

Order Number: 004

Environmental Penalty Order

Environmental Protection Act, R.S.O. 1990, c. E 19 (EPA)
Ontario Water Resources Act, R.S.O. 1990, c. O. 40 (OWRA)

To: Essar Steel Algoma Inc.

**Site: 105 West St.
Sault Ste. Marie
Ontario, Canada**

1. PART 1: DEFINITIONS

For the purposes of this Environmental Penalty Order, the following terms shall have the meanings described below:

“**Director**” means the undersigned Director or, in the event that the undersigned is unable to act, any other director authorized to act pursuant to the EPA.

“**EP**” means an Environmental Penalty.

“**EP Order**” means an Environmental Penalty Order.

“**EPA**” means the Environmental Protection Act, R.S.O. 1990, c. E. 19, as amended.

“**Essar**” means Essar Steel Algoma Inc., formerly operated as Algoma Steel Inc. For the purpose of this EP Order, any mention to “Essar” includes any actions undertaken by Algoma Steel Inc. that occurred prior to its amalgamation with Algoma Acquisition Corp. to form Essar Steel Algoma Inc.

“**Guideline**” means “Guideline for Implementing Environmental Penalties (Ontario Regulations 222/07 and 223/07), May 2007”.

“**Ministry**” means the Ontario Ministry of the Environment.

“**O. Reg. 222/07**” means Environmental Penalties – Ontario Regulation 222/07, made under the EPA, as amended.

“**O. Reg. 214/95**” means Effluent Monitoring and Effluent Limits – Iron and Steel Manufacturing Sector – Ontario Regulation 214/95, made under the EPA, as amended.

“**OWRA**” means the Ontario Water Resources Act, R.S.O. 1990, c. O. 40, as amended.

“**Regulated Person**” means a person who owns or operates a plant that falls under Section 3 of O. Reg. 222/07.

“**Site**” means the property municipally known as 105 West St., Sault Ste. Marie, Ontario.

2. PART 2: LEGAL AUTHORITY AND REASONS

Legal Authority

Authority to Issue EP Order

2.1 Subsection 182.1(1) of the EPA authorizes the Director to issue an EP to a Regulated Person that:

A. Contravenes or has contravened:

- i. Section 14 of the EPA,
- ii. Section 93 of the EPA,
- iii. A provision of a regulation that establishes or has the effect of establishing a numerical limit, including a limit of zero, on the amount, concentration or level of anything that may be discharged to the natural environment,
- iv. A provision of an order under the EPA that establishes or has the effect of establishing a numerical limit, including a limit of zero, on the amount, concentration or level of anything that may be discharged to the natural environment, or
- v. A provision of a certificate of approval, provisional certificate of approval, certificate of property use, licence or permit under the EPA that establishes or has the effect of establishing a numerical limit, including the limit of zero, on the amount, concentration or level of anything that may be discharged to the natural environment; or

- B. The Regulated Person contravenes a provision of,
 - i. The EPA or the regulations,
 - ii. An order under the EPA, other than an order under sections 99.1, 100.1 or 150 of the EPA or an order of a court,
 - iii. A certificate of approval, provisional certificate of approval, certificate of property use, licence or permit under the EPA,
 - iv. A report under section 29 of the EPA, or
 - v. An agreement under subsection 182.1(9) of the EPA.

Agreements

2.2 Subsection 182.1(9) of the EPA allows the Director and the Regulated Person against whom a Notice of Intention or an EP Order has been issued to enter into an agreement that:

- A. Identifies the contravention in respect of which the Notice of Intention or an EP Order has been issued;
- B. Requires the Regulated Person against whom the Notice of Intention or an EP Order has been issued to take steps specified in the agreement within the time specified in the agreement, and
- C. Provides that the obligation to pay the penalty may be cancelled in accordance with O. Reg. 222/07 or the amount of the penalty may be reduced in accordance with O. Reg. 222/07

Publication of Agreements

2.3 Subsection 182.1(10) of the EPA requires the Ministry to publish every agreement entered into under subsection 182.1(9) of the EPA in the environmental registry established under section 5 of the Environmental Bill of Rights, 1993.

Penalty Does Not Prevent Prosecution

2.4 Subsection 182.1(11) of the EPA allows a Regulated Person to be charged, prosecuted and convicted of an offence under the EPA in respect of a contravention referred to in subsection 182.1(1) of the EPA even if an EP has been imposed or paid by the Regulated Person in respect of the contravention.

