



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204  
(317) 232-8603  
Toll Free (800) 451-6027  
[www.idem.IN.gov](http://www.idem.IN.gov)

Mr. Matthew W. Rehtin  
Twin Bridges Recycling and Disposal Facility  
P.O. Box 9  
Danville, IN 46122

May 26, 2010

Re: Approval for a Temporary Operation No. 063-29274-00029 to Part 70 Operating Permit No. 063-18240-00029

Dear Mr. Rehtin:

On May 19, 2010, Twin Bridges Recycling and Disposal Facility submitted a letter informing the Office of Air Quality (OAQ) of their intention to conduct an acetylene tracer experiment. The test operation will begin after June 1, 2010 and end on December 31, 2010.

The purpose of the test is to evaluate and develop a method to characterize landfill methane emissions using a mobile tracer dilution method and a high sensitivity analyzer known as a cavity ring down laser that simultaneously measures methane and acetylene. The principle of the method involves simultaneously measuring the concentration of methane and a tracer gas at various positions around the landfill. During the measurement, an acetylene tracer gas is released from one or more locations on the landfill at a known controlled rate. The amount of methane emitted can be calculated from measuring the ratio of the measured methane and acetylene concentration.

The uncontrolled VOC emissions from the emission unit is less than the PSD significant level of 40 tons per year.

### Temporary Operations General Information

Unit:	Mobile acetylene tracer
Location of the Operation:	124 Twin Bridges Road, Danville, IN 46122
County:	Hendricks
County Status:	Nonattainment for PM2.5 and Attainment for all other criteria pollutants
Starting Date of the Operation:	June 1, 2010 [326 IAC 2-1.1-3(h)(3)(F)]
Duration of the Operation:	Less than 30 days of total operating time
Activity:	Methane and Acetylene emissions

### Applicable Requirements

Pursuant to 326 IAC 2-1.1-3(h) (Exemption for Temporary Operations), the above mentioned temporary operations shall satisfy the following requirements:

1. The potential emissions from the operation are less than 25 tons per year for the duration of the operation. [326 IAC 2-1.1-3(h)(3)(A)]



2. The operation is not a major source or modification as defined under 326 IAC 2-2, or 326 IAC 2-7.  
[326 IAC 2-1.1-3(h)(3)(B)]
3. The purpose of the temporary operation is to:
  - (a) temporarily conduct an operation not considered as part of the normal operation or production of the facility or source.  
[326 IAC 2-1.1-3(h)(3)(C)(ii)]
4. The duration of the temporary operations is less than 30 days of total operating time.  
[326 IAC 2-1.1-3(h)(3)(D)]
5. The Permittee shall submit a report containing the following information, at most seven (7) days after the conclusion of the temporary operations:  
[326 IAC 2-1.1-3(h)(3)(G)]
  - (a) The actual dates of the construction and operation.
  - (b) The duration of the operation.
  - (c) The actual emissions occurring during the operation.
6. The report shall be submitted to:  
Indiana Department of Environmental Management  
Office of Air Quality, Permits Branch  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

Expiration Date

The approval for the Temporary Operations expires after 30 days of actual operating time.

IDEM Contact

If you have any questions regarding this approval, please contact Josiah Balogun of my staff at the Indiana Department Environmental Management, Office of Air Quality, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5257 or toll free at 1-800-451-6027 extension 4-5257.

Sincerely,



Matt Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

Enclosure: Temporary Operations Report

cc: File – Hendricks County  
Hendricks County Health Department  
Air Compliance Inspector

Air Compliance Inspector

**Indiana Department of Environmental Management  
Office of Air Quality, Permits Branch  
100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, IN 46204-2251**

**Temporary operations Report**

Source Name: Twin Bridges recycling and Disposal Facility (RFD)  
Source Location: 124 Twin Bridges Road, Danville, IN 46122  
County Location: Hendricks  
Experimental Operation: 063-29274-00029

Temporary Operation	
Type of unit/operation:	
Actual starting date of the construction:	
Actual ending date of the construction:	
Actual starting date of the operation:	
Actual ending date of the operation:	
Actual number of days of the operation:	
Calculated emissions during the duration of the operation:	
Additional Comments:	

I certify under penalty of law that this report was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

## TWIN BRIDGES ACETYLENE RELEASE CALCULATIONS

### ASSUMPTIONS:

ACETYLENE (C <sub>2</sub> H <sub>2</sub> )	1.072 density (grams/liter)*
Mass Flow Controller Maximum Release Rate:	27.5 liters/min
Number of Mass Flow Controllers:	3
Maximum Number of Hours of Release per Day:	10 hours
Number of Days of Release in 2010:	12 days

### UNIT CONVERSIONS:

Number of minutes per hour:	60 minutes/hour
Number of grams per kilogram:	1000 grams/kilogram
Number of kilograms per pound:	2.2046 kilograms/pound
Number of pounds per ton:	2000 pounds/ton
Number of kilograms per metric ton:	1000 kilograms/ton

### ACETYLENE RELEASE CALCULATIONS:

Maximum Hourly Release Rate of C <sub>2</sub> H <sub>2</sub> :	5 kilograms/hour	or	11 pounds/hour
Maximum Daily Release Rate of C <sub>2</sub> H <sub>2</sub> :	50 kilograms/day	or	109 pounds/day
Maximum Total Release of C <sub>2</sub> H <sub>2</sub> :	594 kilograms	or	1310 pounds
Maximum Total Release of C <sub>2</sub> H <sub>2</sub> :	0.59 metric tons	or	0.655 tons/yr

\* @ 25 degrees C, 14.696 PSIA

# Mail Code 61-53

IDEM Staff	LPOGOST 5/26/2010 Twin Bridges Recycling (Waste Mgmt. Of Indiana) 063 - 29274 - 00029 final)			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handling Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		Matthew W Rehtin Twin Bridges Recycling (Waste Mgmt. Of Indiana) PO Box 9 Danville IN 46122 (Source CAATS) Via confirmed delivery									
2		Brad Eisenhart Dir Landfill Ops Twin Bridges Recycling (Waste Mgmt. Of Indiana) PO Box 9 Danville IN 46122 (RO CAATS)									
3		Larry and Becky Bischoff 10979 North Smokey Row Road Mooresville IN 46158 (Affected Party)									
4		Hendricks County Commissioners 355 S Washington Danville IN 46122 (Local Official)									
5											
6		Danville Town Council and Town Manager 147 W. Main St. Danville IN 46122 (Local Official)									
7		Hendricks County Health Department 355 S Washington Street, Suite 210 Danville IN 46122-1759 (Health Department)									
8											
9											
10											
11											
12											
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <b>Domestic Mail Manual R900, S913, and S921</b> for limitations of coverage on inured and COD mail. See <b>International Mail Manual</b> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
---	--	--	--