

Applicant: Department of Fisheries and Oceans;
Facilities Management
Division and Health and Safety Officer

Interested Party: Public Service Alliance of Canada

On January 15, 1993, a safety officer issued a direction to the Department of Fisheries and Oceans (DFO). In the direction, the safety officer stated that a dangerous condition existed at the Bedford Institute of Oceanography (BIO) in Nova Scotia and that "the operation of the heating plant does not meet the requirements of the Stationary Engineers Act and Regulations of Nova Scotia". The DFO requested a review of the direction.

In his review, the RSO noted that there were two issues to be decided in this case: 1) To what extent, if any, does the Stationary Engineers Act and Regulations of Nova Scotia apply to the BIO heating plant? 2) Does danger exist at the BIO heating plant?

In examining the first issue, the RSO found that section 5.8 of the Regulations, which deals with the operation a boiler and pressure vessel, are the criteria to be applied by provincial authorities when inspecting a boiler or pressure vessel in a federal undertaking. The determination as to whether the equipment is safe is not made according to provincial requirements but as specified in section 5.17 of the Regulations. Therefore, the RSO concluded that for all intents and purposes, the Stationary Engineers Act and Regulations of the province of Nova Scotia do not apply to employment in workplaces under federal jurisdiction.

In regards to the second issue, the RSO noted that the safety officer's initial investigation was limited to equating noncompliance of the staffing requirements of the Nova Scotia Stationary Engineers Act and Regulations with danger. The assumption was made by the safety officer that a continuous presence at the boiler is necessary to ensure an immediate response, by a qualified person, to a detected malfunction of the boiler. However, non-continuous attendance is envisaged by section 5.6 of the COSH Regulations as long as the equipment meets the requirements of the boiler code and is equipped with low-water devices in the case of steam or hot-water boilers. The safety devices on a guarded boiler, shut the system down automatically, in the event of a malfunction. Due to these facts, the RSO concluded that he had no evidence that a danger existed at the BIO heating plant on the basis that the boiler was not continuously attended by stationary engineers.

For all of the above reasons, the RSO rescinded the direction.

CANADA LABOUR CODE
PART II
OCCUPATIONAL SAFETY AND HEALTH

Review under Section 146 of the Canada Labour Code, Part II
of a direction issued by a Safety officer

Applicant: Mr. A.L. Medynski
Chief, Facilities Management Division
Department of Fisheries & oceans

and

Mr. G.J. Browne
Health and Safety Officer
Department of Fisheries and Oceans
Represented by: Mr. Martin Ward
Counsel

Interested party: Mr. Mike O'Rourke
Public Service Alliance of Canada
Local President, Local 80717

Mis-en-Cause: Mr. Ron Thibault
Safety Officer
Labour Canada

Before: Mr. Serge Cadieux
Regional Safety Officer
Labour Canada

An oral hearing was held on May 27, 1993 in Halifax, Nova Scotia.

Background

The circumstances that led to the issuance of a direction to the Department of Fisheries and Oceans by safety officer Ron Thibault are explained in a memo written by Mr. Neil A. Bellafontaine, Fisheries and Oceans, on January 18, 1993. The memo reads, in part:

"On February 25, 1992, this office received an Assurance of Voluntary Compliance (AVC)¹ from Labour Canada which requested Department of Fisheries and Oceans (DFO) to ensure BIO Boiler Plant was operating according to Provincial Labour

Regulations. Public Works Canada (PWC) was contracted to analyze our plant, meet with the Provincial Labour Department and report to us. PWC's analysis and meetings with provincial authorities resulted in a directive from the Province that the boiler plant must be staffed whenever it is in operation and BIO is occupied.

This news came as quite a shock to us as we had the understanding that the boiler plant met all requirements through all previous inspections. We asked PWC to quickly cost a complete refit of the boiler plant from steam to hot water; the cost was very high (1.2M) and considered unacceptable. We then asked PWC to explore the option of installing a "guarded-plant" at BIO. Nova Scotia Regulations do not allow such an installation, yet Newfoundland and New Brunswick do. The estimated cost to install the additional safety features required of a "guarded-plant" is \$60.0K.(sic)

Public Works Canada wrote to the Province on our behalf, requesting permission to install "guarded-plant" features and to operate as we have in the past until DFO can obtain approval for the \$1.2M conversion of the plant and implement same - estimated completion by September 1994. The Province rejected this request.