No Admission of Liability

- 2.5 Under subsection 182.1(12) of the EPA, a Regulated Person that pays the EP imposed under subsection 182.1(1) of the EPA in respect of a contravention or enters into an agreement under subsection 182.1(9) of the EPA in respect of a contravention does not represent an admission that the Regulated Person committed the contravention for the purposes of any prosecution for the contravention.

Failure to Pay When Required

- 2.6 Subsection 182.1(13) of the EPA allows the Ministry to enforce an EP Order where a Regulated Person who is required to pay an EP fails to comply with the requirement by,
- A. Filing the EP Order or decision with the local registrar of the Superior Court of Justice and enforcing the EP Order or decision as if it were an order of the Superior Court of Justice,
 - B. The Director may by order suspend any certificate of approval, provisional certificate of approval, licence or permit that has been issued to the Regulated Person under the EPA until the EP is paid, and
 - C. The Director may refuse to issue any certificate of approval, provisional certificate of approval, licence or permit to the Regulated Person under the EPA until the EP is paid.

Key Background Facts Regarding the Issuance of This Notice of Intention

- 2.7 The following outlines the key background facts, issues and concerns regarding this matter which provide me with the reasons for issuing this EP Order:

Details of the Orderee

- 2.7.1 Essar Steel Algoma Inc. ("**Essar**") is a company incorporated under the laws of Ontario (Ontario Corporation Number: 1738731).
- 2.7.2 Essar is the current owner and operator of a steelmaking facility that is located in Sault Ste. Marie. Prior to Essar obtaining ownership, the facility was owned and operated by Algoma Steel Inc. This facility is listed in Table 1 under subsection 3(1) (a) of O. Reg. 222/07. Essar is, therefore,

considered a Regulated Person to whom the Director is authorized to issue an EP.

The Site

2.7.3 Essar operates a steelmaking facility in Sault Ste. Marie that is municipally known as 105 West St. ("**Site**"). Essar has sampling control point 0200 (Blast Furnace 60 inch sewer) and sampling control point 0300 (Blast Furnace 30 inch sewer) that discharge to the location referred to as the Boat Slip, which connects to the St. Marys River. The sampling control points are regulated under the Effluent Monitoring and Effluent Limit – Iron and Steel Manufacturing Sector of O. Reg. 214/95.

Events Leading Up To Issuing Environmental Penalty Order

2.7.4 In a letter dated October 9, 2007, Essar advised the Ministry that a toxicity failure had occurred on September 25, 2007 at sampling points 0200 and 0300. The effluent sample from sampling point 0200 exceeded the 50% mortality limit for *Daphnia magna* (53.3% mortality). The effluent sample from sampling point 0300 exceeded the 50% mortality limit for rainbow trout (60% mortality). Both of the exceedances are above the limits identified in section 17 of O. Reg. 214/95.

2.7.5 The Ministry Inspection Report 2417-75VJN8 outlined that Essar had undertaken an investigation to determine the cause of the exceedances. Essar was required to submit a written report detailing the findings of their investigation.

2.7.6 In a letter dated December 11, 2007 Essar submitted to the Sault Ste. Marie Area Office a response to the Ministry's inspection of the Site on November 5, 2007. This response included the following findings:

- Operating and maintenance departments were contacted and reported no spills or process upsets.
- MISA chemical parameter results for the sample date were compared to historical values.
- For the sampling control point 0200 effluent, all results were within the normal range.
- For the sampling control point 0300 effluent, the zinc result was higher than normal (0.29 mg/litre vs. 0.04 mg/litre average).

- AquaTox Testing and Consulting Inc. were asked to comment on whether the level of zinc that was found in the effluent was responsible for the toxicity. The company outlined that it was possible if the zinc was in a dissolved form. A literature search confirmed that opinion.
- Essar contacted GE Betz, a contractor that provides water treatment services to Essar, about the situation. It was outlined that an anti-corrosion chemical, FLOGARD POT6110, that is used in the #7 Blast Furnace water system contains zinc phosphate. The zinc in the product binds with the rust. Essar personnel think that there may have been less rust in the system since the Blast Furnace rebuild, which, in turn, may have resulted in a higher zinc level.
- Essar requested that GE Betz reduce the dosage of the anti-corrosion chemical.
- Essar has been unsuccessful in determining a cause for the toxicity failure that occurred at sampling control point 0200.
- Subsequent toxicity tests have passed.
- As per the requirements of subsection 25 (12) of O. Reg 214/95 Essar has recommenced monthly sampling for toxicity at sampling control points 0200 and 0300.

