INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

To: Interested Parties

Date: October 7, 2014

From: Matthew Stuckey, Chief
Permits Branch
Office of Air Quality

Source Name: White Flyer Targets

Permit Level: MSOP – Renewal

Permit Number: 149-34393-00027

Source Location: 317 Kloeckner Drive, Knox, Indiana

Type of Action Taken: Permit Renewal

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the matter referenced above.

The final decision is available on the IDEM website at: http://www.in.gov/apps/idem/caats/
To view the document, select Search option 3, then enter permit 34393.

If you would like to request a paper copy of the permit document, please contact IDEM's central file room:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

(continues on next page)

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

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Minor Source Operating Permit Renewal
OFFICE OF AIR QUALITY

White Flyer Targets
317 Kloeckner Drive
Knox, Indiana 46534

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

Operation Permit No.: M149-34393-00027	
Issued by: Chrystal A. Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: October 7, 2014 Expiration Date: Ocotber 7, 2024

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary sporting goods manufacturing operation.

Source Address:	317 Kloeckner Drive, Knox, Indiana 46534
General Source Phone Number:	574-772-3271
SIC Code:	3949
County Location:	Starke
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

This stationary source consists of the following emission units and pollution control devices:

(a) One (1) natural gas-fired hot oil heater, identified as P08, constructed in 2005, rated at 2.5 MMBtu per hour;

(b) Two (2) enclosed dry material #1 storage silos and conveyors, identified as P03 and P04, constructed in 2005, each with a storage capacity of 2,475 cubic feet and each with a maximum throughput of 26,500 tons per year, both using baghouses as particulate control, and exhausting to stacks S03, S04 and S05;

(c) One (1) enclosed dry material #1 storage tank, identified as P012, with a storage capacity of 2,475 cubic feet, a maximum throughput of 8,760 tons per year, constructed in 2013, with emissions vented through a pulse-jet cleaning dust collector to stack S10.

(d) One (1) enclosed dry material #2 storage tank, identified as P013, with a storage capacity of 1701 cubic feet, a maximum throughput of 958 tons per year, constructed in 2013, with emissions vented through a pulse-jet cleaning dust collector to stack S11.

(e) One (1) enclosed dry material #3 storage tank, identified as P014, with a storage capacity of 600 cubic feet, a maximum throughput of 9,960 tons per year, constructed in 2013, with emissions vented through a pulse-jet cleaning dust collector to stack S12.

(f) Two (2) supersack and/or silo enclosed indoor dry material dump stations, identified as P018a and P018b, constructed in 2013, with dust control systems vented to stack S13.

(g) One (1) enclosed dry mixer, identified as P015, with a storage capacity of 1,350 gallons, a maximum throughput of 9,960 tons per year, constructed in 2013, with the mixed material pneumatically conveyed into a storage hopper, vented through a baghouse to stack S13.

(h) One (1) enclosed heated (hot oil heater) liquid storage tank not containing any HAPs or VOCs, identified as P010, with a capacity of 20,000 gallons, a maximum throughput of 32,850 tons per year, constructed in 2013. Emissions are vented through a wet scrubber and filter system to stack S08.

(i) One (1) enclosed heated (from hot oil heater) and agitated mix tank, identified as P011, with a capacity of 1500 gallons, a maximum throughput of 19,710 tons per year, constructed in 2013, with emissions vented through a wet scrubber and filter system to stack 09.

(j) One (1) enclosed heated (from hot oil heater) process tank, identified as P021, with a capacity of 1500 gallons, a maximum throughput of 19,710 tons per year, constructed in 2013, with emissions vented through a wet scrubber and filter system to stack 09.

(k) One (1) heated (from hot oil heater) and agitated Remelt tank, identified as P022, with a capacity of 500 gallons, a maximum throughput of 250 tons per year, constructed in 2013, with wet scrubber and filter system as a control device, vented inside the building.

(l) One (1) pneumatically operated water cooled molding process, identified as C Line, constructed in 2013, vented inside the building. There are no expected emissions from this process.

(m) Two (2) paint spray booths, identified as P06a and P06b, constructed in 2005, each equipped with four (4) air atomized spray guns, with a maximum capacity of 500,000 units per day, using dry filters for particulate control, coating a clay substrate, and exhausting to stack S06;

(n) Two (2) paint spray booths, identified as P07a and P07b, constructed in 2005, each equipped with four (4) air atomized spray guns, with a maximum capacity of 500,000 units per day, using dry filters for particulate control, coating a clay substrate, and exhausting to stack S07;

(o) Two (2) paint spray booths, identified as P016a and P016b, constructed in 2013, each equipped with twelve (12) air atomized spray guns, with a combined maximum capacity of 600,000 units per day, using dry filters for particulate control, coating a clay substrate, and exhausting to stack S14.

(p) Two (2) pitch storage tanks, each with a capacity of 30,000 gallons, identified as P01 and P02, exhausting to stacks S01 and S02, respectively;

(q) Two (2) pitch mix tanks, identified as P05a and P05b, installed in 2005, each with a capacity of 2,000 gallons.