The Department of Fisheries and Oceans then wrote to the Province requesting permission to install the same "guarded-plant" features until such time as the regulations were amended to permit such an operation. We had "heard" that such amendments were under consideration by the provincial authorities. The Province rejected this request also."

Mr. David M. Steele, an inspector-examiner with the Stationary Engineers Board of Nova Scotia, conducted an inspection on June 26, 1992 of the Bedford Institute of Oceanography (BIO) heating plant, Dartmouth, Nova Scotia. In a letter dated January 15, 1993 Mr. Steele confirmed to Mr. Thibault that the BIO plant is subject to registration under the Stationary Engineers Act and Regulations of the province of Nova Scotia.

One specific item of the AVC which was received by the safety officer on February 25, 1992, following a routine safety inspection, dealt with "boiler room staff procedures". The safety officer communicated and discussed that issue with DFO officials for over a year. The issue came to a head when DFO intended to proceed with the operation of the BIO heating plant as a fully "guarded plant". The safety officer was of the view that in order to operate as a guarded plant, DFO had to meet the requirements of the Nova Scotia Stationary Engineers Act and Regulations. Section 7 of those Regulations require that the plant be staffed whenever it is in operation and the building is occupied.

¹ An AVC is a formal, written assurance by the person in charge of a work place that a contravention of the Canada Labour Code, Part II will be corrected.

On January 15, 1993 Mr. Thibault issued a written direction to DFO under paragraph 145(2)(a) of the Canada Labour Code, Part II. The direction provides, in part, as follows:

"The said safety officer considers that a condition exists in the said work place which constitutes a danger to an employee while at work:

The operation of the heating plant does not meet the requirements of the Stationary Engineers Act and Regulations, Statue (sic) of Nova Scotia Acts of 1980, Chapter 18.

Therefore, you are HEREBY DIRECTED, pursuant to paragraph 145(2)(a) of Canada Labour Code, Part II, to take measures immediately for guarding the source of danger."

Submissions for the employer

Mr. Ward submits that the safety officer did not make an independent and informed decision as to whether the operation of the plant, in a guarded fashion, constitutes a danger to an employee. Mr. Thibault has merely adopted the position that noncompliance with the Stationary Engineers Act and Regulations of Nova Scotia, which requires full time staffing among other things, is equated in this case to a situation of danger. This conclusion is reached without making a full assessment of the plant on its merits in terms of safety. That provincial legislation is, in Mr. Ward's view, not in keeping with the current state of technology for guarded plants which is recognized in other provinces, namely New Brunswick and Newfoundland. Hence, a conclusion of danger is unfounded.

Mr. Ward also submits that section 5.7 of Part V (Boilers and Pressure Vessels) of the Canada Occupational Safety and Health Regulations only refers to the qualifications required by the qualified persons who inspect boilers and pressure vessels in federal undertakings. The fact that those qualified persons must be recognized, in this case, under the laws of Nova Scotia does not demand compliance with provincial legislation.

Submissions for the employees

Mr. O'Rourke submits that the number one priority in this case should be looking at the safety of the staff. While he is conscious that the legislation may be changed in the future to allow guarded plant features, the legislation that applies today is the current one for Nova Scotia. Therefore, any business coming into Nova Scotia should comply with the existing legislation.

Decision

There are two issues to be decided in this case. They are:

1. To what extent, if any, does the Stationary Engineers Act and Regulations of Nova Scotia apply to the Bedford Institute of Oceanography heating Plant?
2. Does danger exists at the BIO heating plant?

Under normal circumstances, I would firstly decide if danger exists at the BIO heating plant. If danger was found to exist, I would then look at the application of the provincial legislation as an acceptable standard to resolve the problem and confirm or vary the direction in accordance with subsection 146(3) of the Canada Labour Code, Part II. In the event that danger was found not to exist, I would simply rescind the direction.

In this case, I have reversed the order of the issues to be decided because the safety officer equated non-compliance with the provincial legislation with danger. Hence, whether danger is found to exist or not, I must look at whether the provincial legislation applies, as well as the extent to which it applies, to make a final ruling in this matter.

Note: The applicable legislation is found in Appendix.

THE FIRST ISSUE

In dealing with the first issue, I will look at the application of the Canada Labour Code, Part II and the pursuant Canada Occupational Safety and Health (COSH) Regulations to employees working in federal work places. The issue of the safety of the public and consequently, the authority of the province to regulate public safety, has not been considered. The parties may nonetheless wish to consider this aspect by obtaining appropriate advice on the matter.