2.7.7 The EP Notice of Intention relates to two (2) contraventions:

Contravention #1: The result for a sample collected at sampling point 0200 under subsection 25 (3) of O. Reg. 214/95 for toxicity on *Daphnia magna* was 53.3% mortality on September 25, 2007. The result exceeds the limit of 50% mortality that is established in section 17 of O. Reg. 214/95 and therefore Essar has contravened section 17 of O. Reg. 214/95; and

Contravention #2: The result for a sample collected at sampling point 0300 under subsection 25 (3) of O. Reg. 214/95 for toxicity on Rainbow Trout was 60% mortality on September 25, 2007. The result exceeds the limit of 50% mortality that is established in section 17 of O. Reg. 214/95 and therefore Essar has contravened section 17 of O. Reg. 214/95.

Contravention of Table 2 of O. Reg. 222/07

2.7.8 Contravention #1 is covered under item number 8 in Table 2 of O. Reg. 222/07.

2.7.9 Contravention #2 is covered under item number 8 in Table 2 of O. Reg. 222/07

Classification of the Seriousness of the Contravention and Cell of Table 4 of O. Reg. 222/07 that Corresponds to Classification

2.7.10 Contravention #1 is classified as a Type 2 contravention in accordance with item number 8 in Table 2 of O. Reg. 222/07. The seriousness of contravention #1 was classified in accordance with section 13 of O. Reg. 222/07, which specifies that a contravention specified in item 8 of Table 2 is classified as less serious. The cell of Table 4 indicates that a Type 2 less serious contravention results in an EP in the range of ten thousand to fifteen thousand dollars (\$10,000 - \$15,000).

2.7.11 Contravention #2 is classified as a Type 2 contravention in accordance with item number 8 in Table 2 of O. Reg. 222/07. The seriousness of contravention #2 was classified in accordance with section 13 of O. Reg. 222/07, which specifies that a contravention specified in item 8 of Table 2 is classified as less serious. The cell of Table 4 indicates that a Type 2 less serious contravention results in an EP in the range of ten thousand to fifteen thousand dollars (\$10,000 - \$15,000).

The Gravity Component of the EP

Contravention #1:

2.7.12 To determine the amount of the gravity component of an EP, the Director must look to section 9 of O. Reg. 222/07. More specifically, the Director considered the factors identified in paragraph 3 of subsection 9(1) of O. Reg. 222/07. These factors will then be assigned points and the total number of points were be used to determine the final gravity component of the EP.

2.7.12.1 Under paragraph 3(i) of subsection 9(1) of O. Reg. 222/07, the Director can consider a Regulated Person's contravention history under the EPA and/or the OWRA when determining the gravity component of the EP. Essar has had no convictions within the past five years. Under Appendix 3 of the Guideline this results in -1 points and a ten thousand dollar (\$10,000) gravity component.

Contravention # 2

2.7.13 As noted above under Contravention # 1, the Director considered the factors identified in paragraph 3 of subsection 9(1) of O. Reg. 222/07 when determining the gravity component of the contravention.

2.7.13.1 Under paragraph 3(i) of subsection 9(1) of O. Reg. 222/07, the Director can consider a Regulated Person's contravention history under the EPA and/or the OWRA when determining the gravity component of the EP. Essar has had no convictions within the past five years. Under Appendix 3 of the Guideline this results in -1 points and a ten thousand dollar (\$10,000) gravity component.

Description of the Number of Day(s) Contravention Occurred

2.7.14 Contravention #1 occurred for one day on September 25, 2007.

2.7.15 Contravention #2 occurred for one day on September 25, 2007.

Director's Response to Regulated Person's Request for Review of Notice of Intention

2.8 On April 28, 2008, the Director issued a Notice of Intention to issue an EP Order to Essar. Essar responded on May 23, 2008 and asked me to review the Notice of Intention. A copy of the Notice of Intention issued on May 5, 2008, is attached to and forms part of this EP Order. A copy of Essar's written request that I review the Notice of Intention dated May 23, 2008, is also attached to and forms part of this EP Order.

2.9 I have reviewed your written request provided. My responses to your requests are as follows:

A. Reductions for Prevention:

2.9.1 Reductions to the gravity component are determined in accordance with section 16 of O. Reg. 222/07 on the grounds that the Regulated Person took steps to prevent the contravention or mitigate its effects. Section 4.1 in Appendix 4 of the Guideline specifically lists the preventive measure modifiers considered for discharge violations. A Regulated Person is eligible for up to a 20% reduction to the gravity component of a penalty for the steps

the person took to prevent the discharge violations. For each consideration that has a "yes" answer in Table A1, the appropriate point value from the last 3 columns is assigned. The points are totaled and Table A2 is used, based on the violation type to determine the percentage reduction for the preventive measures taken by the regulated person.