(r) One (1) pitch re-melt tank, identified as P09, installed in 2005, with a capacity of 300 gallons, a maximum throughput of 250 tons per year.

(s) Paved and unpaved roads.

(t) Two (2) pneumatically operated water cooled molding process, A & B Line, constructed in 2005, vented inside the building.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, M149-34393-00027, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Annual Notification [326 IAC 2-6.1-5(a)(5)]

(a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.

(b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.9 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003

Indianapolis, Indiana 46204-2251

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to M149-34393-00027 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this permit.

B.11 Termination of Right to Operate [326 IAC 2-6.1-7(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.12 Permit Renewal [326 IAC 2-6.1-7]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.13 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.14 Source Modification Requirement

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.15 Inspection and Entry
[326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.16 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

(a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.17 Annual Fee Payment [326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ,.

(b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.18 Credible Evidence [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project.

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-6.1-5(a)(2)]

C.8 Performance Testing [326 IAC 3-6]

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date.

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

C.10 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.11 Instrument Specifications [326 IAC 2-1.1-11]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale. The analog instrument shall be capable of measuring values outside of the normal range.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps

C.12 Response to Excursions or Exceedances

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall record the reasonable response steps taken.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

C.14 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 General Record Keeping Requirements [326 IAC 2-6.1-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(m) Two (2) paint spray booths, identified as P06a and P06b, constructed in 2005, each equipped with four (4) air atomized spray guns, with a maximum capacity of 158,352 units per day, using dry filters for particulate control, coating a clay substrate, and exhausting to stack S06;

(n) Two (2) paint spray booths, identified as P07a and P07b, constructed in 2005, each equipped with four (4) air atomized spray guns, with a maximum capacity of 158,352 units per day, using dry filters for particulate control, coating a clay substrate, and exhausting to stack S07;

(o) Two (2) paint spray booths, identified as P016a and P016b, constructed in 2013, each equipped with twelve (12) air atomized spray guns, with a combined maximum capacity of 158,352 units per day, using dry filters for particulate control, coating a clay substrate, and exhausting to stack S14.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.1.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(d), surface coating processes shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, subject to the following:

(a) The source shall operate the control device in accordance with manufacturer's specifications.

(b) If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:

(1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records shall be maintained for five (5) years.

D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan, of this permit, contains the Permittee's obligations with regard to the records required by this condition.

Compliance Determination Requirements

D.1.3 Particulate

In order to comply with Condition D.1.1, the dry particulate filter, waterwash, or an equivalent control device for particulate control shall be in operation at all times when the spray booths are in

operation.

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

D.1.4 Record Keeping Requirements

(a) To document the compliance status with condition D.1.1, the Permittee shall maintain a record of any actions taken if overspray is visibly detected.

(b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(b) Two (2) enclosed dry material #1 storage silos and conveyors, identified as P03 and P04, constructed in 2005, each with a storage capacity of 2475 cubic feet and each with a maximum throughput of 26500 tons per year, both using baghouses as particulate control, and exhausting to stacks S03, S04 and S05;

(c) One (1) enclosed dry material #1 storage tank, identified as P012, with a storage capacity of 2475 cubic feet, a maximum throughput of 8760 tons per year, constructed in 2013, with emissions vented through a pulse-jet cleaning dust collector to stack S10.

(e) One (1) enclosed dry material #3 storage tank, identified as P014, with a storage capacity of 600 cubic feet, a maximum throughput of 9960 tons per year, constructed in 2013, with emissions vented through a pulse-jet cleaning dust collector to stack S12.

(g) One (1) enclosed dry mixer, identified as P015, with a storage capacity of 1350 gallons, a maximum throughput of 9960 tons per year, constructed in 2013, with the mixed material pneumatically conveyed into a storage hopper, vented to stack S08 and through a baghouse to stack S13.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.2.1 Particulate [326 IAC 6-3-2]

(a) Pursuant to 326 IAC 6-3-2:

(1) The allowable particulate emission rate from the dry material storage silos, identified as P03 and P04, shall each not exceed 8.61 pounds per hour when operating at a process weight rate of 3.03 tons per hour.

(2) The allowable particulate emission rate from the dry material #1 storage silo, identified as P012, shall each not exceed 4.10 pounds per hour when operating at a process weight rate of 1.00 ton per hour.

(3) The allowable particulate emission rate from the dry material #3 storage silo, identified as P014, shall each not exceed 4.47 pounds per hour when operating at a process weight rate of 1.14 tons per hour.

(4) The allowable particulate emission rate from the dry mixer, identified as P015, shall each not exceed 4.47 pounds per hour when operating at a process weight rate of 1.14 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10P^{0.67}$ where E = rate of emission in pounds per hour;
and P = process weight rate in tons per hour.

D.2.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.2.3 Particulate Control

(a) In order to comply with the requirements of Condition D.2.1, the baghouses (P03, P04, and P015) and the dust collectors (P012 and P014) for particulate control shall be in operation and control emissions from the dry material #1 and #3 storage silos and dry mixer, identified as P03, P04, P012, P014 and P015 at all times that the dry material storage silos and the dry mixer are in operation.

