



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

July 22, 2012

LR-8J

7001 0320 0006 0185 0577

**CERTIFIED LETTER**  
**RETURN RECEIPT REQUESTED**

Mr. Corey Conn  
ESSROC Cement Corporation  
3084 West C.R. 225 South  
Logansport, Indiana 46947

Re: Draft Federal RCRA Permit, ESSROC Cement Corporation  
Logansport, Indiana, IND 005 081 542

Dear Mr. Conn:

Enclosed is the draft federal Resource Conservation and Recovery Act (RCRA) permit for ESSROC Cement Corporation, Logansport, Indiana.

The draft federal RCRA permit will be publicly noticed in the "Pharos-Tribune" on July 22, 2012. A copy of the draft federal RCRA permit is available for review at the Logansport-Cass County Public Library, 616 East Broadway, Logansport, Indiana 46947. The public comment period extends from July 22 to September 7, 2012.

During the public comment period, you or any interested party may submit comments to the U.S. Environmental Protection Agency on the draft federal RCRA permit. At the close of the comment period, EPA will prepare a response to all significant comments. Comments on the draft federal RCRA permit may be submitted to:

U.S. Environmental Protection Agency, Region 5  
RCRA Branch (LR-8J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604

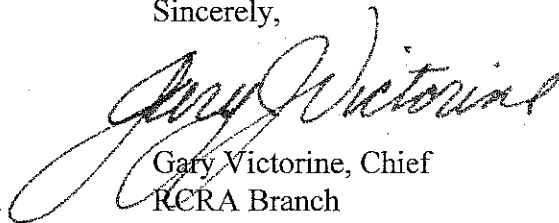
Attention: Jae B. Lee

You may request that EPA hold a public hearing about this permit. At a hearing, you will have an opportunity to submit written comments, ask questions, make statements, and otherwise discuss any concerns about the permit with EPA staff. If a public hearing is to be held, EPA will make a separate announcement of the date, time, and location of that hearing/meeting, thirty (30) days in advance.

Following review of any comments received on the draft federal RCRA permit, EPA will issue a final permit decision in accordance with the requirements of 40 CFR § 124.19.

If you have questions concerning the draft federal RCRA permit, please contact Jae Lee, of my staff, at (312) 886-3781.

Sincerely,

A handwritten signature in cursive script, appearing to read "Gary Victorine".

Gary Victorine, Chief  
RCRA Branch

Enclosure

cc: Vic Windle, IDEM

**DRAFT**

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5**

**HAZARDOUS WASTE MANAGEMENT FACILITY PERMIT**

**Facility Name and Location:** ESSROC Cement Corporation  
3084 West County Road 225 South  
Logansport, Indiana 46947

**Owner:** ESSROC Cement Corporation  
3251 Bath Pike  
Nazareth, Pennsylvania 18064

**Operator:** ESSROC Cement Corporation  
3084 West County Road 225 South  
Logansport, Indiana 46947

**U.S. EPA Identification Number:** IND 005 081 542

**Effective Date:** 30 Days from Issuance Date of the Final Permit

**Expiration Date:** Five Years from the Effective Date

The United States Environmental Protection Agency hereby issues a Resource Conservation and Recovery Act permit (hereinafter referred to as the "permit") to ESSROC Cement Corporation (hereinafter referred to as the "Permittee" or addressed in the second person as "you") in connection with the hazardous waste treatment operations at the ESSROC Cement Corporation located in Logansport, Indiana.

This permit is issued under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984 (42 USC § 6901 *et seq.*) (collectively referred to as "RCRA") and EPA's regulations promulgated thereunder (codified, and to be codified, in Title 40 of the Code of Federal Regulations (40 CFR)).

Specifically, this permit addresses requirements for cement kilns burning hazardous waste at 40 CFR Part 266 Subpart H – Hazardous Waste Burned in Boilers and Industrial Furnaces.

The RCRA permit consists of both this permit, which contains the effective Federal RCRA permit conditions, and the effective State RCRA permit conditions issued by the State of Indiana's RCRA program authorized under 40 CFR Part 271 (hereinafter called the "State RCRA permit").

The State RCRA permit was issued on April 23, 2009. The effective and expiration dates of the State RCRA permit are April 23, 2009 and April 23, 2014, respectively. Any hazardous waste activity which requires a RCRA permit and is not included in the RCRA permit is prohibited.

**Permit Approval:**

On January 31, 1986, the State of Indiana received final authorization pursuant to Section 3006 of RCRA, 42 USC § 6926, and 40 CFR Part 271, to administer the pre-HSWA RCRA hazardous waste program. The State of Indiana has also received final authorization to administer certain additional RCRA requirements on several occasions since then. However, because the EPA has not yet authorized the State of Indiana to administer certain regulations, including the Boilers and Industrial Furnaces regulations (see 40 CFR § 266.100 *et seq.*, also known as the BIF regulations), the EPA Region 5 is issuing the RCRA permit requirements for operations at your facility which fall under these regulations.

You must comply with all terms and conditions contained in this permit. This permit consists of all the conditions contained herein, the documents attached hereto, all documents cross-referenced in these documents, approved submittals (including plans, schedules and other documents), the applicable regulations in 40 CFR Parts 124, 260, 261, 262, 264, 266, 268, 270, and applicable provisions of RCRA.

This permit is based on the assumption that 1) the information submitted in your RCRA Part B Permit Application dated May 9, 2008, including the Part A Application, and all other modifications and responses to that application (hereinafter referred to as the "Part B Permit Application"), and 2) the stack test emission data, is accurate, and the facility is configured, operated and maintained as specified in the permit and as described in the Part B Permit Application and other relevant documents.

Any inaccuracies in the submitted information may be grounds for EPA to terminate, revoke and reissue, or modify this permit in accordance with 40 CFR §§ 270.41, 270.42 and 270.43; and for enforcement action. You must inform EPA of any deviation from, or changes in, the information in the Part B Permit Application and other pertinent documents that might affect your ability to comply with the applicable regulations or conditions of this permit.

**Opportunity to Appeal:**

Petitions for review must be submitted within 30 days after EPA serves notice of the final permit decision. Any person who filed comments on the draft permit or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit decision. Any person who failed to file comments or failed to participate in the public hearing on the draft permit may file a petition for review only to the extent of the changes from the draft to the final permit decision. The procedures for permit appeals are found in 40 CFR § 124.19.

**Effective Date:**

This permit is effective as of **30 Days from Issuance Date of the Final Permit** and will remain in effect until **Five Years from the Effective Date**, unless revoked and reissued under 40 CFR § 270.41, terminated under 40 CFR § 270.43, or continued in accordance with 40 CFR § 270.51(a).

By:

\_\_\_\_\_  
Margaret M. Guerriero  
Director  
Land and Chemicals Division

Date: \_\_\_\_\_

**IND 005 081 542**  
**ESSROC Cement Corporation, Logansport, Indiana**

SECTION I—STANDARD PERMIT CONDITIONS .....	1
I.A. EFFECT OF PERMIT .....	1
I.B. PERMIT ACTIONS .....	1
I.B.1 Permit Review, Modification, Revocation and Reissuance, and Termination .....	1
I.B.2 Permit Renewal .....	2
I.C. SEVERABILITY .....	2
I.D. DEFINITIONS .....	2
I.E. DUTIES AND REQUIREMENTS .....	2
I.E.1 Duty to Comply .....	2
I.E.2 Duty to Reapply .....	2
I.E.3 Permit Expiration .....	3
I.E.4 Need to Halt or Reduce Activity Not a Defense .....	3
I.E.5 Duty to Mitigate .....	3
I.E.6 Proper Operation and Maintenance .....	3
I.E.7 Duty to Provide Information .....	3
I.E.8 Inspection and Entry .....	4
I.E.9 Monitoring and Records .....	4
I.E.10 Reporting Planned Changes .....	5
I.E.11 Reporting Anticipated Noncompliance .....	5
I.E.12 Certification of Construction .....	5
I.E.13 Transfer of Permits .....	6
I.E.14 Twenty-Four Hour Reporting .....	6
I.E.15 Other Noncompliance .....	8
I.E.16 Other Information .....	8
I.F. SIGNATORY REQUIREMENT .....	8
I.G. REPORTS, NOTIFICATIONS AND SUBMITTALS TO THE DIRECTOR .....	8
I.H. CONFIDENTIAL INFORMATION .....	9
I.I. DOCUMENTS TO BE MAINTAINED AT THE FACILITY .....	9
I.I.1 Operating Record .....	9
I.I.2 Notifications .....	9
I.I.3 Copy of Permit .....	9
I.J. ATTACHMENTS AND DOCUMENTS INCORPORATED BY REFERENCE .....	9
I.K. COORDINATION WITH THE CLEAN AIR ACT .....	10