2.9.2 Essar did not specifically request a reduction for Contravention #1 (rather Essar asked that I simply do not impose an EP for Contravention #1). Further, it is unclear from the information Essar submitted if any preventive measures were in place in relation to Contravention #1. Since I did not receive a request to make any reductions to Contravention #1 and it is unclear whether Essar is entitled to any points, I am not going to award any points to Essar in this situation.

2.9.3 In relation to Contravention #2, I am going to award Essar two (2) points for the preventive maintenance program that it had in place. Under Table A2 of the Guide, an award of two (2) points results in a reduction of four (4) percent to the gravity proponent of the EP.

B. Reductions for Mitigation:

2.9.4 Reductions to the gravity component are determined in accordance with section 16 of O. Reg. 222/07 on the grounds that the Regulated Person took steps to prevent the contravention or mitigate its effects. Section 4.2 in Appendix 4 of the Guideline lists all the mitigative measures that may be considered. A Regulated Person is eligible for up to a 10% reduction to the gravity component of a penalty for the steps the person took to mitigate the effects of the discharge violation. For each consideration in Table B1, the appropriate point value from the last 3 columns is assigned. Points are totalled and Table B2 is used to determine the percentage reduction for the mitigative measures taken by the Regulated Person.

2.9.5 In letters from Essar dated May 23, 2008 and December 11, 2007, Essar made several requests for reductions. Based on these requests, Essar should receive one (1) point for the cause analysis that it undertook for Contravention #1. Essar should also receive an additional two (2) points for the additional monitoring it undertook. Adding the points together, Essar has been awarded three (3) points for the mitigative steps it took in relation to Contravention #1. According to Table B2 of the Guide, an award of three (3) points results in a reduction of six (6) percent for the mitigative steps Essar took after the unlawful discharge in relation to Contravention #1.

2.9.6 I am of the view that Essar is also entitled to the same reductions outlined in paragraph 2.9.5 in relation to Contravention #2. However, I am further of the view that Essar should also receive an additional 2 points for the mitigative

measures Essar implemented after Contravention #2. Adding the points together, Essar has been awarded five (5) points for the mitigative steps it took in relation to Contravention #2. According to Table B2 of the Guide, an award of five (5) points results in a reduction of eight (8) percent for the mitigative steps Essar took after the unlawful discharge in relation to Contravention #2.

C. Reductions for Environmental Management System:

2.9.7 In the letter from Essar dated May 23, 2008 and received by the Ministry on May 23, 2008, Certificate of ISO 14001 is provided. I have reviewed this information and accept that Essar had an environmental management system in place. Therefore, Essar is entitled to a reduction of five (5) percent for both Contravention #1 and Contravention #2.

D. EP Totals For Contravention #1 and Contravention #2:

2.9.8 For Contravention #1, Essar is entitled to a total reduction of 11 percent (six (6) percent for its mitigative measures it took in relation to the unlawful discharge and five (5) percent for having an environmental management system). A reduction of 11 percent equals a monetary reduction of one thousand one hundred dollars (\$1,100.00) for Contravention #1. Therefore, the EP total amount for Contravention #1 will be eight thousand, nine hundred dollars (\$8,900.00).

2.9.9 For Contravention #2, Essar is entitled to a total reduction of 17 percent (four (4) percent for the preventive measures Essar had in place before the unlawful discharge, six (6) percent for its mitigative measures it took in relation to the unlawful discharge and five (5) percent for having an environmental management system). A reduction of 17 percent equals a monetary reduction of one thousand seven hundred dollars (\$1,700.00) for Contravention #2. Therefore, the EP total amount for Contravention #2 will be eight thousand, three hundred dollars (\$8,300.00).

3. PART 3: ORDER TO PAY ENVIRONMENTAL PENALTY

3.1 For the reasons stated above and pursuant to my authority under subsection 182.1(1) of the EPA, I order you to pay an Environmental Penalty in the total amount of seventeen thousand two hundred dollars (\$17,200.00) by October 15, 2008. This payment shall be made by certified cheque made payable to the Minister of Finance and sent to the following address Ministry of The Environment, Sault Ste. Marie Area Office, 3rd Floor, 289 Bay Street Sault Ste. Marie Ontario P6A 1W7.

Note that this total amount includes the total environmental penalties for both Contravention #1 (at \$8,900.00) and Contravention #2 (at \$8,300.00).