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

D.2.4 Visible Emission Notations

(a) Daily visible emission notations of the dry material storage silos, identified as P03, P04, P012, P014, and the dry mixer, identified as P015, stack exhausts shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.5 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouses used in conjunction with the dry material storage silos, identified as P03, P04, and the dry mixer, identified as P015 at least once per day when the dry material storage silos and the dry mixer are in operation. If the pressure drop across the baghouse is outside the normal range of 0.5 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.6 Broken or Failed Bag Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the silo(s). Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces, or triboflows.

(c) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

The baghouses must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-6.1 (MSOP).

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

D.2.7 Record Keeping Requirements

(a) To document compliance with Conditions D.2.4, the Permittee shall maintain records of daily visible emission notations of the dry material storage silos, identified as P03, P04, P012 and P014, and the dry mixer, identified as P015, stack exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document compliance with Condition D.2.5, the Permittee shall maintain daily records of the pressure drop during normal operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	White Flyer Targets
Address:	317 Kloeckner Drive
City:	Knox, Indiana 46534
Phone #:	574-772-3271
MSOP #:	M149-34393-00027

I hereby certify that White Flyer Targets is : ☐ still in operation.
☐ no longer in operation.

I hereby certify that White Flyer Targets is : ☐ in compliance with the requirements of MSOP M149-34393-00027.
☐ not in compliance with the requirements of MSOP M149-34393-00027.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FAX NUMBER: (317) 233-6865

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100 TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF "MALFUNCTION" AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____
_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____
_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____
*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____
_____

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (ATSD) for a Minor Source Operating Permit

Source Background and Description

Source Name:	**White Flyer Targets**
Source Location:	**317 Kloeckner Drive, Knox, IN 46534**
County:	**Starke**
SIC Code:	**3949**
MSOP Renewal No.:	**M149-34393-00027**
Permit Reviewer:	**Roger Osburn**

On August 28, 2014, the Office of Air Quality (OAQ) had a notice published in the Knox Leader and Review, Knox, Indiana, stating that White Flyer Targets had applied for a renewal of a Minor Source Operating Permit and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments and Responses

On August 28, 2014, White Flyer Targets submitted comments to IDEM, OAQ on the draft MSOP renewal.

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1: The Permittee requests to change the requirement for parametric monitoring on the baghouses in Section D.2.5 to show that the normal range of pressure drop is between 0.5 to 6.0 inches of water. In addition, the Permittee would like for the language relating to this requirement to read that this range is during material transfer operation times.

Response to Comment 1:

IDEM agrees with the requested changes. The normal range of the pressure drop will be changed to 0.5 to 6.0 inches to show the baghouse is operating correctly. The language relating to this requirement already states that the pressure drop shall be recorded when the dry material storage silos and the dry mixer are in operation. Therefore, the language regarding this will remain. The permit has been revised as follows:

D.2.5 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouses used in conjunction with the dry material storage silos, identified as P03 and P04, and the dry mixer, identified as P015 at least once daily when the dry material storage silos and the dry mixer are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of ~~3.0~~ **0.5** and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

***

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Roger Osburn at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-0242 or toll free at 1-800-451-6027 extension 3-0242.

(b) A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) Minor Source Operating Permit Renewal

Source Background and Description

Source Name:	**White Flyer Targets**
Source Location:	**317 Kloeckner Drive, Knox, IN 46534**
County:	**Starke**
SIC Code:	**3949**
MSOP Renewal No.:	**M149-34393-00027**
Permit Reviewer:	**Roger Osburn**

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from White Flyer Targets relating to the operation of a stationary sporting goods manufacturing plant. On April 4, 2014, White Flyer Targets submitted an application to the OAQ requesting to renew its operating permit. White Flyer Targets was issued its first MSOP No.: M149-28339-00027 on October 28, 2009.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

(a) One (1) natural gas-fired hot oil heater, identified as P08, constructed in 2005, rated at 2.5 MMBtu per hour;

(b) Two (2) enclosed dry material #1 storage silos and conveyors, identified as P03 and P04, constructed in 2005, each with a storage capacity of 2,475 cubic feet and each with a maximum throughput of 26,500 tons per year, both using baghouses as particulate control, and exhausting to stacks S03, S04 and S05;

(c) One (1) enclosed dry material #1 storage tank, identified as P012, with a storage capacity of 2,475 cubic feet, a maximum throughput of 8,760 tons per year, constructed in 2013, with emissions vented through a pulse-jet cleaning dust collector to stack S10.

(d) One (1) enclosed dry material #2 storage tank, identified as P013, with a storage capacity of 1701 cubic feet, a maximum throughput of 958 tons per year, constructed in 2013, with emissions vented through a pulse-jet cleaning dust collector to stack S11.

(e) One (1) enclosed dry material #3 storage tank, identified as P014, with a storage capacity of 600 cubic feet, a maximum throughput of 9,960 tons per year, constructed in 2013, with emissions vented through a pulse-jet cleaning dust collector to stack S12.