SECTION II—GENERAL FACILITY CONDITIONS .....	10
II.A DESIGN AND OPERATION OF FACILITY .....	10
II.B TREATMENT OF OFF-SITE HAZARDOUS WASTE .....	11
II.C SPECIFIC WASTE PROHIBITIONS .....	11
II.D GENERAL WASTE ANALYSIS .....	11
II.E SECURITY PROCEDURES .....	11
II.F GENERAL INSPECTION REQUIREMENTS .....	11
II.F.1 Inspection Schedule .....	11
II.F.2 Inspection Remedies .....	11
II.F.3 Inspection Records .....	11
II.G PERSONNEL TRAINING .....	12
II.G.1 Training Requirements .....	12
II.G.2 Training Schedule .....	12
II.G.3 Training Records .....	12
II.H GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTES .....	12
II.I PREPAREDNESS AND PREVENTION .....	12
II.I.1 Required Equipment .....	12
II.I.2 Testing and Maintenance Equipment .....	13
II.I.3 Arrangements with Local Authorities .....	13
II.J CONTINGENCY PLAN .....	13
II.J.1 Implementation of Contingency Plan .....	13
II.J.2 Copies of Contingency Plan .....	13
II.J.3 Amendments to Contingency Plan .....	13
II.K RECORD KEEPING AND REPORTING .....	13
II.K.1 Operating Record .....	14
II.K.2 Manifest Records .....	14
II.K.3 Biennial Report .....	14
II.K.4 Other Reports .....	14
II.K.5 Waste Minimization .....	14
II.L GENERAL CLOSURE REQUIREMENTS .....	15
II.L.1 Performance Standard .....	15
II.L.2 Amendment to Closure Plan .....	16
II.L.3 Notification of Closure .....	16
II.L.4 Time Allowed for Closure .....	16
II.L.5 Disposal or Decontamination of Equipment, Structures and Soils .....	16
II.L.6 Certification of Closure .....	16

II.M	COST ESTIMATE FOR FACILITY CLOSURE .....	17
II.M.1	Adjustment for Inflation .....	17
II.M.2	Revision Due to Changes in Closure Plan .....	17
II.M.3	Copy at Facility .....	17
II.N	FINANCIAL ASSURANCE FOR FACILITY CLOSURE .....	17
II.O	LIABILITY REQUIREMENTS .....	17
II.P	INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS OR FINANCIAL INSTITUTIONS .....	17
SECTION III—OPERATING REQUIREMENTS FOR CEMENT KILN UNIT .....		18
III.A	DESIGN .....	18
III.A.1	Compliance with Engineering Design Plans and Specifications .....	18
III.A.2	Modifications .....	19
III.B	RESTRICTIVE MATERIALS TO BE BURNED. ....	19
III.C	REGULATION OF CEMENT KILN DUST AND OTHER RESIDUES. ....	19
III.D	HAZARDOUS WASTE AND OTHER FEED STREAM ANALYSIS .....	20
III.E	COMPLIANCE WITH REGULATIONS .....	20
III.F	ANNUAL FEED RATE LIMIT FOR MERCURY .....	20



## **SECTION I—STANDARD PERMIT CONDITIONS**

### **I.A EFFECT OF PERMIT**

You are hereby allowed to manage hazardous waste at ESSROC Cement Corporation, (facility) in accordance with this permit. Under this permit, the treatment of RCRA hazardous waste must comply with all BIF standards and all other terms and conditions in this permit. Other aspects of the storage of RCRA hazardous wastes in containers, tanks, etc., are subject to the conditions in the state-issued portion of the RCRA permit.

Subject to 40 CFR § 270.4, compliance with the RCRA permit during its term generally constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA except for those requirements not included in the permit which become effective by statute.

This permit does not: (1) convey any property rights or any exclusive privilege; (2) authorize any injury to persons or property, or invasion of other private rights; or (3) authorize any infringement of state or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued, or any action brought, under: (1) Sections 3008(a), 3008(h), 3013, or 7003 of RCRA; (2) Sections 104, 106(a), or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 USC §§ 9601 *et seq.* (commonly known as CERCLA); or (3) any other law protecting public health or the environment from any imminent and substantial endangerment to human health, welfare, or the environment. (40 CFR §§ 270.4 and 270.30(g))

### **I.B PERMIT ACTIONS**

#### **I.B.1 Permit Review, Modification, Revocation and Reissuance, and Termination**

The EPA may review, modify, or revoke and reissue this permit, or terminate it for cause, as specified in 40 CFR § 270.41, § 270.42, and § 270.43. The EPA may also review and modify this permit, consistent with 40 CFR § 270.41, to include any terms and conditions it determines are necessary to protect human health and the environment under Section 3005(c)(3) of RCRA. The filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance on your part will not stay the applicability or enforceability of any permit condition. (40 CFR § 270.30(f))

You may request a modification of this permit under the procedures specified in 40 CFR § 270.42. You must not perform any construction associated with a Class 3 permit modification request until such modification request is granted and the modification becomes effective. You may perform construction associated with a Class 2 permit

modification request beginning 60 days after submission of the request unless the Director establishes a later date. (40 CFR §§ 270.42(b)(8) and 270.42(c))

### **I.B.2 Permit Renewal**

This permit may be renewed as specified in 40 CFR § 270.30(b) and Section I.E.2 of this permit. In reviewing any application for a permit renewal, the EPA will consider improvements in the state of control and measurement technology, and changes in applicable regulations. (40 CFR § 270.30(b) and RCRA Section 3005(c)(3))

## **I.C SEVERABILITY**

This permit's provisions are severable; if any permit provision, or the application of any permit provision to any circumstance, is held invalid, such provision's application to other circumstances and the remainder of this permit will not be affected. Invalidity of any statutory or regulatory provision on which any condition of this permit is based does not affect the validity of any other statutory or regulatory basis for that condition. (40 CFR § 124.16(a))

## **I.D DEFINITIONS**

The terms used in this permit will have the same meaning as in 40 CFR Parts 124, 260 through 266, 268 and 270, unless this permit specifically provides otherwise. Where neither the regulations nor the permit define a term, the term's definition will be the standard dictionary definition or its generally accepted scientific or industrial meaning.

## **I.E DUTIES AND REQUIREMENTS**

### **1.E.1 Duty to Comply**

You must comply with all conditions of this permit, except to the extent and for the duration for which an emergency permit authorizes such noncompliance (40 CFR § 270.61). Any permit noncompliance, except under the terms of an emergency permit, constitutes a violation of RCRA and will be grounds for: enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 CFR § 270.30(a))

### **1.E.2 Duty to Reapply**

If you wish to continue an activity this permit regulates after its expiration date, you must apply for and obtain a new permit. You must submit a complete application for a new

permit at least 180 days before the permit expires, unless the Director grants permission for a later date. The Director will not grant permission to submit the complete application for a new permit later than the permit's expiration date. (40 CFR §§ 270.10(h) and 270.30(b))

### **I.E.3 Permit Expiration**

Unless revoked or terminated, this permit and all conditions herein will be effective until 5 years from the effective date of this permit. This permit and all conditions herein will remain in effect beyond the permit's expiration date if you have submitted a timely, complete application (40 CFR § 270.10 and §§ 270.13 through 270.29), and, through no fault of your own, the Director has not made a final determination regarding permit reissuance. (40 CFR §§ 270.50 and 270.51)

