ejected?	**No.**

C	CUTTING, STABBING & PUNCTURING	
e.	The mobility of the plant?	**No**
f.	Uncontrolled or unexpected movement of the plant?	**No.**
g.	Other factors not mentioned?	**No.**

D	SHEARING	
1	Can anyone's body parts be sheared between two parts of the plant, or between a part of the plant and a work piece or structure?	**No.**

E	FRICTION	
1	Can anyone be burnt due to contact with moving parts or surfaces of the plant, or material handled by the plant?	**No.**

F	STRIKING	
1	Can anyone be struck by moving objects due to:	
a.	Uncontrolled or unexpected movement of the plant or material handled by the plant?	**Yes.** If the plant were to move whilst lifting the wheelie bin. Instruction states that castors are to be locked prior to lifting. If instructions are followed the likelihood of such a hazard is highly unlikely.
b.	The plant, parts of the plant or work pieces disintegrating?	**No.**
c.	Work pieces being ejected?	**No.** .
d.	Mobility of the plant?	**Yes.** If the plant were to move whilst lifting the wheelie bin. Instruction state that casters are to be locked prior to lifting. If instructions are followed the likelihood of such a hazard is highly unlikely.
e.	Other factors not mentioned?	**No**.

G	HIGH PRESSURE FLUID	
1	Can anyone come into contact with fluids under high pressure, due to plant failure or misuse of the plant?	**No.**

H	ELECTRICAL	
1	Can anyone be injured by electrical shock or burnt due to:	
a.	The plant contacting live electrical conductors?	**No.**
b.	The plant working in close proximity to electrical conductors?	**No.**

c.	Overload of electrical circuits?	**No.**
d.	Damaged or poorly maintained electrical leads and cables?	**No.**
e.	Damaged electrical switches?	**No.**
f.	Water near electrical equipment?	**No.**
g.	Lack of isolation procedures?	**No.**
h.	Other factors not mentioned?	**No.**

I	**EXPLOSION**	
1	Can anyone be injured by explosion of gases, vapours, liquids, dusts or other substances, triggered by the operation of the plant or by material handled by the plant?	**No.**

J	**SLIPPING, TRIPPING & FALLING**	
1	Can anyone using the plant, or in the vicinity of the plant, slip, trip or fall due to:	
a.	Uneven or slippery work surfaces?	**Yes.** Only if plant used in an environment where slips and trip could occur.
b.	Poor housekeeping, eg. swarf in the vicinity of the plant, spillage not cleaned up?	**Yes.** If there is spillage of rubbish or liquids from the bin, however this is unlikely.
c.	Obstacles being placed in the vicinity of the plant?	**Yes.** The potential for an individual(s) to slip, trip and/or fall around the plant exists in the event where housekeeping standards are not maintained to a high level.
d.	Other factors not mentioned?	**No**

J	**SLIPPING, TRIPPING & FALLING**	
2	Can anyone fall from a height due to:	
a.	Lack of a proper work platform?	**No.**
b.	Lack of proper stairs or ladders?	**No.**
c.	Lack of guardrails or other suitable edge protection?	**No.**
d.	Unprotected holes, penetrations or gaps?	**No.**
e.	Poor floor or walking surfaces, such as the lack of a slip-resistant surface?	**No.**
f.	Steep walking surfaces?	**No.**
g.	Collapse of the supporting structure?	**No.**
h.	Other factors not mentioned?	**No.**

K	ERGONOMIC	
1	Can anyone be injured due to:	
a.	Poorly designed seating?	**No.**
b.	Repetitive body movement?	**No.**
c.	Constrained body posture or the need for excessive effort?	**No.**
d.	Design deficiency causing mental of psychological stress?	**No.**
e.	Inadequate or poorly placed lighting?	**No.**
f.	Lack of consideration given to human error or human behaviour?	**No.**
g.	Mismatch of the plant with human traits and natural characteristics?	**No.**
h.	Other factors not mentioned? (For more information on hazards associated with manual handling refer to the Victorian Manual Handling Code of Practice.)	**No**

L	SUFFOCATION	
1	Can anyone be suffocated due to the lack of oxygen, or atmospheric contamination?	**NOT APPLICABLE.**

M	HIGH TEMPERATURE FOR FIRE	
1	Can anyone come into contact with objects at high temperatures?	**No.**
2	Can anyone be injured by fire?	**No.**

N	TEMPERATURE (THERMAL COMFORT)	
1	Can anyone suffer ill-health due to exposure to high or low temperature?	**No.**

O	OTHER HAZARDS	
1	Can anyone be injured or suffer ill-health from exposure to:	
a.	Chemicals?	**No.**
b.	Toxic gases or vapours?	**No.**
c.	Fumes?	**No.**
d.	Dust?	**NO.**
e.	Noise? (For more information on hazards associated with noise, refer to the Victorian Noise Code of Practice.)	**No.**
f.	Vibration?	**NOT APPLICABLE.**

O	OTHER HAZARDS	
g.	Radiation?	**NOT APPLICABLE.**
h.	Other factors not mentioned?	**No**

PLANT HAZARD - RISK ASSESSMENT SUMMARY
RISK CONTROL STRATEGIES

(The following risk control strategies have been developed to ensure the safe operation of the plant for all users and people working in the vicinity of the plant)

A. ENTANGLEMENT
Not Applicable

B. CRUSHING
In the event of the winch apparatus were to fail during maintenance, the swing arm could fall onto a maintenance person working under the swing arm.

RECOMMENDATION.

A notation could be added to the Safety Notes stating "Maintenance is only to be carried out when swing arm is down,"

The risk of crushing due to movement of the plant has been addressed in the safe work procedure:

- We recommend slopes no more than 6 degrees and
- Activate total brake on both castors by pressing down on red pedal with your foot.

Compliance with the safe work procedure will prevent the risk of injury from this hazard. No further recommendations in relation to this hazard.

C. CUTTING, STABBING & PUNCTURING
No hazards detected.

D. SHEARING
No hazards detected.

E. FRICTION
Not applicable

F. STRIKING
The risk of striking due to movement of the plant has been addressed in the safe work procedure:

- We recommend slopes no more than 6 degrees and
- Activate total brake on both casters by pressing down on red pedal with your foot.

Compliance with the safe work procedure will prevent the risk of injury from this hazard. No further recommendations in relation to this hazard.

G. HIGH PRESSURE FLUID
No hazards detected.

H. ELECTRICAL
No hazards detected.

I. EXPLOSION
No hazards detected.

SLIPPING, TRIPPING & FALLING

Trip slip and fall hazards are only present if the environment in which the bin lifter is used. This is beyond the control of the manufacturer and is the responsibility of the operator.

RECOMMENDATION

Consider included the following statement in the Safe Operating Procedures. :"Check area for trip slip and fall hazards prior to operation".

J. ERGONOMIC

NOT APPLICABLE.

K. SUFFOCATION

NOT APPLICABLE.

L. HIGH TEMPERATURE FOR FIRE

NOT APPLICABLE.

M. TEMPERATURE (THERMAL COMFORT)

NOT APPLICABLE.

O. OTHER HAZARDS

(CHEMICALS)

NOT APPLICABLE.

(TOXIC GASES OR VAPOURS)

NOT APPLICABLE.

(FUMES)

NOT APPLICABLE.

(DUST)

NOT APPLICABLE.

(NOISE)

NOT APPLICABLE.

(VIBRATION)

NOT APPLICABLE.

(RADIATION)

NOT APPLICABLE.