(f) Two (2) supersack and/or silo enclosed indoor dry material dump stations, identified as P018a and P018b, constructed in 2013, with dust control systems vented to stack S13.

(g) One (1) enclosed dry mixer, identified as P015, with a storage capacity of 1,350 gallons, a maximum throughput of 9,960 tons per year, constructed in 2013, with the mixed material pneumatically conveyed into a storage hopper, vented through a baghouse to stack S13.

(h) One (1) enclosed heated (hot oil heater) liquid storage tank not containing any HAPs or VOCs, identified as P010, with a capacity of 20,000 gallons, a maximum throughput of 32,850 tons per year, constructed in 2013. Emissions are vented through a wet scrubber and filter system to stack S08.

(i) One (1) enclosed heated (from hot oil heater) and agitated mix tank, identified as P011, with a capacity of 1500 gallons, a maximum throughput of 19,710 tons per year, constructed in 2013, with emissions vented through a wet scrubber and filter system to stack 09.

(j) One (1) enclosed heated (from hot oil heater) process tank, identified as P021, with a capacity of 1500 gallons, a maximum throughput of 19,710 tons per year, constructed in 2013, with emissions vented through a wet scrubber and filter system to stack 09.

(k) One (1) heated (from hot oil heater) and agitated Remelt tank, identified as P022, with a capacity of 500 gallons, a maximum throughput of 250 tons per year, constructed in 2013, with wet scrubber and filter system as a control device, vented inside the building.

(l) One (1) pneumatically operated water cooled molding process, identified as C Line, constructed in 2013, vented inside the building. There are no expected emissions from this process.

(m) Two (2) paint spray booths, identified as P06a and P06b, constructed in 2005, each equipped with four (4) air atomized spray guns, with a maximum capacity of 500,000 units per day, using dry filters for particulate control, coating a clay substrate, and exhausting to stack S06;

(n) Two (2) paint spray booths, identified as P07a and P07b, constructed in 2005, each equipped with four (4) air atomized spray guns, with a maximum capacity of 500,000 units per day, using dry filters for particulate control, coating a clay substrate, and exhausting to stack S07;

(o) Two (2) paint spray booths, identified as P016a and P016b, constructed in 2013, each equipped with twelve (12) air atomized spray guns, with a combined maximum capacity of 600,000 units per day, using dry filters for particulate control, coating a clay substrate, and exhausting to stack S14.

(p) Two (2) pitch storage tanks, each with a capacity of 30,000 gallons, identified as P01 and P02, exhausting to stacks S01 and S02, respectively;

(q) Two (2) pitch mix tanks, identified as P05a and P05b, installed in 2005, each with a capacity of 2,000 gallons.

(r) One (1) pitch re-melt tank, identified as P09, installed in 2005, with a capacity of 300 gallons, a maximum throughput of 250 tons per year.

(s) Paved and unpaved roads.

(t) Two (2) pneumatically operated water cooled molding process, A & B Line, constructed in 2005, vented inside the building.

Existing Approvals

Since the issuance of the MSOP No.: M149-28339-00027 on October 28, 2009, the source has constructed or has been operating under the following additional approvals:

(a) Significant Permit Revision No.: 149-32378-00027 issued on March 7, 2013.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the State Implementation Plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Starke County.

Pollutant	Designations
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard.[1]
$PM_{2.5}$	Unclassifiable or attainment effective April 5, 2005, for the annual $PM_{2.5}$ standard.
$PM_{2.5}$	Unclassifiable or attainment effective December 13, 2009, for the 24-hour $PM_{2.5}$ standard.
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.

[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Starke County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Starke County has been classified as attainment for $PM_{2.5}$. Therefore, direct $PM_{2.5}$, SO_2, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
Starke County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

(a) The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.

(b) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Permit Level Determination – MSOP

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	106.8
PM_{10}	88.75
$PM_{2.5}$	86.40
SO_2	0.24
VOC	19.77
CO	0.90
NO_x	1.07
GHGs as CO_2e	1,296

HAPs	**tons/year**
Hexane	0.02
Formaldehyde	0.31
Total	**0.33**

(a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of PM_{10} and $PM_{2.5}$ is each less than one hundred (100) tons per year, but greater than or equal to twenty-five (25) tons per year. The PTE of all other regulated criteria pollutants are less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. A Minor Source Operating Permit (MSOP) renewal will be issued.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of GHG is less than one hundred thousand (100,000) tons of CO_2 equivalent (CO_2e) emissions per year.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source will be issued an MSOP Renewal.

Federal Rule Applicability

Compliance Assurance Monitoring (CAM)

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

New Source Performance Standards (NSPS)

(b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

(c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD (326 IAC 20-95) are not included in this permit, because this rule only applies to boilers or process heaters located at a major source of HAPs. This source is not a major source of HAPs.

(d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Brick and Structural Clay Products Manufacturing, 40 CFR 63, Subpart JJJJJ (326 IAC 20-72) are not included in this permit because this rule only applies to brick and structural clay products manufacturing facilities that are located at, or are part of, a major source of HAP emissions. This source is not a major source of HAP emissions.