### **I.E.4 Need to Halt or Reduce Activity Not a Defense**

In an enforcement action, you are not entitled to a defense that it would have been necessary to halt or reduce the permitted activity to maintain compliance with this permit. (40 CFR § 270.30(c))

### **I.E.5 Duty to Mitigate**

In the event of noncompliance with this permit, you must take all reasonable steps to minimize releases to the environment resulting from the noncompliance and must implement all reasonable measures to prevent significant adverse impacts on human health or the environment. (40 CFR § 270.30(d))

### **I.E.6 Proper Operation and Maintenance**

You must always properly operate and maintain all facilities and treatment and control systems (and related appurtenances) that you install or use to comply with this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires you to operate back-up or auxiliary facilities or similar systems only when necessary to comply with this permit. (40 CFR § 270.30(e))

### **I.E.7 Duty to Provide Information**

You must provide the Director, within a reasonable time, any relevant information that the Director requests to determine whether there is cause to modify, revoke and reissue,

or terminate this permit, or to determine permit compliance. You must also provide the Director, upon request, with copies of any records this permit requires. The information you must maintain under this permit is not subject to the Paperwork Reduction Act of 1995, 44 USC §§ 3501 *et seq.* (40 CFR §§ 264.74(a) and 270.30(h))

#### **I.E.8 Inspection and Entry**

Upon the presentation of credentials and other legally required documents, you must allow the Director or an authorized representative to:

**I.E.8.a** Enter at reasonable times upon your premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this permit;

**I.E.8.b** Have access to and copy, at reasonable times, any records that you must keep under the conditions of this permit;

**I.E.8.c** Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

**I.E.8.d** Sample or monitor any substances at any location at reasonable times, to assure permit compliance or as RCRA otherwise authorizes.

Notwithstanding any provision of this permit, EPA retains the inspection and access authority which it has under RCRA and other applicable laws. (40 CFR § 270.30(i))

#### **I.E.9 Monitoring and Records**

**I.E.9.a** Samples and measurements taken for monitoring purposes must be representative of the monitored activity. The methods used to obtain a representative sample of the feed streams, treatment residues, or other hazardous wastes to be analyzed must be the appropriate methods from Appendix I of 40 CFR Part 261, or the methods specified in the Waste Analysis Plan which is Section 3 of the Part B Permit Application, or an equivalent method approved by the Director. Laboratory methods must be those specified in *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods* (SW-846, latest edition), *Methods for Chemical Analysis of Water and Wastes* (EPA 600/4-79-020), or an equivalent method, as specified in the referenced Waste Analysis Plan. (40 CFR § 270.30(j)(1))

**I.E.9.b** You must retain, at the facility, records of all monitoring information as

specified in 40 CFR § 264.74.

**I.E.9.c** You must submit all monitoring results at the intervals specified in this permit.

**I.E.9.d** You must retain all reports, records, or other documents, required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the reports, records, or other documents, unless a different period is specified in this permit. All operating records, monitoring data, and waste analysis data produced to comply with the Section III of this permit shall be retained at the facility until closure of the facility. These periods may be extended by request of the Director at any time and automatically extended during the course of any unresolved enforcement action regarding this facility. (40 CFR §§ 270.30(j) and 270.31)

#### **I.E.10 Reporting Planned Changes**

You must notify the Director as soon as possible of any planned physical alterations or additions to the permitted facility. (40 CFR § 270.30(l)(1))

#### **I.E.11 Reporting Anticipated Noncompliance**

You must notify the Director, in advance, of any planned changes in the permitted facility or activity that may result in permit noncompliance. Advance notice will not constitute a defense for any noncompliance. (40 CFR § 270.30(l)(2))

#### **I.E.12 Certification of Construction**

You must not operate any RCRA air emission control devices completed after the effective date of this permit until you have submitted to the Director, by certified mail or hand-delivery, a letter signed both by your authorized representative and by a registered professional engineer. That letter must state that the portions of the facility covered by this permit have been constructed in compliance with the applicable conditions of this permit. In addition, you must not operate the permitted control devices until either:

**I.E.12a.** The Director or his/her representative has inspected those portions of the facility and finds them in compliance with the conditions of the permit; or

**I.E.12b.** The Director waives the inspection.

(40 CFR § 270.30(l)(2))

### **I.E.13 Transfer of Permits**

This permit is not transferable to any person, except after notice to the Director. Under 40 CFR § 270.40, the Director may require permit modification, or revocation and reissuance to change your name and incorporate other RCRA requirements. Before transferring ownership or operation of the facility during its operating life, you must notify the new owner or operator in writing of the requirements of 40 CFR Parts 264, 266, 268, and 270, and must provide a copy of the RCRA permit to the new owner or operator. (40 CFR §§ 264.12(c), 270.30(l)(3), and 270.40(a))

### **I.E.14 Twenty-Four Hour Reporting**

**I.E.14.a** You must report to the Director any noncompliance with this permit that may endanger human health or the environment. Any such information must be promptly reported orally, but no later than 24 hours after you become aware of the circumstances.

**I.E.14.b** The report must include the following (40 CFR §§ 270.30(l)(6) and 270.33): (1) Information concerning release of any hazardous waste that may endanger public drinking water supplies; (2) Information of a release or discharge of hazardous waste; or (3) Information of a fire or explosion from the hazardous waste management facility, that could threaten the environment or human health outside the facility. You must include the following information:

- (1) Name, title and telephone number of the person making the report;
- (2) Name, address and telephone number of the facility owner or operator;
- (3) Facility name, address and telephone number;
- (4) Date, time and type of incident;
- (5) Location and cause of incident;
- (6) Identification and quantity of material(s) involved;
- (7) Extent of injuries, if any;
- (8) Assessment of actual or potential hazards to the environment and human health outside the facility, where applicable;

- (9) Description of any emergency action taken to minimize the threat to human health and the environment; and
- (10) Estimated quantity and disposition of recovered material that resulted from the incident.

**I.E.14.c** In addition to the oral notification required under Sections I.E.14.a and I.E.14.b of this permit, a written report must also be provided within 5 calendar days after you become aware of the circumstances. The written report must include, but is not limited to, the following:

- (1) Name, address and telephone number of the person reporting;
- (2) Incident description (noncompliance and/or release or discharge of hazardous waste), including cause, location, extent of injuries, if any, and an assessment of actual or potential hazards to the environment and human health outside the facility, where applicable;
- (3) Period(s) in which the incident (noncompliance and/or release or discharge of hazardous waste) occurred, including exact dates and times;
- (4) Whether the incident's results continue to threaten human health and the environment, which will depend on whether the noncompliance has been corrected and/or the release or discharge of hazardous waste has been adequately cleaned up; and
- (5) If the noncompliance has not been corrected, the anticipated period for which it is expected to continue and the steps taken or planned to reduce, eliminate, and prevent the recurrence of the noncompliance.

The Director may waive the requirement that written notice be provided within 5 calendar days; however, you will then be required to submit a written report within 15 calendar days of the day on which you must provide oral notice, in accordance with Sections I.E.14.a and I.E.14.b of this permit. (40 CFR § 270.30(1)(6)) (40 CFR § 270.30(h))

#### **I.E.15 Other Noncompliance**

You must report all instances of noncompliance not reported under Section I.E.14 of this permit, when any other reports this permit requires are submitted. The reports must contain the information listed in Section I.E.14 of this permit. (40 CFR § 270.30(I)(10))

#### **I.E.16 Other Information**

**I.E.16.a** Whenever you become aware that you failed to submit or otherwise omitted any relevant facts in the Part B Permit Application or other submittal, or submitted incorrect information in the Part B Permit Application or other submittal, you must promptly notify the Director of any incorrect information or previously omitted information, submit the correct facts or information, and explain in writing the circumstances of the incomplete or inaccurate submittal. (40 CFR § 270.30(I)(11)) (40 CFR § 270.30(h))

**I.E.16.b** All other requirements contained in 40 CFR § 270.30 not specifically described in this permit are incorporated into this permit and you must comply with all those requirements.