In respect of the first issue, the Department of Fisheries and Oceans has gone to great length to comply, or attempt to comply, with the requirements of the provincial legislation. I understand that historically, as well as on the advice of Labour Canada officials, DFO and other federally regulated undertakings have applied to the provincial jurisdiction having authority for plant registration numbers, for permission to install guarded plant features, for approval to operate a plant without continuous staffing, and numerous other permissions and approvals. I am convinced that everybody acted as they did primarily in the interest of safety.

Because section 5.7 of Part V (Boilers and Pressure Vessels) of the COSH Regulations indirectly devolved upon the provinces the authority for inspecting boilers on federal premises, employers as well as safety officers felt they had to comply with the requirements imposed by provincial authorities acting under provincial legislation. Consequently, federal employers sought compliance with the legislation of the province where the equipment is located in order to ensure that provincial inspectors would certify the equipment as being safe. For many, that meant the issuance of a certificate of compliance with provincial legislation. Also, the certificate would be issued with the proviso that a plant would operate only with the continuous attendance at the boiler of various types of stationery engineers.

I do not read any of those requirements in the federal legislation.

The only similar requirement that I have found in the federal legislation regarding the necessity to obtain an approval from provincial authorities concerns the Canadian Registration Number. That number is referred to by reference under section 5.3 of the COSH Regulations. That provision references clause 3.8 of the boiler code² which provides:

² "boiler code" means CSA Standard B51-M1981, Code for the Construction and Inspection of Boilers and Pressure Vessels, the English

3.8 Stamping

3.8.1 Every boiler, pressure vessel, and pressure-relief device shall be stamped in accordance with the requirements of the ASME Code. The stamping shall include the Canadian Registration Number.

I suspect that employers, and safety officers as well felt that, in order to obtain a Canadian Registration Number, they had to comply with a litany of requirements made by provincial authorities. That is a mistake. The obligation to obtain the Canadian Registration Number does not reside with the owner of the boiler but with the manufacturer of the equipment, as can be read throughout the boiler code. Furthermore, the registration number only applies to designs and specifications of the equipment, not to the whole plant nor its operation.

Furthermore, section 5.7 of the COSH Regulations, which alludes to the laws of a province, merely refers to the qualifications of the person who will inspect the boiler or pressure vessel. In other words, that provision ensures that the inspection of a boiler or pressure vessel will be carried out by an independent qualified person. That person must have been trained in accordance with the laws of the province where the boiler is located and be formally recognized by that province as being competent.

In Nova Scotia, as in the other provinces except Ontario and Quebec, the only persons recognized under the Stationary Engineers Act and Regulations to inspect boilers and pressure vessels are inspectors from the Department of Labour, Stationary Engineers Board. In Ontario and Quebec, arrangements have been made to recognize persons of private businesses who specialize in that field. Those persons are qualified to inspect boilers and pressure vessels in federal work places and to determine whether the equipment is safe for its intended use.

The determination as to whether the equipment is safe is not made according to provincial requirements but as specified in section 5.17 of the Regulations. Likewise, the frequency of inspection is determined by subsection 5.7(3) of the Regulations. Only section 5.8 of the Regulations deal with the operation of a boiler and pressure vessel and it is non-specific. Those are the criteria to be applied by provincial authorities when inspecting a boiler or pressure vessel in a federal undertaking.

For all intent and purposes, the Stationary Engineers Act and Regulations of the province of Nova Scotia do not apply to employment in work places under federal jurisdiction.

THE SECOND ISSUE

In respect of the issue of danger, it has been established that the safety officer's initial investigation was limited to equating noncompliance with the staffing requirements of the Nova Scotia Stationary Engineers Act and Regulations with danger. The assumption is made by Mr. Thibault that a continuous presence at the boiler is necessary to ensure an immediate response, by a qualified person, to a detected malfunction of the boiler.

Non-continuous attendance is envisaged by section 5.6 of the COSH Regulations as long as the equipment meets the requirements of the boiler code and is equipped with low-water cut-off devices in the case of a steam or hot-water boiler. I understand that provincial authorities have issued a certificate to DFO with a staffing proviso. That certificate exceeds the requirements of subsection 5.17 of the COSH Regulations. After having ascertained compliance with section 5.6 of the COSH Regulations, the inspector is to limit his or her inspection to technical considerations of the equipment without regards to the staffing requirements of the whole heating plant.