(e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Clay Ceramics Manufacturing, 40 CFR 63, Subpart KKKKK (326 IAC 20-73) are not included in this permit because this rule only applies to clay ceramics manufacturing facilities that are located at, or are part of, a major source of HAP emissions. This source is not a clay ceramics manufacturing facility and is not a major source of HAP emissions.

(f) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

State Rule Applicability Determination

(a) 326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))
MSOP applicability is discussed under the Permit Level Determination – MSOP section above.

(b) 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))
This source is not a major stationary source under PSD (326 IAC 2-2), because the potential to emit of all attainment regulated pollutants are less than 250 tons per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

(c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year.

Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.

(d) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

(e) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

(f) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

<u>Paint Spray Booths</u>

(g) 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices, and Control Technologies) Pursuant to 326 IAC 6-3-2(d), the surface coating processes (P06a, P06b, P07a, P07b, P016a and P016b) shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, subject to the following:

(1) The source shall operate the control device in accordance with manufacturer's specifications.

(2) If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:

(A) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(B) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

If overspray is visibly detected the source shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records shall be maintained for five (5) years.

(h) 326 IAC 8-1-6 (New Facilities; General Reduction Requirements)
Each of the paint spray booths, identified as P06a, P06b, P07a, P07b, P016a, and P016b are not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each booth is less than twenty-five (25) tons per year.

(i) There are no other 326 IAC 8 Rules that are applicable to the paint spray booths.

Limestone Storage Silos

(k) 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices, and Control Technologies) Pursuant to 326 IAC 6-3-2:

(1) the allowable particulate emission rate from the limestone storage silos, identified as P03 and P04, shall each not exceed 8.61 pounds per hour when operating at a process weight rate of 3.03 tons per hour.

(2) The allowable particulate emission rate from the dry material #1 storage silo, identified as P012, shall each not exceed 4.10 pounds per hour when operating at a process weight rate of 1.00 ton per hour.

(3) The allowable particulate emission rate from the dry material #3 storage silo, identified as P014, shall each not exceed 4.47 pounds per hour when operating at a process weight rate of 1.14 tons per hour.

(4) The allowable particulate emission rate from the dry mixer, identified as P015, shall each not exceed 4.47 pounds per hour when operating at a process weight rate of 1.14 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10P^{0.67}$$

where E = rate of emission in pounds per hour;
and P = process weight rate in tons per hour.

In order to comply with this limit, the baghouses for particulate control shall be in operation and control emissions at all times that the limestone storage silos are in operation.

Hot Oil Heater

(l) 326 IAC 6-2-4 (Emission Limitations for Facilities Specified in 326 IAC 6-2-1(d))
Pursuant to 326 IAC 6-2-4, this condition is applicable to indirect heating facilities constructed after September 21, 1983. The hot oil heater is a direct heating facility. Therefore, the hot oil heater is not subject to the conditions of this rule.

Mix Tanks

(m) The two (2) liquid pitch mix tanks, identified as P05a and P05b, do not produce PM. Therefore, the conditions of 326 IAC 6-3-2 are not applicable to these units.

Re-Melt Tank and Pitch Storage Tank

(n) 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices, and Control Technologies)

(1) The re-melt tank, identified as P09, is not subject to the conditions of 326 IAC 6-3-2 because the process involves melting production parts and does not produce PM. Therefore, the conditions of 326 IAC 6-3-2 are not applicable to this unit.

(2) The two (2) pitch storage tanks, identified as P01 and P02, do not produce PM. Therefore, the conditions of 326 IAC 6-3-2 are not applicable to these units.

Compliance Determination, Monitoring and Testing Requirements

The compliance determination and monitoring requirements applicable to this source are as follows:

(a) The dry material storage silos, identified as P03, P04, P012, P014, and the dry mixer, identified as P015, have applicable compliance monitoring conditions as specified below:

(1) Visible Emission Notations

(A) Daily visible emission notations of the dry material storage silos, identified as P03, P04, P012, P014, and the dry mixer, identified as P015, stack exhausts shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(B) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(C) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(D) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(E) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Failure to take response steps shall be considered a deviation from this permit. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition.

(2) The Permittee shall record the pressure drop across the baghouses used in conjunction with the two (2) limestone storage silos, identified as P03, P04, and the dry mixer, identified as P015 at least once per day when the storage silos and mixer are in operation. If the pressure drop across the baghouses is outside the normal range of 3.0 and 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(3) In the event that bag failure has been observed:

(A) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(B) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the silo(s). Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces, or triboflows.

(C) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

The baghouses must operate properly to ensure compliance with 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-6.1 (MSOP).

Recommendation

The staff recommends to the Commissioner that the MSOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on April 4, 2014.