### **I.F SIGNATORY REQUIREMENT**

You must sign and certify all applications, reports, or information this permit requires, or which are otherwise submitted to the Director, in accordance with 40 CFR § 270.11. (40 CFR § 270.30(k))

### **I.G REPORTS, NOTIFICATIONS AND SUBMITTALS TO THE DIRECTOR**

Except as otherwise specified in this permit, all reports, notifications, or other submittals that this permit requires to be sent or given to the Director should be sent by certified mail or express mail, or hand-delivered to the U.S. Environmental Protection Agency Region 5, RCRA Branch, at the following address:

RCRA Branch, LR-8J  
Land and Chemicals Division  
U.S. EPA Region 5  
77 West Jackson Boulevard  
Chicago, Illinois 60604



## **I.H CONFIDENTIAL INFORMATION**

In accordance with 40 CFR Part 2, Subpart B, you may claim any information this permit requires, or otherwise submitted to the Director, as confidential. You must assert any such claim at the time of submittal in the manner prescribed on the application form or instructions or, in the case of other submittals, by stamping the words "Confidential Business Information" on each page containing such information. If you made no claim at the time of submittal, the Director may make the information available to the public without further notice. If you assert a claim, the information will be treated in accordance with the procedures in 40 CFR Part 2. (40 CFR § 270.12)

## **I.I DOCUMENTS TO BE MAINTAINED AT THE FACILITY**

You must maintain at the facility, until closure is completed and certified by an independent registered professional engineer, the following documents and all amendments, revisions, and modifications to them.

### **I.I.1 Operating Record**

You must maintain in the facility's operating record the documents required by this permit, and by the applicable portions of 40 CFR § 266.102, § 264.13, and § 264.73 (as they apply to the equipment used to comply with this permit).

### **I.I.2 Notifications**

You must maintain notifications from generators that are required by 40 CFR § 268.7 to accompany an incoming shipment of hazardous wastes subject to 40 CFR Part 268, Subpart C, that specify treatment standards, as required by 40 CFR §§ 264.73, 268.7, and this permit.

### **I.I.3 Copy of Permit**

You must keep a copy of this permit on site, and you must update it as necessary to incorporate any official permit modifications.

## **I.J ATTACHMENTS AND DOCUMENTS INCORPORATED BY REFERENCE**

**I.J.1** All attachments and documents that this permit requires to be submitted, if any, including all plans and schedules are, upon the Director's approval, incorporated into this permit by reference and become an enforceable part of this permit. Since required items are essential elements of this permit, failure to submit any of the required items or submission of inadequate or insufficient information may subject you to enforcement

action under Section 3008 of RCRA. This may include fines, or permit suspension or revocation.

**I.J.2** This permit also includes the documents attached hereto, all documents cross-referenced in these documents, and the applicable regulations contained in 40 CFR Parts 124, 260, 261, 262, 264, 266, 268, and 270, and applicable provisions of RCRA, all of which are incorporated herein by reference.

**I.J.3** Any inconsistency or deviation from the approved designs, plans and schedules is a permit noncompliance. The Director may grant written requests for extensions of due dates for submittals required in this permit.

**I.J.4** If the Director determines that actions beyond those provided for, or changes to what is stated herein, are warranted, the Director may modify this permit according to procedures in Section I.B of this permit.

**I.J.5** If any documents attached to this permit are found to conflict with any of the conditions in this permit, the condition will take precedence.

#### **I.K COORDINATION WITH THE CLEAN AIR ACT**

You must fully comply with all applicable Clean Air Act (CAA) and RCRA permit limits. Where two or more operating limitations apply, the most stringent operating limitations take precedence.

### **SECTION II—GENERAL FACILITY CONDITIONS**

You must comply with the following conditions to the extent that they apply to the cement kilns and its associated and ancillary equipment.

#### **II.A DESIGN AND OPERATION OF FACILITY**

You must maintain and operate the cement kiln in a manner that minimizes the possibility of a fire, explosion, or any unplanned, sudden or non-sudden release of hazardous waste or hazardous constituents to air, soil, or surface water that could threaten human health or the environment (40 CFR § 264.31). The kiln unit must be configured, operated and maintained in accordance with the engineering drawings and specifications in the Part B Permit Application.

## **II.B TREATMENT OF OFF-SITE HAZARDOUS WASTE**

You are authorized to treat hazardous waste from off-site sources in the kilns. In order to treat off-site generated hazardous waste in the kilns, you shall first be allowed by the State RCRA Permit to receive and store the off-site hazardous waste.

## **II.C SPECIFIC WASTE PROHIBITIONS**

You must comply with all applicable requirements of 40 CFR Part 268. No on- or off-site generated hazardous waste shall be burned in the kilns unless it is specified in the Part A Application which is Attachment 1-2 of the Part B Permit Application.

## **II.D GENERAL WASTE ANALYSIS**

You must follow the waste analysis procedures required by 40 CFR § 264.13, as described in the Waste Analysis Plan which is Section 3 of the Part B Permit Application (40 CFR § 264.13).

## **II.E SECURITY PROCEDURES**

You must comply with the security provisions of 40 CFR § 264.14(b) and (c) as described in Section 6, Hazard Prevention, of the Part B Permit Application.

## **II.F GENERAL INSPECTION REQUIREMENTS**

### **II.F.1 Inspection Schedule**

You must inspect the facility regularly in accordance with the inspection schedule described in Section 6, Hazard Prevention, of the Part B Permit Application. (40 CFR § 264.15(b))

### **II.F.2 Inspection Remedies**

You must remedy any deterioration or malfunction of equipment or structures discovered during an inspection, in accordance with 40 CFR § 264.15(c).

### **II.F.3 Inspection Records**

You must record all inspections in the inspection log or summary, in accordance with 40 CFR § 264.15(d), and keep them as part of the operating record, in accordance with 40 CFR § 264.73(b)(5) and Section I.I of this permit.

## **II.G PERSONNEL TRAINING**

### **II.G.1 Training Requirements**

You must ensure that all personnel who handle hazardous waste are trained in hazardous waste management, safety procedures and emergency procedures, as applicable to their job description, in accordance with 40 CFR § 264.16, and that they follow the outlines and procedures in Section 7, Personnel Training, of the Part B Permit Application.

### **II.G.2 Training Schedule**

Facility personnel must successfully complete the hazardous waste training described in Section II.G.1 of this permit within six months after the date of their employment or assignment to a facility, or to a new position at a facility, whichever is later. Employees must not work in unsupervised positions until they have completed the training identified in Section II.G.1 of this permit. (40 CFR § 264.16(b))

### **II.G.3 Training Records**

You must maintain a copy of the personnel training documents and records, in accordance with 40 CFR § 264.16(d) and (e) and Section II.I of this permit.

## **II.H GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTES**

You must comply with 40 CFR § 264.17(a) when handling ignitable, reactive, or incompatible wastes.

## **II.I PREPAREDNESS AND PREVENTION**

You must comply with all applicable preparedness and prevention requirements, in accordance with 40 CFR Part 264, Subpart C, including those in the following conditions:

### **II.I.1 Required Equipment**

At a minimum, you must maintain at the facility the equipment required in 40 CFR § 264.32 and § 264.52(e), and specified in Section 5, Contingency Plan and Section 6, Hazard Prevention, of the Part B Permit Application.

### **II.I.2 Testing and Maintenance of Equipment**

You must test and maintain the equipment referred to in Section II.I.1 of this permit, in accordance with the inspection schedules that are included as Sections 5 and 6 of the Part B Permit Application. (40 CFR §§ 264.15(b)(1) and 264.33)

### **II.I.3 Arrangements with Local Authorities**

You must attempt to develop and maintain preparedness and prevention arrangements with state and local authorities, as 40 CFR § 264.37 requires. If state or local authorities decline to enter into such arrangements, you must document this refusal in the operating record maintained under Section I.I of this permit. (40 CFR § 264.37(b))

## **II.J CONTINGENCY PLAN**

You must comply with all applicable requirements in 40 CFR Part 264, Subpart D, including the following conditions:

### **II.J.1 Implementation of Contingency Plan**

You must immediately carry out the provisions of the Contingency Plan included as Section 5 of the Part B Permit Application, and follow the emergency procedures described by 40 CFR § 264.56 whenever there is a fire, explosion or release of hazardous waste or hazardous waste constituents that could threaten human health or the environment. (40 CFR § 264.51(b))

### **II.J.2 Copies of Contingency Plan**

You must provide a copy of the Contingency Plan, Section 5 of the Part B Permit Application and all revisions to the local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services. (40 CFR § 264.53(b))

### **II.J.3 Amendments to Contingency Plan**

You must review, and immediately amend if necessary, the Contingency Plan, Section 5 of the Part B Permit Application, in accordance with 40 CFR § 264.54.

