



SAFETY ORDER

ELECTRICAL EQUIPMENT LOCATED IN WOOD PELLET MANUFACTURING PLANTS

No: SO-EL 2012-03

Date of Issue: September 18, 2012

This safety order is issued pursuant to section 31 of the Safety Standards Act. A person affected by this safety order may appeal this order in writing to the Safety Standards Appeal Board within 30 days. The appeal process is set out on the Safety Standards Appeal Board's website at <http://www.housing.gov.bc.ca/ssab/>.

Failure to comply with a safety order is an offence under section 72 of the Safety Standards Act.

Introduction

This safety order is being issued to owners and operators of wood pellet manufacturing plants utilizing electrical equipment. Electrical equipment is a regulated product under the *Safety Standards Act*.

In the past nine months explosions and fires at four wood processing facilities in British Columbia have resulted in fatalities and serious injuries to workers. Previous incidents have also been identified in which wood dust has been ignited by electrical equipment.

Although the investigations into the two recent fatal incidents are ongoing and the causes of those incidents have not been identified, this Safety Order is aimed at minimizing the risk of fire or explosion related to regulated electrical equipment being a potential combustion or ignition source in wood processing operations.

Required Actions

Any owner or operator of a wood pellet manufacturing facility will take the following actions at any facility under its direction or control as soon as practicable:

1. Verify that a valid Electrical Operating permit is in place for the operation and maintenance of electrical equipment located at sites with a supply service at a voltage greater than 750 V or a combined electrical service capacity in excess of 250 kVA. A British Columbia registered Field Safety Representative (FSR) shall be named on all valid Electrical Operating Permits. Directive [D- E3 070801 7 Electrical Operating Permit Requirements](#) provides further details on requirements for electrical operating permits.
2. If your wood processing operation requires an electrical operating permit but is not in possession of a valid permit you shall make application to BC Safety Authority to obtain one. Application for the operating permit must be submitted before **December 1st, 2012**.
3. Develop and implement a process to report incidents involving electrical equipment or electrical work to the BC Safety Authority. Directive [D-E3 070115 1 Incident Reporting Requirements With Respect To Electrical Technology](#) provides further details on requirements for incident reporting.

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4. Report any incidents that have occurred since 1st January 2010 and that meet the reporting criteria of Directive [D-E3 070115 1 Incident Reporting Requirements With Respect To Electrical Technology](#) and that have not been previously reported to the BC Safety Authority.
5. Verify that the interior of enclosures of electrical motor control centres, power distribution centres, or similar switchgear are clear and free of known or potential combustible or explosive materials such as wood dust.
6. Verify that electrical cabinet doors and access covers for energized electrical equipment are closed and secured with all fasteners in place and that a process is in place to keep such fasteners closed and secure.
7. Verify that ventilation systems for electrical equipment enclosures are clean, working properly and installed in accordance with the equipment manufacturer's instructions and that a process is in place to keep such systems clean and functional.
8. Submit a completed copy of the attached Safety Order Response Form to the BC Safety Authority on or before **December 1st, 2012**.

If you have any questions regarding this safety order, please contact your local electrical safety officer through the BC Safety Authority call centre by phone at 1.866.566.7233 or by email at info@safetyauthority.ca.

Details of Ordering Safety Manager or Safety Officer – Please read following page

I certify that I am authorized to issue this safety order in accordance with section 15 (d) of the Safety Standards Act or that I have been delegated this power under section 15 (g) of the Safety Standards Act.

A handwritten signature in black ink, appearing to read "Ulrich Janisch".

Ulrich Janisch
Provincial Safety Manager - Electrical

Date: September 18, 2012



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Safety Standards Act:

Safety Orders

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- (1) To prevent, avoid or reduce risk of personal injury or damage to property, a provincial safety manager may, in writing, issue a safety order.
 - (2) A safety order may be issued to any person in relation to any of the following:
 - (a) regulated work or regulated products generally;
 - (b) a specific class of regulated product or regulated work;
 - (c) a specific regulated product or regulated work.
 - (3) For certainty, a safety order issued under this section may apply to
 - (a) regulated work that meets the requirements under this Act,
 - (b) regulated work that previously met the requirements under this Act or a former Act but does not meet the current requirements under this Act,
 - (c) regulated products that meet the requirements under this Act, or
 - (d) regulated products that previously met the requirements under this Act or a former Act but do not meet the current requirements under this Act, including a regulated product that bears a certification mark.
 - (4) A safety order may specify any requirement that is intended to prevent, avoid or reduce the risk of personal injury or damage to property and may include any of the following orders:
 - (a) that an existing regulated work or regulated product must be made safe in compliance with the safety order;
 - (b) that a regulated product must be
 - (i) disconnected from a power source,
 - (ii) uninstalled, or
 - (iii) modified before continued use;
 - (c) that a regulated product must be operated, installed, manufactured or disposed of only as specified or that a regulated product must not be moved;
 - (d) that current or future regulated work or a regulated product must conform to the terms or conditions of the order;
 - (e) that a person take or refrain from taking any action that a safety manager considers necessary to prevent, avoid or reduce a risk of personal injury to persons or damage to property;
 - (f) that the manufacturer make reasonable efforts to recall the regulated product.
 - (5) The provincial safety manager must give written notice of the safety order to the following persons:
 - (a) the manufacturer of the regulated product;
 - (b) an owner of the regulated product if the identity of the owner is known to the provincial safety manager;
 - (c) the person in charge of the regulated work.
 - (6) The notice must state the reasons for the decision and that the person has the right to appeal the decision to the appeal board.
 - (7) Despite section 54, a safety order may not be stayed during an appeal.