Conclusion

The operation of this stationary sporting goods manufacturing plant shall be subject to the conditions of the attached MSOP Renewal No.: 149-34393-00027.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Roger Osburn at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-0242 or toll free at 1-800-451-6027 extension 3-0242

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

TSD Appendix A: Emission Calculations
Emissions Summary

Company Name: White Flyer Targets
Address City IN Zip: 317 Kloeckner Drive, Knox, IN 46534
Permit Number: M149-34393-00027
Reviewer: Roger Osburn
Date: 4/16/2014

	Unlimited Potential to Emit (PTE) (tons/year) (Before Controls)										
Emission Units	PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO2e	Total HAPs	Worst Single HAP	
Hot Oil Heater	0.02	0.08	0.08	0.01	1.07	0.06	0.90	1,296	0.02	0.02	hexane
Material Storage	17.99	2.91	1.09	0.23	–	–	–	–	–	–	–
Mixing and Process	26.34	24.28	24.03	–	–	–	–	–	–	–	–
Pitch Tanks	–	–	–	–	–	1.25E-04	–	–	–	–	–
Spray Booths	61.16	61.16	61.16	–	–	19.71	–	–	0.31	0.31	Formaldehyde
Paved Roads	0.28	0.06	0.01	–	–	–	–	–	–	–	–
Unpaved Roads	1.04	0.26	0.03	–	–	–	–	–	–	–	–
Total PTE	**106.83**	**88.75**	**86.40**	**0.24**	**1.07**	**19.77**	**0.90**	**1296**	**0.33**	0.31	Formaldehyde

	Unlimited Potential to Emit (PTE) (tons/year) (After Controls)										
Emission Units	PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO2e	Total HAPs	Worst Single HAP	
Hot Oil Heater	0.02	0.08	0.08	0.01	1.07	0.06	0.90	1,296	2.03E-02	0.02	hexane
Material Storage	0.36	0.06	0.02	6.90E-04	–	–	–	–	–	–	–
Mixing and Process	0.12	0.08	0.07	–	–	–	–	–	–	–	–
Pitch Tanks	–	–	–	–	–	1.25E-04	–	–	–	–	–
Spray Booths	1.22	1.22	1.22	–	–	19.71	–	–	0.31	0.31	Formaldehyde
Paved Roads	0.25	0.05	0.01	–	–	–	–	–	–	–	–
Unpaved Roads	0.68	0.17	0.02	–	–	–	–	–	–	–	–
Total PTE	**2.66**	**1.67**	**1.43**	**0.01**	**1.07**	**19.77**	**0.90**	**1296**	**0.33**	0.31	Formaldehyde

TSD Appendix A: Emission Calculations
Natural Gas Combustion Only
Capacity <100 MMBtu/hr
Unlimited PTE for Existing Significant Boilers

Company Name: White Flyer Targets
Source Address: 317 Kloeckner Ave., Knox, IN 46534
Permit Number: M149-34393-00027
Reviewer: Roger Osburn
Date: 4/16/2014

Unit	Maximum Heat Input Capacity (MMBtu/hr)	High Heat Value (MMBtu/MMscf)	Potential Throughput (MMcf/yr)
Hot Oil Heater	2.50	1020	21.47
Totals	**2.50**		**21.47**

Criteria Pollutants	Pollutant					
	PM*	PM10/PM2.5*	SO2	NOx	VOC	CO
Uncontrolled Emission Factor in lb/MMcf	1.9	7.6	0.6	100 **see below	5.5	84
Uncontrolled Potential Emission in tons/yr	0.02	0.08	0.01	1.07	0.06	0.9
Control Efficiency (filterable only)	85.00%	85.00%				
Controlled Emission Factor in lb/MMcf	0.29	5.99				
Potential Emissions (after control) in tons/yr	0.00	0.06				

*PM emission factor is filterable PM only. PM10/PM2.5 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Hazardous Air Pollutants	HAPs - Organics*					HAPs - Metals*				
	Benzene	DCB	Formaldehyd	Hexane	Toluene	Pb	Cd	Cr	Mn	Ni
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.80	3.4E-03	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	2.25E-05	1.29E-05	8.05E-04	0.02	3.65E-05	5.37E-06	1.18E-05	1.50E-05	4.08E-06	2.25E-05

*The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Potential Emission of Total HAPs (tons/yr)	**0.02**

Methodology
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMcf/yr) = [Heat Input Capacity (MMBtu/hr)] * [8,760 hours/year] * [MMcf/1,020 MMBtu]
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Greenhouse Gases (GHGs)	Greenhouse Gas (GHG)		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120000	2.3	2.2
Potential Emission in tons/yr	1,288	0.02	0.02
Summed Potential Emissions in tons/yr	1,288		
CO2e Total in tons/yr	1,296		

Methodology
The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (25) + N2O Potential Emission ton/yr x N2O GWP (298).