## **II.K RECORD KEEPING AND REPORTING**

In addition to the record keeping and reporting requirements specified elsewhere in this permit, you must comply with those in the following conditions:

### **II.K.1 Operating Record**

You must maintain a written or electronic operating record at the facility, in accordance with 40 CFR §§ 264.73 and 266.102(e)(8).

### **II.K.2 Manifest Records**

You must comply with the 40 CFR §§ 264.71, 264.72 and 270.30(1)(7) manifest and manifest discrepancy record keeping and reporting requirements. You must not receive any unmanifested hazardous waste (as defined by 40 CFR §§ 264.76 and 270.30(1)(8)).

### **II.K.3 Biennial Report**

You must, by March 1 of each even-numbered year, submit to the Director, a biennial report covering each of the permitted hazardous waste management unit's activities, in accordance with 40 CFR § 264.75.

### **II.K.4 Other Reports**

You must submit to the Director any additional reports specified in 40 CFR § 264.77.

### **II.K.5 Waste Minimization**

For hazardous wastes you generate at your facility, if you generate in excess of 200 pounds of hazardous waste during a calendar year, in the following year you must implement a waste minimization program, unless the Director directs otherwise:

For each year that your facility generates 200 pounds or more of hazardous waste, you must, by March 1 of the following year, submit to the Director a certification in accordance with 40 CFR § 264.73(b)(9), and signed in accordance with 40 CFR § 270.11 and Section I.F of this permit, that you have a program in place to reduce the volume and toxicity of hazardous waste generated to the degree that you determine is economically practicable. The waste minimization program may include the following:

**II.K.5.a** Any written policy or statement that outlines goals, objectives, and/or methods for source reduction and recycling of hazardous waste generated at the facility;

**II.K.5.b** Any employee training or incentive programs designed to identify and implement source reduction and recycling opportunities;

**II.K.5.c** Any source reduction and/or recycling measures implemented in the last 5 years or planned for the near future;

**II.K.5.d** An itemized list of the dollar amounts of capital expenditures (plant and equipment) and operating costs devoted to source reduction and recycling of hazardous waste generated at the facility;

**II.K.5.e** Factors that have prevented implementation of source reduction and/or recycling of waste generated at the facility;

**II.K.5.f** Sources of information on source reduction and/or recycling received at the facility (for example, local government, trade associations, or suppliers);

**II.K.5.g** An investigation of additional waste minimization efforts that could be implemented at the facility. This investigation must analyze the potential for reducing the quantity and toxicity of each hazardous waste stream generated at the facility through production reformulation, recycling and all other appropriate means. The analysis must assess the technical feasibility, cost and potential waste reduction for each option;

**II.K.5.h** A flow chart or matrix detailing all hazardous wastes you produce by quantity, type, and building or area; and

**II.K.5.i** A demonstration of the need to use those processes which produce a particular hazardous waste due to a lack of alternative processes or available technology that would produce less hazardous waste.

You must include the following information in the operating record: 1) the annual certification; 2) a written description of efforts undertaken during the year to reduce the volume and toxicity of waste generated; and 3) a written description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years. These documents must be available at the facility at all times for EPA, the State, local agencies, or their duly authorized representatives' inspection.

## **II.L GENERAL CLOSURE REQUIREMENTS**

With respect to the kiln units, you must comply with all applicable requirements in 40 CFR Part 264, Subpart G, Closure and Post-Closure, including those in the following conditions:

### **II.L.1 Performance Standard**

You must close the kiln unit in accordance with 40 CFR §§ 264.111, and 266.102(e)(11), and in accordance with the Closure Requirements for Cement Kilns submitted in your Part B Permit Application.

### **II.L.2 Amendment to Closure Plan**

Whenever necessary, you must amend the Closure Plan, in Section 8 of the Part B Permit Application, in accordance with 40 CFR § 264.112(c). When necessary you must submit a written notification or request to the Director for a permit modification to amend the Closure Plan, Section 8 of the Part B Permit Application in accordance with 40 CFR § 264.112(c).

### **II.L.3 Notification of Closure**

You must notify the Director in writing at least 45 days before the date on which you expect to begin partial or final closure of the kiln unit at your facility.  
(40 CFR § 264.112(d))

### **II.L.4 Time Allowed for Closure**

After treating the final hazardous waste volume in the kiln unit at your facility, you must treat and remove from the unit all hazardous waste and must complete closure activities in accordance with 40 CFR § 264.113 and the schedule specified in the Closure Plan, in Section 8 of the Part B Permit Application.

### **II.L.5 Disposal or Decontamination of Equipment, Structures and Soils**

You must decontaminate and/or dispose of all contaminated equipment, structures and soils, as 40 CFR § 264.114 requires, and in accordance with the Closure Plan, in Section 8 of the Part B Permit Application.

### **II.L.6 Certification of Closure**

You must provide a certification statement for each hazardous waste management unit when that hazardous waste management unit has been closed in accordance with the Closure Plan, in Section 8 of the Part B Permit Application. An independent registered professional engineer must sign the certification in accordance with 40 CFR § 270.11 and other applicable conditions of this permit. (40 CFR § 264.115)

## **II.M COST ESTIMATE FOR FACILITY CLOSURE**

### **II.M.1 Adjustment for Inflation**

You must adjust the closure cost estimate for inflation pursuant to the schedule specified in 40 CFR § 264.142(b).



### **II.M.2 Revision due to Changes in Closure Plan**

You must revise the closure cost estimates within 30 days after receiving the Director's approval whenever there is a change in the facility's Closure Plan, Section 8 of the Part B Permit Application, if that change increases closure costs (40 CFR § 264.142(c)).

### **II.M.3 Copy at Facility**

You must keep at the facility the latest closure cost estimates, as 40 CFR § 264.142(d) and Section I.I of this permit requires.

## **II.N FINANCIAL ASSURANCE FOR FACILITY CLOSURE**

You must demonstrate continuous compliance with 40 CFR §§ 264.143 and 264.146 by documenting financial assurance, as 40 CFR § 264.151 requires, in at least the amount of the cost estimate that Section II.M of this permit requires. Under 40 CFR § 264.143, the Director or the Commissioner of the Indiana Department of Environmental Management (IDEM) must approve any changes in financial assurance mechanisms.

You must adjust the financial assurance documents, as necessary, to account for any adjustments to the closure cost estimate in Section II.M.1 of this permit pursuant to the schedules contained in 40 CFR § 264.143.

## **II.O LIABILITY REQUIREMENTS**

You must demonstrate continuous compliance with 40 CFR § 264.147(a)'s requirement of obtaining and maintaining liability insurance coverage for sudden accidental occurrences in the amount of at least \$1 million per occurrence, with an annual aggregate of at least \$2 million, exclusive of legal defense costs.

## **II.P INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS OR FINANCIAL INSTITUTIONS**

You must comply with 40 CFR § 264.148, regarding voluntary or involuntary Bankruptcy, or loss of authority of a trustee or financial institution whenever necessary.

## **SECTION III—OPERATING REQUIREMENTS FOR CEMENT KILN UNIT**

This Section addresses the operation of your cement kilns. ESSROC operates two cement kilns that use hazardous waste-derived fuels to produce cement at its Logansport facility. A Part 70 operating permit was issued by the Office of Air Quality of the IDEM on November 8, 2010.

(The expiration date of the Part 70 operating permit is November 8, 2015.)

Modifications of the cement kiln system, including its ancillary equipment, shall require a permit modification pursuant to 40 CFR § 270.42.

