Ohio EPA
40 years and moving forward
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

Re: Hardin County
Triumph Thermal Systems, Inc.
NPDES Permit

November 6, 2012

Mr. Stanley Coughlin
Triumph Thermal Systems, Inc.
200 Railroad Street
Forest, Ohio 45843

Dear Mr. Coughlin:

On October 25, 2012, a National Pollutant Discharge Elimination System (NPDES) permit compliance inspection was conducted at Triumph Thermal Systems, Inc. You and Mr. Lance Blackburn were present and provided information on plant operations and maintenance. The inspection included an interview with completion of the enclosed inspection checklist, an overview of the manufacturing processes that generate wastewater, and inspection of the wastewater treatment system. The final effluent discharging to Rickenbach Ditch (a.k.a. Shaefer Ditch) via Outfall #002 was clear with no noticeable odor.

Waste water for the treatment system is generated from the welding test tanks, rough boil tanks as part of the salt dip brazing process, and from the rinse cycle in the parts cleaning process. The process water flows into the Deionized (DI) water holding tanks. During the DI regeneration cycle, the wastewater is discharged to two pretreatment 5,000 gallon Hex tanks. Hexavelent chromium is reduced to trivalent chromium by the addition of sulfur dioxide in a batch process. These tanks then discharge to Pit #1 in the treatment system. Magnesium chloride and Lime are fed into Pit #1 for pH adjustment and fluoride removal. From Pit #1, a flocculent is added in pipe as the wastewater flows to the plate fin settler. The solids are separated out in the settler with the wastewater discharging into tank #2. In tank #2, sulfuric acid is added for pH adjustment with an air bubbler providing mixing. From tank #2 the wastewater flows to the final clarifier prior to discharge through outfall 002. The solids from the settler are sent to Pit #3 where further settling occurs. The solids are then ran through a filter press and dropped in a container for offsite disposal.

A review of the discharge monitoring reports (DMRs) from November 2011 to October 2012 shows that there have been several effluent limit violations. The specific instances of non-compliance are enclosed on a separate sheet.

Our completed inspection report is enclosed for your records. If you have any questions, please contact me at (419) 373-3053.

Sincerely,

Ryan Gierhart
Division of Surface Water

/jlm
Enclosures
ec: Tracking

Permit # : 2IS00001
NPDES #: OH0003701

State of Ohio Environmental Protection Agency
Northwest District Office

NPDES Compliance Inspection Report

Section A: National Data System Coding

Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
2IS00001	OH0003701	10/25/2012	C	S	2

Section B: Facility Data

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Triumph Thermal Systems, Inc. 200 Railroad Street Forest, Ohio 45843	10:00 a.m.	2/1/2008
	Exit Time	**Permit Expiration Date**
	11:30 a.m.	1/31/2013
Name(s) and Title(s) of On-Site Representatives	**Phone Number(s)**	
Mr. Stanley Coughlin, Director - Manufacturing Support Mr. Lance Blackburn, Maintenance Supervisor	419-273-1110 419-273-1122	
Name, Address and Title of Responsible Official	**Phone Number**	
Mr Stanley Coughlin, Director - Maunfacturing Support Triumph Thermal Systems, Inc. 200 Railroad Street Forest, Ohio 45843	419-273-2511	

Section C: Areas Evaluated During Inspection
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S	Permit	S	Flow Measurement	N	Pretreatment
S	Records/Reports	S	Laboratory	S	Compliance Schedule
S	Operations & Maintenance	S	Effluent/Receiving Waters	S	Self-Monitoring Program
S	Facility Site Review	S	Sludge Storage/Disposal	S	Other
N	Collection System				

Section D: Summary of Findings (Attach additional sheets if necessary)

The sample refrigerator was located in the lobby and not locked. The sample refrigerator should be stored in a secure location or locked to prevent the samples from being tampered with.

The discharge flow has greatly decreased. Refrigerant chillers are being used instead of contact cooling water. The average daily flow (ADF) from July 2007 to July 2010 was 22,560 gallons per day (gpd). The ADF from August 2010 to June 2012 is 3990 gpd

Total dissolved solids levels have been greatly increased since reducing the flow and adding magnesium chloride for fluoride removal.

The facility needs to verify that proper calibration of effluent flow meter is being performed.