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
SO2 = Sulfur Dioxide
NOx = Nitrous Oxides
VOC - Volatile Organic Compounds
CO = Carbon Monoxide
DCB = Dichlorobenzene
Pb = Lead
Cd = Cadmium
Cr = Chromium
Mn = Manganese
Ni = Nickel
CO2 = Carbon Dioxide
CH4 = Methane
N2O = Nitrous Oxide
CO2e = CO2 equivalent emissions

Appendix A: Emission Calculations
Material Storage Emissions

Company Name: White Flyer Targets
Address City IN Zip: 317 Kloeckner Drive, Knox, IN 46534
Permit Number: M149-34393-00027
Reviewer: Roger Osburn
Date: 4/16/2014

Emission Unit	Maximum Throughput (tons/yr)	Pollutant*	Ef (lb/ton)	Uncontrolled Emissions (ton/yr)	Type of control	Control Efficiency (%)	Controlled Emissions (ton/yr)
Dry Material #1 - P03	26500	PM	0.50	**6.56**	Fabric Filter	98.00%	0.13
		PM10	0.08	**1.06**	Fabric Filter	98.00%	0.02
		PM2.5	0.03	**0.40**	Fabric Filter	98.00%	0.01
Dry Material #1 - P04	26500	PM	0.50	**6.56**	Fabric Filter	98.00%	0.13
		PM10	0.08	**1.06**	Fabric Filter	98.00%	0.02
		PM2.5	0.03	**0.40**	Fabric Filter	98.00%	0.01
Dry Material #1 - P012	8760	PM	0.50	**2.17**	Fabric Filter	98.00%	0.04
		PM10	0.08	**0.35**	Fabric Filter	98.00%	0.01
		PM2.5	0.03	**0.13**	Fabric Filter	98.00%	2.63E-03
Dry Material #2 - P013	958	PM	0.50	**0.24**	Fabric Filter	98.00%	4.74E-03
		PM10	0.08	**0.04**	Fabric Filter	98.00%	7.66E-04
		PM2.5	0.03	**0.01**	Fabric Filter	98.00%	2.87E-04
Dry Material #3 - P014	9960	PM	0.50	**2.47**	Fabric Filter	98.00%	4.93E-02
		PM10	0.08	**0.40**	Fabric Filter	98.00%	7.97E-03
		PM2.5	0.03	**0.15**	Fabric Filter	98.00%	2.99E-03
Heated liquid storage tank P010	32850	Hydrogen sulfide	1.40E-02	**0.23**	wet scrubber and filter	99.70%	6.90E-04

*Assume PM=PM10=PM2.5

Methodology

All storage and conveying is conducted in covered silos and covered conveyors.

These emissions include any emissions that would result from the molding process.

P03 and P04 maximum throughput has remained unchanged from the previous permit.

The controlled emission factors are from AP-42 Ch. 11.19.2-4 (8/04)

The uncontrolled total particulate matter emission factor was calculated from the controlled total particulate matter using the following equation:

Uncontrolled emission factor = Controlled total particulate emission factor (100% - Efficiency %)/ 100%

The conservative emission factor for the heated liquid storage tank assumes all hydrogen sulfide is released from sulfur upon its solidification.

Appendix A: Emission Calculations
Mixing and Process Emissions

Company Name: White Flyer Targets
Address City IN Zip: 317 Kloeckner Drive, Knox, IN 46534
Permit Number: M149-34393-00027
Reviewer: Roger Osburn
Date: 4/16/2014

Emission Unit	Maximum Throughput (tons/yr)	Pollutant*	Ef (lb/ton)	Uncontrolled Emissions (ton/yr)	Type of control	Control Efficiency (%)	Controlled Emissions (ton/yr)
Dry Mixer- P015	9960	PM	0.50	2.47	Fabric Filter	98.00%	4.93E-02
		PM10	0.08	0.40	Fabric Filter	98.00%	7.97E-03
		PM2.5	0.03	0.15	Fabric Filter	98.00%	2.99E-03

*Assume PM=PM10=PM2.5
The controlled emission factors are from AP-42 Ch. 11.19.2-4 (8/04)
All dry storage and conveying is conducted in covered silos and covered conveyors.
The uncontrolled total particulate matter emission factor was calculated from the controlled total particulate matter using the following equation:
Uncontrolled emission factor = Controlled total particulate emission factor (100% - PM10 Efficiency %)/ 100%

Emission Unit Description	Flowrate (acfm) (a)	Estimated Grain Loading (b) (gr/dscf)	Controlled Potential Emissions PM/PM10/PM2.5 (lbs/hr)	Controlled Potential Emissions PM/PM10/PM2.5 (ton/yr)	Control Device % Efficiency	Uncontrolled Emissions PM/PM10/PM2.5 (lbs/hr)	Uncontrolled Emissions PM/PM10/PM2.5 (ton/yr)
Heated liquid storage tank P010	106	0.003	0.003	0.01	99.70%	0.91	3.98
Heated and agitated mix tank P011	106	0.003	0.003	0.01	99.70%	0.91	3.98
Heated process tank P021	106	0.003	0.003	0.01	99.70%	0.91	3.98
Remelt tank P022	106	0.003	0.003	0.01	99.70%	0.91	3.98
Super sack and/or silo dry material dump station P018a	106	0.003	0.003	0.01	99.70%	0.91	3.98
Super sack and/or silo dry material dump station P018b	106	0.003	0.003	0.01	99.70%	0.91	3.98
		Totals	**0.02**	**0.07**		**5.45**	**23.88**

Notes:
a) Values are total airflows for all of the baghouses at an emission source.
b) Grain loading values in the baghouse exhaust, based on manufacturer's data.
c) Assumed that the air exhausted through the stacks is equal to the volume of dry material loaded. Grain loading values are conservative estimates based on engineering judgem