### **III.A DESIGN**

#### **III.A.1 Compliance with Engineering Design Plans and Specifications**

**III.A.1.a** You are authorized to manage hazardous waste in the cement kilns in accordance with the engineering design plans and specifications contained in the Part B Permit Application.

**III.A.1.b** You must operate the hazardous waste combustion units in a manner which minimizes the possibility of a fire, explosion, or any unplanned, sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water that might threaten human health or the environment.  
(40 CFR § 264.31)

#### **III.A.2 Modifications**

Modifications to the design plans and specifications will be allowed only in accordance with Section I.E.10 of this permit. Modifications which might affect the facility's handling of hazardous waste or emissions from the combustion of hazardous waste will be allowed only in accordance with Section I.B.1 of this permit.

### **III.B RESTRICTIVE MATERIALS TO BE BURNED**

**III.B.1** You shall not burn in the kiln the following hazardous waste listed for dioxin or hazardous waste derived from any of these wastes: F020, F021, F022, F023, F026, and F027.

**III.B.2** You shall not burn hazardous waste containing polychlorinated biphenyls (PCBs) at concentrations greater than or equal to 50 parts per million.

**III.B.3** You shall not burn radioactive or nuclear hazardous waste.

**III.B.4** You shall not burn hazardous waste considered medical waste.

**III.B.5** You must not dilute the prohibited inorganic metal-bearing hazardous wastes (listed in Appendix XI of 40 CFR Part 268), unless the hazardous waste can be demonstrated to comply with one or more of the criteria

specified in 40 CFR § 268.3(c), to prepare fuel for the kiln.

**III.B.6** You must not directly transfer hazardous waste from tank-truck, rail-car, or any other moving vehicle to the cement kilns.

### **III.C REGULATION OF CEMENT KILN DUST AND OTHER RESIDUES**

1. The cement kiln dust (CKD) or residue generated from the burning or processing of hazardous waste in your cement kilns is excluded from being considered a hazardous waste if the following criteria are met:
  - (a) A minimum of fifty (50) percent by weight of the normal cement-production raw materials must be processed in the cement kiln;
  - (b) The concentration of each constituent of concern, determined based on the information specified in Attachment C, Waste Analysis Plan, of the Part B Permit Application, in the hazardous waste-derived CKD or residue must not exceed the health-based level specified in Appendix VII of 40 CFR Part 266, or the level of detection (using analytical procedures prescribed in SW-846), whichever is higher, for the nonmetal constituents; and
  - (c) Records sufficient to document compliance with the Condition III.C.1.(a) and (b) shall be retained until closure of the cement kilns.  
(40 CFR § 266.112)
2. You shall sample and analyze the waste-derived CKD or residue according to the sampling frequency and quality assurance and quality control procedures according to Section 3, Waste Analysis Plan, of the Part B Permit Application.
3. You shall place the CKD or residue in the on-site landfill according to the management guideline and plan approved by the IDEM.
4. You shall construct, maintain and operate the on-site landfill in accordance with the requirement of the IDEM.
5. Any pile of hazardous waste-derived CKD or residue which is not meeting exclusion requirements specified in Condition III.C.1 shall be stored in containers that meet Federal and State standards and be disposed of off-site at a hazardous waste disposal or treatment facility.
6. You shall sample, analyze, and manage spent refractory materials used to line the cement kiln in accordance with Section 3, Waste Analysis Plan, of the Part B

Permit Application.

### **III.D HAZARDOUS WASTE AND OTHER FEED STREAM ANALYSIS**

You shall conduct sampling and analysis as described in the Waste Analysis Plan which is Section 3 of the Part B Permit Application, to ensure that the hazardous waste and other fuels fired into the cement kiln are within the physical and chemical composition limits specified in the permit. Changes to the sampling and analysis procedures described in the Waste Analysis Plan shall require a permit modification as required by 40 CFR § 270.42.

### **III.E COMPLIANCE WITH REGULATIONS**

For the purposes of permit enforcement, compliance with the operating requirements specified in this permit shall be regarded as compliance with 40 CFR § 266.102. However, any evidence that indicates that compliance with these permit conditions is insufficient to ensure compliance with the requirements of 40 CFR § 266.102 shall constitute "information" which may justify modification or revocation and re-issuance of a permit under 40 CFR § 270.41.

### **III.F ANNUAL FEED RATE LIMIT FOR MERCURY**

III.F.1 You shall comply with the annual feed rate limit for the compound specified below (yearly total both Kiln #1 and Kiln #2, combined):

<u>Compound</u>	<u>Annual Feed Limit</u>
Mercury	87.91 pounds (lb) per year

III.F.2 You must record in the operating record the annual total feed of the compound specified in Condition III.F.1.f of this permit, from both Kiln #1 and Kiln #2, combined. Starting from the effective date of this federal RCRA permit, at each anniversary date, you shall calculate the yearly total feed of mercury for both Kiln #1 and Kiln #2, combined. You must maintain the annual total feed data at the facility and it must be available at all times for EPA, the State, local agencies, or their duly authorized representatives' inspection.

III.F.3 You must conduct a test to determine the removal efficiency of the mercury compound at Kiln #2. Such test must be conducted before or during the next performance or compliance test required at the facility by the State or federal agencies. At least 90 days prior to conducting the removal efficiency test at Kiln #2, as required in this paragraph, you must submit a test plan, including, but not limited to, a waste analysis plan, a quality assurance project plan, and a scope of procedures for the laboratories to

EPA for approval. Based on the results of the removal efficiency test, EPA may recalculate and revise the mercury annual feed rate limit provided for in this permit using the new System Removal Efficiency.



**Administrative Record Index (DRAFT RCRA PERMIT)**

ESSROC Cement Corporation

Logansport, Indiana

IND 005 081 542

<u>Date</u>	<u>Title</u>	<u>Date</u>	<u>Prepared</u>
1.	Part B Permit Application (Separate, 3 binders)	5/9/08	ESSROC
2.	Part B Application NOD #1 (not alone, included in #3)	7/31/08	IDEM
3.	Particle Size Lab Documents(40)	8/13/08	ESSROC
4.	ESSROC's response to NOD #1	8/29/08	ESSROC
5.	Revised Part B Application ((Separate, 3 binders)	8/29/08	ESSROC
6.	Part B Application NOD #2 (included in #7)	10/23/08	IDEM
7.	ESSROC's Response to NOD #2	11/12/08	ESSROC
8.	HWC NESHAP CPT and CMS Performance Evaluation Plan (Actual Plan Date is October 2008)	11/20/08	ESSROC
9.	Class 1 Modification Request	1/2/09	ESSROC
10.	State Draft RCRA Permit (300) (see the IDEM Virtual File, #42615559) <a href="http://12.186.81.89/Pages/Public/Search.aspx">http://12.186.81.89/Pages/Public/Search.aspx</a>	1/22/09	IDEM
10A	Risk assessment Update Request	1/22/09	EPA
11.	CPT Plan NOD (4)	3/27/09	IDEM
12.	Temporary Authorization of Roll-off Containers	4/6/09	IDEM
13.	State Final RCRA Permit	4/8/09	IDEM
14.	Class 1 modification request for sunset Language	5/11/09	ESSROC
15.	Mercury Sensitivity Analysis (a CD is included)	5/15/09	ESSROC
16.	CPT plan NOD Response (40)	5/27/09	ESSROC
17.	EPA 's Response for Sunset Language Request	6/5/09	EPA
18.	Mercury Risk Assessment Data Collection (8)	08/2009	ESSROC
19.	Hg Speciation and Particle Size Request	8/3/09	EPA
20.	Response to test extension of Kiln #2(2)	8/06/09	EPA
21.	ESSROC's response to Hg Speciation Request	8/31/09	ESSROC
22.	Metals Extrapolation Data (5)	9/10/09	ESSROC
23.	E-mail questions for waste analysis (included in 20)	9/10/09	EPA
24.	Response to the 9/10/09 e-mail questions (Feedstream Analysis and Waste analysis Plan Attached)	9/11/09	ESSROC
25.	Mercury Risk Assessment Data Collection Test Report Kiln #1 (Appendices are included in a CD (attached))	02/2010	ESSROC
26.	NOC and CPT Report-Kiln 1 (50)	02/2010	ESSROC
27.	Revised Mercury Comparative Analysis (40)	2/17/10	ESSROC
28.	Permit Modification	10/14/10	IDEM
29.	Title 5 Air permit (500)	11/8/10	IDEM
30.	Particle Size Data Report (by METCO Environmental)	12/8/10	ESSROC
31.	Final Class 3 Modification	1/12/11	IDEM
32.	Class 1 Modification Request	3/5/12	ESSROC