4 PART 4: GENERAL

- 4.1 All orders are issued in the English language and may be translated into the French language. In the event that there should be a conflict between the English original and the French translation, the English original shall prevail.
- 4.2 Subsection 19(1) of the EPA provides that an order of the Director is binding upon the successor or assignee of the person to whom it is directed.
- 4.3 The requirements of this order are minimum requirements only and do not relieve you from:
- complying with any other applicable order, statute, regulation, municipal, provincial or federal law
 - obtaining any approvals or consents not specified in this order
- 4.4 Notwithstanding the issuance of this order, further or other orders may be issued in accordance with legislation as circumstances require.
- 4.5 In the event that any party to this order is, in the opinion of the Director, rendered unable to perform or comply with any obligations herein because of
- natural phenomena of an exceptional, inevitable or irresistible nature, or insurrections, or
 - any other cause whether similar to or different from the foregoing beyond the reasonable control of the parties,
- the obligations hereof, as they are affected by the above shall be adjusted in a manner defined by the Director. To obtain such an adjustment, the party must notify the Director immediately of any of the above occurrences, providing details that demonstrate that no practical alternatives are feasible in order to meet the compliance dates in question.
- 4.6 Failure to comply with a requirement of this order by the date specified does not absolve the parties from compliance with the requirement. The obligation to complete the requirement shall continue each day thereafter.
- 4.7 This order has no expiry date.

5 PART 5: APPEAL RIGHTS

- 5.1 Under section 140 of the EPA, you may require a hearing before the Environmental Review Tribunal, if, within fifteen days after service upon you of this order, you serve written notice upon the Review Tribunal and the Director.
- 5.2 Section 142 of the EPA provides that the notice requiring the hearing must include a statement of the portions of the order for which the hearing is required and the grounds on which you intend to rely at the hearing. Except by leave of the Environmental Review Tribunal, you are not entitled to appeal a portion of the order or to rely on grounds of appeal that are not stated in the notice requiring the hearing.
- 5.3 Written notice requiring a hearing shall be served in accordance with the applicable Act(s) or Service Regulations on the following:

The Secretary
Environmental Review Tribunal
655 Bay Street, 15th Floor
Toronto, ON M5G 1E5
(416) 314-4506 (fax)

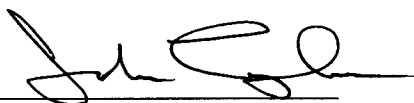
and Director Franca Dignem
Ministry of the Environment
Northern Region
Suite 1201
199 Larch St
Sudbury ON P3E 5P9
705-564-3305

Where service is made by mail, the service shall be deemed to be made on the fifth day after the day of mailing and the time for requiring a hearing is not extended by choosing service by mail.

Refer to Service of Documents Regulation 227/07 for further rules regarding service by fax.

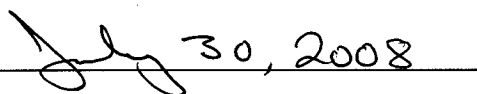
6 PART 6: PROCESS OF APPEAL BEFORE ENVIRONMENTAL REVIEW TRIBUNAL

- 6.1 Subsection 145.4(1) of the EPA provides that the regulations made under clause 182.1(15)(d) governing the determination of the amounts of an EP apply to the Environmental Review Tribunal ("**ERT**").
- 6.2 Subsection 145.4(2) of the EPA provides that the ERT shall not substitute its opinion for that of the Director with respect to the amount of the EP Order unless the ERT considers the amount to be unreasonable.
- 6.3 Subsection 145.5(2) of the EPA places the onus on the Regulated Person requesting the hearing before the ERT to prove that the contravention of section 14 of the EPA did not cause or could not have caused an adverse effect.
- 6.4 Subsection 145.5(3) of the EPA places the onus on the Regulated Person requesting the hearing before the ERT to prove that a contravention of section 93 of the EPA that:
- i. The discharge of the pollutant was not abnormal in quality or quantity in light of all the circumstances of the discharge;
 - ii. The pollutant that was spilled did not cause and was not likely to cause an adverse effect; or
 - iii. Forthwith after the pollutant was spilled, the person did everything practicable to prevent, eliminate and ameliorate the adverse effect and to restore the natural environment.
- 6.5 Subsection 145.5(4) of the EPA places the onus on the Regulated Person requesting the hearing before the ERT to prove that a contravention of a provision referred to in subclause 182.1(a)(iii), (iv) or (v) that the Regulated Person did not contravene the provision.

A handwritten signature in black ink, appearing to read "John Taylor", written over a horizontal line.

John Taylor
Director appointed under subsection 182.1 (1) of the EPA
Northern Region
3rd Flr Suite 331 435 James St. S.
Thunder Bay, Ontario P7E 6S7
(807) 475 -1754 (fax)

Date: _____

A handwritten signature in black ink, followed by the date "July 30, 2008", written over a horizontal line.