References:

- [SBC 2003, c. 39](#) [Safety Standards Act](#)
[B.C. Reg. 105/2004](#) [Safety Standards General Regulation](#)
[B.C. Reg. 100/2004](#) [Electrical Safety Regulation](#)
[D-E3 070801 7](#) [Electrical Operating Permit Requirements](#)
[D-E3 070115 1](#) [Incident Reporting Requirements With Respect To Electrical Technology](#)

For more information on the British Columbia Safety Authority, please visit our website at:
www.safetyauthority.ca

SAFETY ORDER RESPONSE FORM

The information on this form is collected to administer the provisions of the BC Safety Standards Act and section 26 of the Freedom of Information and Protection of Privacy Act. If you have any questions about the collection, use, or disclosure of this information, contact the Records, Information and Privacy Analyst for the BC Safety Authority at 1-866-566-7233.

The company and/or designated representative in receipt of a safety order must fill out and submit this form to the BC Safety Authority within the timeframe stipulated on the safety order.

Safety Order No: SO-EL 2012-03

Submit a completed copy of this Safety Order Response Form (both pages) to the BC Safety Authority **before December 1st, 2012.**

The following items have been completed as required in the above safety order:

- | Yes | No | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Verify that the combined supply service capacity, at any one site under your control, is greater than 250 kVA, or that the supply service voltage is greater than 750 volts. |
| <input type="checkbox"/> | <input type="checkbox"/> | Verify that a valid Electrical Operating permit is in place for the operation and maintenance of electrical equipment located at sites with a supply service at a voltage greater than 750 V or a combined electrical service capacity in excess of 250 kVA. A British Columbia registered Field Safety Representative (FSR) shall be named on all valid Electrical Operating Permits. Directive D- E3 070801 7 Electrical Operating Permit Requirements provides further details on requirements for electrical operating permits. |
| <input type="checkbox"/> | <input type="checkbox"/> | If your wood processing facility requires an Electrical Operating permit and you do not currently hold an Electrical Operating permit for this facility, verify that you have completed and submitted an application for an Electrical Operating permit to the BC Safety Authority. |
| <input type="checkbox"/> | <input type="checkbox"/> | Verify that you have developed and implemented a process to report incidents involving electrical equipment or electrical work to the BC Safety Authority. Directive D-E3 070115 1 Incident Reporting Requirements With Respect To Electrical Technology provides further details on requirements for incident reporting. |
| <input type="checkbox"/> | <input type="checkbox"/> | Verify that you have reported all incidents, to the BC Safety Authority, that: <ul style="list-style-type: none"> • have occurred since 1st January 2010, • meet the reporting criteria of Directive D-E3 070115 1 Incident Reporting Requirements With Respect To Electrical Technology, and • have not been previously reported. |
| <input type="checkbox"/> | <input type="checkbox"/> | Verify that the interior of enclosures of electrical motor control centres, power distribution centres, or similar switchgear are clear and free of known or potential combustible or explosive materials such as wood dust. |
| <input type="checkbox"/> | <input type="checkbox"/> | Verify that electrical cabinet doors and access covers for energized electrical equipment are closed and secured with all fasteners in place and that a process is in place to keep such fasteners closed and secure. |
| <input type="checkbox"/> | <input type="checkbox"/> | Verify that ventilation systems for electrical equipment enclosures are clean, working properly and installed in accordance with the equipment manufacturer's instructions and that a process is in place to keep such systems clean and functional. |



Completion Date: _____
Month / Day / Year

Operating Company Name: _____

Operating Company Address: _____

Company representative signifying
completion of safety order requirements: _____
(Please print name)

Position Title: _____

Signature: _____

Email: _____ Phone number: _____

Valid Electrical Operating Permit Number: _____

Valid Electrical Field Safety Representative
(FSR) named on Electrical Operating Permit: Name _____

Valid Electrical Field Safety Representative
(FSR) named on Electrical Operating Permit: Registration Number _____

Return this form before December 1st, 2012 to:

by mail	by fax
BC Safety Authority 505 Sixth St. New Westminster, BC V3L 0E1 Attn: Safety Order	778-396-2064 Attn: Safety Order
	by email
	info@safetyauthority.ca Subject: Safety Order