33. NOC and CPT Report-Kiln 2 (50)	10/2011	ESSROC
34. EJ Report	4/12/12	EPA
35. DM Report	4/12/12	EPA
36. System Removal efficiency Report	5/10/12	EPA
37. Risk Assessment Report	6/19/12	EPA
38. Annual Hg Feed Rate Limit memo	6/28/12	EPA
39. Draft RCRA Federal Permit	7/22/12	EPA

\*\*\* Above Documents are on file in the RCRA Branch, U.S. EPA, Chicago, IL

CMS: Compliance Monitoring Strategy  
 CPT: Comprehensive Performance Test  
 EJ: Environmental Justice  
 EPA: U.S. Environmental Protection Agency  
 ESSROC: ESSROC Cement Corporation  
 DM: Dispersion Modeling  
 Hg: Mercury  
 HWC: Hazardous Waste Combustion  
 IDEM: Indiana Department of Environmental Management Hg: Mercury  
 MACT: Maximum Achievable Control Technology  
 NESHAP: National Emission Standards for Hazardous Air Pollutants  
 NOD: Notice of Deficiency  
 NOC: Notice of Compliance  
 Part B: Part B Permit Application  
 RCRA: Resource Conservation Resource Act  
 SRE: System Removal Efficiency





## **EPA Announces a Public Comment Period on a Permit for the ESSROC Cement Corp.**

Logansport, Indiana

The U.S. Environmental Protection Agency plans to issue a federal Resource Conservation and Recovery Act hazardous waste management permit to ESSROC Cement Corp. for its Logansport facility. The permit would include operating requirements for the cement kilns, including annual mercury feed rate limit.

Before EPA makes its decision final, the Agency will review written public comments submitted during the **public comment period** that runs July 22, to **midnight, Sept. 7**. EPA will consider a request to hold a public hearing. Send your comments to:

**Jae Lee**

EPA Region 5 Land and Chemicals Division (LR-8J)

77 W. Jackson Blvd.

Chicago, IL 60604-3590

lee.jae@epa.gov

fax: 312-692-2408

If you have questions or need more information, call Rafael P. Gonzalez at 800-621-8431, Ext. 60269, 9:30 a.m. – 5:30 p.m., weekdays.

You may see the permit application and other materials EPA used to make a decision at the **Logansport-Cass County Public Library** 616 East Broadway, or at EPA's Chicago regional office. Or visit, [www.epa.gov/region5/waste/permits/actions.htm#2012](http://www.epa.gov/region5/waste/permits/actions.htm#2012).



# EPA Proposes to OK Permit For ESSROC

Logansport, Indiana

July 2012

## Comments welcomed

Comments on the ESSROC proposed permit action can be submitted to EPA Environmental Engineer Jae Lee at the address below no later than September 7, 2012. You may also request EPA hold a public hearing about this permit. At a hearing you would have an opportunity to submit oral and written comments, ask questions, make statements and discuss any concerns about the permit with EPA staff. Here is Jae's contact information:

### Jae Lee

EPA Region 5, Land and Chemicals  
Division (LR-8J)  
77 W. Jackson Blvd.  
Chicago, Illinois 60604-3590  
Voice: 312-886-3781  
Fax: 312-692-2408  
E-mail: [lee.jae@epa.gov](mailto:lee.jae@epa.gov)

### Region 5 toll-free:

800-621-8431, ext 6-3781, 9:30 a.m.  
– 5:30 p.m., weekdays

## For more information

The draft permit and this fact sheet may also be viewed online:  
<http://www.epa.gov/region5/waste/permits/actions.htm#2012>

*(See box back page for locations of the administrative record, which can be reviewed by the public.)*

U.S. Environmental Protection Agency Region 5 is proposing to issue a hazardous waste management permit to ESSROC Cement Corporation (ESSROC), but will review public comments before making a final decision. The permit would include operating requirements for the cement kilns, including an annual mercury feed rate limit at the Logansport facility. <sup>1</sup> EPA is acting on the hazardous waste permit application under its responsibilities set out in the federal Resource Conservation and Recovery Act (RCRA).

## Background

ESSROC operates a hazardous waste storage and treatment facility at Logansport, Indiana. ESSROC stores hazardous waste derived fuel in tanks and containers and then burns that fuel in two rotary cement kilns to facilitate the production of cement.

## State permit

On September 24, 2010, Ohio Environmental Protection Agency issued the state-portion of the RCRA permit. That portion contains rules for storing of hazardous waste in container storage areas, corrective action and groundwater monitoring requirements.

## Proposed decision on federal permit

Since EPA has not yet authorized the State of Indiana to administer certain RCRA regulations, including the Boilers and Industrial Furnace (40 CFR Part 266 Subpart H), EPA Region 5 is issuing the RCRA permit requirements for operations at this facility which fall under these regulations. The Ohio permit expires on April 23, 2014, and the federal permit would be expired five years after the issuance date of the final permit. EPA has concluded the company has fulfilled all requirements and proposes to issue a RCRA permit to ESSROC for the hazardous waste activities discussed above. After the close of the public comment period, EPA will review all comments received and decide whether to issue the permit. The final decision will include notification to those who submitted written comments during the official comment period. EPA will also prepare and send to all responders a document answering significant comments.

The Agency will hold a public meeting if enough people request such a gathering (*see left-hand box for ways you can participate in the decision-making process.*). EPA may modify the proposed permit or take other action based on new information or public comments so your opinion is important.

<sup>1</sup> EPA is proposing to issue the ESSROC permit under the authority of the federal Resource Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Waste Amendments of 1984 and subject to public notice and comment under the provisions of 40 Code of Federal Regulations (CFR) Section 124.10. See <http://www.epa.gov/lawsregs/index.html> to read RCRA and 40 CFR.

# **EPA Tentatively Approves ESSROC Permit Logansport, Indiana**

**Comment Period: Until September  
7, 2012**

**(details front page)**

## **Review the documents**

The administrative record consists of the draft permit, fact sheet and other materials that EPA used to make a decision in this case. The file is available for public review at the following locations:

Logansport-Cass County Public Library  
616 East Broadway  
Logansport, IN 46947  
(574) 753-6383

(The library will have a fact sheet, draft permit and public notice. Other records such as part B permit applications will be available at the EPA, noted below.)

## **EPA Region 5 Offices**

RCRA Branch, 77 W. Jackson Blvd.  
Chicago Call Jae Lee at 312- 886-3781,  
or toll-free 800-621-8431, Ext. 6-378.

*Reproduced on Recycled Paper*



**ESSROC Cement: Tentative Permit Approval**

United States  
Environmental Protection  
Agency  
Region 5  
Office of Public Affairs (P-19J)  
77 W. Jackson Blvd.  
Chicago, IL 60604-3590





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

July 22, 2012

REPLY TO THE ATTENTION OF:

Vic Windle  
Hazardous Waste Management Branch  
Indiana Department of Environmental Management  
100 North Senate Avenue  
Indianapolis, Indiana 46206-6015

LR-8J

RE: Draft Federal RCRA Permit, ESSROC Cement Corp.  
Logansport, Indiana, IND 005 081 542

Dear Mr. Windle:

Enclosed please find a copy of the draft Federal Resource Conservation and Recovery Act permit and cover letter to the above-referenced facility.

If you have any questions, please contact me at (312) 886-3781.

Sincerely,

A handwritten signature in cursive script, appearing to read "Mary S. Setnicar".