Inspector	Reviewer
Ryan Gierhart 11-5-2012	Thomas Poffenbarger 11/5/12
Ryan Gierhart Date Division of Surface Water Northwest District Office	Thomas Poffenbarger, P.E. Date Water Quality Engineer II/ Unit Supervisor Division of Surface Water Northwest District Office

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Sections E thru K: Complete on all inspections as appropriate
Y – Yes, N – No, N/A – Not Applicable, N/E – Not Evaluated

Section E: Permit Verification

Inspection observations verify the permit

(a) Correct name and mailing address of permittee	Y
(b) Correct name and location of receiving waters	Y
(c) Product(s) and production rates conform with permit application (Industries)	Y
(d) Flows and loadings conform with NPDES permit	Y
(e) Treatment processes are as described in permit application	Y
(f) New treatment process(es) added since last inspection	N
(g) Notification given to State of new, different or increased discharges	Y
(h) All discharges are permitted	Y
(i) Number and location of discharge points are as described in permit	Y

Comments/Status:

Section F: Compliance Schedules/Violations

(a) Any significant violations since the last inspection	N
(b) Permittee is taking actions to resolve violations	Y
(c) Permittee has a compliance schedule	Y
(d) Compliance schedule contained in	NPDES Permit
(e) Permittee is meeting compliance schedule	Y

Comments/Status:

Section G: Operation & Maintenance

Treatment Works:

Treatment facility properly operated and maintained

(a)	Standby power available.....generator ☐ or dual feed ☐.....	N
(b)	Adequate alarm system available for power or equipment failures..	Y
(c)	All treatment units in service other than backup units.....	Y
(d)	Wastewater Treatment Works classification (OAC 3745-7).....	NA
(e)	Operator of Record holds unexpired license of class required by permit..... Class:NA	N/A
(f)	Copy of certificate of Operator of Record displayed on-site.....	N/A
(g)	Minimum operator staffing requirements fulfilled (OAC 3745-7)...	N/A
(h)	Routine and preventative maintenance scheduled/performed...	Y
(i)	Any major equipment breakdown since last inspection.....	N
(j)	Operation and maintenance manual provided and maintained.....	Y
(k)	Any plant bypasses since last inspection.....	N
(l)	Regulatory agency notified of bypasses..... On MORs ☐ and/or Spill Hotline (1-800-282-9378) ☐	N/A
(m)	Any hydraulic and/or organic overloads since last inspection.....	N

Record Keeping:

(a)	Log book provided.....	N/A
(b)	Format of log book (i.e. computer log, hard bound book)	
(c)	Log book(s) kept onsite (in an area protected from weather).....	N/A
(d)	Log book contains the following:	
	I. Identification of treatment works.....	N/A
	II. Date/times of arrival/departure for Operator of Record and any other operator required by OAC 3745-7.....	N/A
	III. Daily record of operation and maintenance activities (including preventative maintenance, repairs and request for repairs).....	N/A
	IV. Laboratory results (unless documented on bench sheets)...	N/A
	V. Identification of person making log entries.....	N/A
(d)	Has the operator of record submitted written notification to the permittee, Ohio EPA and (if applicable) any local environmental agencies when a collection system overflow, treatment plant bypass or effluent limit violation has occurred.....	N/A

Section G: Operation & Maintenance (con't)

Collection System:

(a) Percent combined system: %
(b) Any collection system overflows since last inspection..... N/A
(CSO ☐ and/or SSO ☐)
(c) Regulatory agency notified of overflows (SSOs)..... N/A
(d) CSO O&M plan provided and implemented..... N/A
(e) CSOs monitored and reported in accordance with permit..... N/A
(f) Portable pumps used to relieve system..... N/A
(g) Lift station alarms provided and maintained..... N/A
(h) Are lift stations equipped with permanent standby power or equivalent..... N/A
(i) Is there an inflow/infiltration problem (separate sewer system), or were there any major repairs to collection system since last inspection..... N/A
(j) Any complaints received since last inspection of basement flooding N/A
(k) Are any portions of the sewer system at or near capacity..... N/A

Comments/Status:

Section H: Sludge Management

(a) Sludge management plan (SMP)
Submitted date: Approval #: Not submitted ☐ N/A ☒

(b) Sludge management plan current..... N/A
(c) Sludge adequately disposed..... Y
(Method: hauled offsite as a non-hazardous waste)
(d) If sludge is incinerated, where is ash disposed of
(e) Is sludge disposal contracted..... Y
(Name:Chemtron)
(f) Has amount of sludge generated changed significantly since last inspection..... Y
(g) Adequate sludge storage provided at plant.....Y
(h) Land application sites monitored and inspected per SMP..... N/A
(i) Records kept in accordance with State and Federal law..... Y
(j) Any complaints received in last year regarding sludge..... N
(k) Is sludge adequately processed (digestion, pathogen control)..... Y

Comments/Status:

Amount of sludge generated has doubled from the addition of magnesium chloride for fluoride removal.