The investigation of the safety officer was not made on technical considerations. His allegation that "anything could happen while the boiler is unattended" is a generic statement that could apply to a wide range of situations. The safety officer has not presented specific facts regarding the boilers at BIO heating plant other than the possibility of an excess of pressure above the normal operating pressures. If the pressure is allowed to increase out of control, it could result in a violent explosion.

However, the safety features of the guarded plant have been designed with those possibilities in mind. The design and construction of boilers have improved with time owing to today's advanced state of knowledge and technology in this field. There are highly sophisticated and reliable safety valves and other safety devices on the boiler which have proven to be most effective. In the event of a malfunction, the system will shut down automatically; it can then only be re-started manually by a qualified person. The system will automatically relay the information respecting the malfunction to a central location, the security office of the building, which is attended twenty-four hours a day and seven days a week.

Needless to say that the combination of a guarded plant with safety features and the presence, in the proximity of the boiler, of stationery engineers, is preferable and to some extent desirable. However, I have no evidence before me to conclude that a danger exists at the BIO heating plant on the basis that the boilers are not continuously attended by stationery engineers.

For all the above reasons, I hereby rescind the direction given on January 15, 1993 by safety officer Ron Thibault to the Department of Fisheries and Oceans.

Decision rendered on June 30, 1993

Serge Cadieux
Regional Safety Officer

LEGISLATION QUOTED

Canada Labour Code Part II

145.(2) Where a safety officer considers that the use or operation of a machine or thing or a condition in any place constitutes a danger to an employee while at work,

- (a) the safety officer shall notify the employer of the danger and issue directions in writing to the employer directing the employer immediately or within such period of time as the officer specifies
 - (i) to take measures for guarding the source of danger, or
 - (ii) to protect any person from the danger.

146.(3) The regional safety officer shall in a summary way inquire into the circumstances of the direction to be reviewed and the need therefor and may vary, rescind or confirm the direction and thereupon shall in writing notify the employee, employer or trade union concerned of the decision taken.

Canada Occupational Safety and Health Regulations

5.3 Every boiler, pressure vessel and piping system used in a work place shall meet the standards relating to design, construction, testing, inspection and installation set out in clauses 3.8, 3.9, 4.8 to 5.1, 5.3.4 to 6.3, 7.1 and 8.1 of the boiler code, to the extent that is essential for the safety and health of employees.

5.6(1) Every steam boiler that is not under continuous attendance by a qualified person shall be equipped with a low-water fuel cut-off device that serves no other purpose.

5.6(2) Subject to subsection (3), where an automatically fired hot-water boiler is installed in a forced circulation system and is not under continuous attendance by a qualified person, the boiler shall be equipped with a low-water fuel cut-off device.

5.7(1) In this section, "qualified person" means a person recognized under the laws of the province in which the boiler, pressure vessel or piping system is located as qualified to inspect boilers, pressure vessels or piping systems.

(2) No person shall use a boiler, pressure vessel or piping system unless it has been inspected by a qualified person in accordance with subsection (3).

(3) A qualified person shall

- (a) inspect every boiler, pressure vessel and piping system

- (i) after installation;
- (ii) after any welding, alteration or repair is carried out on it, and
- (iii) in accordance with sections 5.12 to 5.14 and 5.16; and

(b) make a record of each inspection in accordance with section 5.17.

5.8 Every boiler, pressure vessel and piping system in use at a work place shall be operated, maintained and repaired by a qualified person.

5.17(1) A record of each inspection carried out under sections 5.7 and 5.12 to 5.16 shall be completed by the person who carried out the inspection.

(2) Every record referred to in subsection (1)

(a) shall be signed by the person who carried out the inspection; and (b) shall include

- (i) the date of the inspection,
- (ii) the identification and location of the boiler, pressure vessel or piping system that was inspected,
- (iii) the maximum allowable working pressure and the maximum temperature at which the boiler or pressure vessel may be operated,
- (iv) a declaration as to whether the boiler, pressure vessel or piping system meets the standards, prescribed by this Part,
- (v) a declaration as to whether, in the opinion of the person carrying out the inspection, the boiler, pressure vessel or piping system is safe for its intended use, and
- (vi) any other observation that the person considers relevant to the safety of employees.

(3) The employer shall keep every record referred to in subsection (1) for a period of 10 years after the inspection is made at the work place in which the boiler, pressure vessel or piping system is located.