Mary S. Setnicar, Chief  
RCRA/TSCA Programs Section  
Land and Chemicals Division

Enclosure



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

July 22, 2012

REPLY TO THE ATTENTION OF:

LR-8J

Logansport Public Library  
616 East Broadway  
Logansport, Indiana 46947

Re: Draft Federal RCRA Permit  
ESSROC Cement Corp.  
Logansport, Indiana  
IND 005 081 542

Dear Sir/Madam:

The United States Environmental Protection Agency intends to issue a Hazardous Waste Management permit to ESSROC Cement Corporation located in Logansport, Indiana. In accordance with the public involvement procedures in Title 40 Code of Federal Regulations Part 124, a public notice will be announced in the *Pharos-Tribune* on July 22, 2012. The public comment period extends from July 22, 2012 to September 7, 2012.

Please make available for public examination this letter and the enclosed documents for at least seventy-five (75) days under "Reference Materials - ESSROC Cement Corp.". The following items are enclosed.

- Draft Permit
- Fact Sheet
- Public Notice

Thank you for your assistance. If you have any questions, please call me at 312-886-3781.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jae B. Lee".

Jae B. Lee, Permit Writer  
RCRA Branch  
Land and Chemicals Division

cc: V. Windle, IDEM

**THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5**

Date: June 28, 2012

From: Jae Lee, Permit Writer  
Land and Chemicals Division

To: File

Subject: Annual Mercury Feed Rate Limit for ESSROC Cement Corporation  
Logansport, Indiana, RCRA Permit

**I. Background**

The United States Environmental Protection Agency requires that the ESSROC Cement Corporation (ESSROC) facility in Logansport, Indiana (ESSROC Facility) not exceed a total annual feed rate limit of 87.91 pound (lb) per year of mercury for both Kiln #1 and Kiln #2. The purpose of this memorandum is to explain the basis for this requirement for the administrative record. [ESSROC operates two cement kilns with a common exhaust stack. Kiln # 1 utilizes a bag house as an air pollution control device and Kiln #2 utilizes an Electrostatic Precipitator (ESP) as a control device.]

EPA promulgated the National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors<sup>1</sup> at 40 CFR Part 63, Subpart EEE (HWC MACT). This regulation sets hazardous waste combustor Maximum Achievable Control Technology standards for emissions of mercury and other pollutants at, among other hazardous waste combustors, hazardous waste burning cement kilns. 40 CFR § 63.1204(a); 40 CFR § 63.1220(a). If a site-specific risk assessment demonstrates that operation in accordance with the HWC MACT standard is not protective of human health and the environment, permitting authorities may require additional conditions in the RCRA permit.<sup>2</sup>

In June 2012, EPA completed a site-specific risk assessment for the ESSROC Facility (ESSROC Risk Report). In the ESSROC Risk Report, EPA assessed site-specific risks associated with compliance with the HWC MACT standard consistent with agency guidance. The ESSROC Risk Report concluded that emissions from the ESSROC Facility at the HWC MACT emission standard for mercury would create an unacceptable risk to human health. Therefore, risk-based limits on the emission of mercury from the

---

<sup>1</sup> For existing owners of hazardous waste boilers or industrial furnaces, the RCRA Subpart H regulations for boilers and industrial furnaces generally no longer apply once the facility demonstrates compliance with the MACT. 40 CFR § 266.100(b).

<sup>2</sup> U.S. EPA, Office of Solid Waste, *Resource Conservation and Recovery Act Site-Specific Risk Assessment Policy for Hazardous Waste Combustion Facilities*, at 3 (July 1999), <http://www.epa.gov/epaoswer/hazwaste/combust/toolkit/ssrapofs.pdf>; 40 CFR § 270.32(b).

ESSROC facility are necessary in addition to the HWC MACT standard in order to protect human health.

## II. HWC MACT Emission Standard

The HWC MACT mercury emission standard for existing hazardous waste cement kiln units is 120 micrograms per dry standard cubic meter (ug/dscm) corrected to 7 percent oxygen. 40 CFR § 63.1204(a); 40 CFR § 63.1220(a). At the ESSROC Facility, this stack gas concentration would be expected to result 0.00389 gram per second (g/s) or 14.004 grams per hour (g/hr).

Attachment 1 of the Dispersion Modeling Report explains in detail how the HWC MACT emission standard was converted to the stack-specific mass emission rate.

## III. Risk Assessment

The ESSROC Risk Report indicates that the Hazard Quotients (HQ) for the emission of mercury at the HWC MACT emission standard from the cement kilns at the ESSROC Facility is 2.55.

This HQ value is approximately 10 times higher than the benchmark HQ of 0.25. To evaluate the potential for non-cancer health effects, the Agency generally uses a HQ of 1.0. However, for purposes of RCRA combustion permitting decisions, EPA Region 5 has modified the target levels to reflect the contribution of background levels of contamination. See Exposure Assessment Guidance for RCRA Hazardous Waste Combustion Facilities, Draft, U.S. EPA, April 1994.

The HQ per g/hr mercury emission rate per unit can be calculated using the above mass rate and resultant HQ per unit. Since the resultant HQ was 2.55 from a mercury emission rate of 14.004 g/hr (0.00389 g/sec), the HQ per g/hr emission rate of mercury is 0.182091 (i.e.,  $2.55 / 14.004$ ). It should be noted that the relationship between the emission rate of mercury and the resultant HQ value per unit is linear.

The system removal efficiency (SRE) for the ESSROC Facility Cement Kiln System, consisting of Kiln #1 and Kiln #2, was based on a comprehensive performance test (CPT) conducted in October 2009. The SRE of the ESSROC Facility's Cement Kiln System was determined to be 69.84 percent. However, it should be noted that the October 2009 CPT was conducted only at Kiln #1 which has bag house. Since there is no acceptable SRE data for the ESP at Kiln #2, the SRE for Kiln #1 was applied to Kiln #2 in determining the SRE for purpose of the ESSROC Risk Assessment.

## IV. Risk-Based Limits on Mercury

Since the resultant HQ from emissions at the HWCMACT standard for mercury may pose an unacceptable risk to human health, there is a need to set an additional risk-based limit for mercury emission from the ESSROC Facility Cement Kiln System.



In order to determine the annual feed rate limit that would be below a hazard quotient of 0.25, the following equation is utilized:

$$\text{MAF} \times (1 - \text{SRE}) \times (\text{HIPEM}) \times (1/8760) = 0.25$$

MAF = Annual feed rate limit of mercury (grams per year);

SRE = System removal efficiency for mercury;

HIPEM = HQ value per g/hr mercury emission rate;

8760 = Unit conversion factor from one year to hours; and

0.25 = Acceptable HQ risk value

Therefore,  $\text{MAF} = (0.25)(8760)/(0.3016)(0.18209) = 39877.386 \text{ g/year} = 87.91 \text{ lb/year}$

The SRE for mercury at ESSROC Facility's Cement Kiln utilized for above calculation was 69.84 percent.

Therefore, based on the above calculations, EPA recommends that the total annual mercury feed rate limit for the ESSROC Facility's Cement Kiln System should not exceed 87.91 lbs. This limit will ensure that the hazard quotient that results from the emission of mercury from the ESSROC Facility will be equal to or below the benchmark HQ value of 0.25.

This limit is in addition to any mercury feed rate limit imposed by the Clean Air Act (CAA), either at each cement kiln or for entire facility.

Since a SRE of 69.84 %, determined based on emission from the bag house control device at Kiln #1, was applied to the ESP control device of the Kiln #2, ESSROC is required to conduct a specific test to determine the removal efficiency at the ESP device of the Kiln #2. Such test must be conducted during the next performance or compliance test required by the CAA or State/federal agencies at Kiln #2.

At least 90 days prior to conducting the removal efficiency test at Kiln #2, as referenced in the previous paragraph, the permit requires ESSROC to submit a removal efficiency test plan, including, but not limited to, a waste analysis plan, a quality assurance project plan, and a scope of procedures for the laboratories, to EPA for approval.

Once a removal efficiency of the ESP at Kiln #2 is determined based on the EPA's approved test plan, an annual feed rate for the facility may be adjusted to reflect the more kiln-specific System Removal Efficiency.