Section I: Self-Monitoring Program

Flow Measurement:

(a) Primary flow measuring device operated and maintained..... Y

Type of device: Ultrasonic & Parshall flume ☒ Ultrasonic & Weir ☐ Weir ☐

Calculated from influent ☐ Other ☐(Specify:)

(b) Calibration frequency adequate ..... Y
(Date of last calibration: 3/4/2009)

(c) Secondary instruments operated and maintained..... Y

(d) Flow measurement equipment adequate to handle full range of flows..... Y

(e) Actual flow discharged is measured..... Y

(f) Flow measuring equipment inspection frequency
☒Daily ☐Weekly ☐monthly ☐other

Comments/Status:

Section I: Self-Monitoring Program (con't)

Sampling:

(a) Sampling location(s) are as specified by permit..... Y

(b) Parameters and sampling frequency agree with permit..... Y

(c) Permittee uses required sampling method..... Y

(d) Sample collection procedures are adequate..... N
- (i) Samples refrigerated during compositing..... N
- (ii) Proper preservation techniques used..... Y
- (iii) Containers and sample holding times prior to analysis conform with 40 CFR 136.3..... Y

(e) Monitoring records (i.e., flow, pH, DO) maintained for a minimum of three years including all original strip chart recordings (i.e, continuous monitoring instrumentation, calibration and maintenance records)..... Y

(f) Adequate records maintained of sampling date, time, location, etc.. Y

Laboratory:

General

(a) EPA approved analytical testing procedures used (40 CFR 136.3).. Y

(b) If alternate analytical procedures are used, proper approval has been obtained..... Y

(c) Analyses being performed more frequently than required by permit. Y

(d) If (c) is yes, are results in permittee's self-monitoring report..... Y

(e) Commercial laboratory used..... Y
Parameters analyzed by commercial lab: All parameters except pH.

Permit # : 2IS00001
NPDES #: OH0003701

Lab name: Alloway Environmental Testing

Quality Control/Quality Assurance

(f) Quality assurance manual provided and maintained..... Y
(g) Satisfactory calibration and maintenance of instruments/equipment. Y
(h) Adequate records maintained..... Y
(i) Results of latest USEPA quality assurance performance sampling program: ☐ Satisfactory ☐ Marginal ☐ Unsatisfactory
Date:

Comments/Status:

Sample Fridge should be secured.

Section J: Effluent/Receiving Water Observations

Outfall Number	Oil sheen	Grease	Turbidity	Visible Foam	Visible Floating Solids	Color	Other
002	none	none	clear	none	none	clear	

Comments/Status:

002 Discharge into receiving stream was clear with no noticeable odor.
No discharges were observed in storm water outfalls 001 and 005.
A clear trickling discharge was observed in storm water outfall 003 and was believed to be from the fire system testing.

Section K: Multimedia Observations

(a) Are there indications of sloppy housekeeping or poor maintenance in work and storage areas or laboratories..... N
(b) Do you notice staining or discoloration of soils, pavement or floors.. N
(c) Do you notice distressed (unhealthy, discolored, dead) vegetation.. N
(d) Do you see unidentified dark smoke or dust clouds coming from sources other than smokestacks..... N
(e) Do you notice any unusual odors or strong chemical smells..... N
(f) Do you see any open or unmarked drums, unsecured liquids, or damaged containment facilities..... N

If any of the above are observed, ask the following questions:

(1) What is the cause of the condition?
(2) Is the observed condition or source a waste product?
(3) Where is the suspected contaminant normally disposed?
(4) Is this disposal permitted?
(5) How long has the condition existed and when did it begin?

Comments/Status:

Get New Data

Permit No	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
2IS00001*ED	January 2012	002	61941	pH, Maximum	1D Conc	9.0	9.39	1/25/2012
2IS00001*ED	January 2012	002	61941	pH, Maximum	1D Conc	9.0	9.45	1/28/2012
2IS00001*ED	March 2012	002	61941	pH, Maximum	1D Conc	9.0	9.23	3/7/2012
2IS00001*ED	March 2012	002	61941	pH, Maximum	1D Conc	9.0	9.45	3/8/2012
2IS00001*ED	March 2012	002	61941	pH, Maximum	1D Conc	9.0	9.24	3/13/2012
2IS00001*ED	May 2012	002	61941	pH, Maximum	1D Conc	9.0	9.26	5/16/2012
2IS00001*ED	June 2012	002	00530	Total Suspended Solids	30D Conc	30	33.	6/1/2012
2IS00001*ED	August 2012	002	00530	Total Suspended Solids	30D Conc	30	42.	8/1/2012
2IS00001*ED	August 2012	002	00530	Total Suspended Solids	1D Conc	45	46.	8/22/2012