Methodology:
Controlled Potential Emissions (lbs/hr) = [Grain Loading (gr/dscf)] x [Air Flow (dscfm)] x [60 min/hr] x [lb/7000 grains]
Controlled Potential Emissions (tons/yr) = [Controlled Potential Emissions (lbs/hr)] x [8760 hrs/yr] x [ton/2000 lb]
Uncontrolled Potential Emissions (lbs/hr) = [Controlled Potential Emissions (lbs/hr)] x [1 / 1 - Control Efficiency (%)]
Uncontrolled Potential Emissions (tons/yr) = [Uncontrolled Potential Emissions (lbs/hr)] x [8760 hrs/yr] x [ton/2000 lb]

Appendix A: Emission Calculations
Petroleum Pitch Tank Emissions

Company Name: White Flyer Targets
Address City IN Zip: 317 Kloeckner Drive, Knox, IN 46534
Permit Number: M149-34393-00027
Reviewer: Roger Osburn
Date: 4/16/2014

Tank VOC Emissions - Maximum PTE

Tank ID	Product Stored	Throughput (gallons/yr)	Tank Height (ft)	Diameter (ft)	Vapor Molecular Weight	Vapor Space Outage (ft)	Material Vapor Pressure (psia)	Turnovers per Year	Tank Capacity (gallons)	Breathing Loss (lbs)	Turnover Factor	Working Loss (lbs)	Total VOC Tons/yr
P01	Petroleum Pitch	555,000.00	30	14.5	470	1.10	1.25E-05	19	30,000	0.01	1	0.08	4.50E-05
P02	Petroleum Pitch	555,000.00	30	14.5	470	1.10	1.25E-05	19	30,000	0.01	1	0.08	4.50E-05
P05a	Petroleum Pitch	1,111,000.00	8	6.5	470	1.10	1.25E-05	700	2,000	0.00	1	0.03	1.50E-05
P05b	Petroleum Pitch	1,111,000.00	8	6.5	470	1.10	1.25E-05	700	2,000	0.00	1	0.03	1.50E-05
P09	Petroleum Pitch	50,000.00	5.8	4	470	1.10	1.25E-05	100	500	0.00	1	0.01	5.00E-06
													1.25E-04

Note: Storage tank emissions estimated using EPA software Tanks 4.09

TSD Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: White Flyer Targets
Address City IN Zip: 317 Kloeckner Drive, Knox, IN 46534
Permit Number: M149-34393-00027
Reviewer: Roger Osburn
Date: 4/16/2014

Paved Roads at Industrial Site
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Information (provided by source)

Type of Traffic	Vehicle Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight of Loaded Vehicle (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle Type 1 (entering plant) (one-way trip)	Box Trailer & Tractor	15.0	1.0	15.0	17.5	262.5	100	0.019	0.3	103.7
Vehicle Type 1 (leaving plant) (one-way trip)	Box Trailer & Tractor	15.0	1.0	15.0	40.0	600.0	100	0.019	0.3	103.7
			Total	**30.0**		**862.5**			**0.6**	**207.4**

Average Vehicle Weight Per Trip = 28.8 tons/trip
Average Miles Per Trip = 0.02 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	28.8	28.8	28.8	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m^2 = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	2.674	0.535	0.1313	lb/mile
Mitigated Emission Factor, Eext =	2.445	0.489	0.1200	lb/mile

Type of Traffic	Vehicle Type	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Vehicle Type 1 (entering plant) (one-way trip)	Box Trailer & Tractor	0.14	0.03	0.01	0.13	0.03	0.01
Vehicle Type 1 (leaving plant) (one-way trip)	Box Trailer & Tractor	0.14	0.03	0.01	0.13	0.03	0.01
		0.28	**0.06**	**0.01**	**0.25**	**0.05**	**0.01**

Methodology
Total Weight driven per day (ton/day) = [Maximum Weight of Loaded Vehicle (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)
PTE = Potential to Emit

TSD Appendix A: Emission Calculations
Fugitive Dust Emissions - Unpaved Roads

Company Name: White Flyer Targets
Address City IN Zip: 317 Kloeckner Drive, Knox, IN 46534
Permit Number: M149-34393-00027
Reviewer: Roger Osburn
Date: 4/16/2014

Unpaved Roads at Industrial Site
The following calculations determine the amount of emissions created by unpaved roads, based on 8,760 hours of use and AP-42, Ch 13.2.2 (11/2006).

Vehicle Information (provided by source)

Type	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	7.0	1.0	7.0	40.0	280.0	300	0.057	0.4	145.2
Vehicle (leaving plant) (one-way trip)	7.0	1.0	7.0	17.5	122.5	300	0.057	0.4	145.2
		Totals	**14.0**		**402.5**			**0.8**	**290.3**

Average Vehicle Weight Per Trip = 28.8 tons/trip
Average Miles Per Trip = 0.06 miles/trip

Unmitigated Emission Factor, Ef = k*[(s/12)^a]*[(W/3)^b] (Equation 1a from AP-42 13.2.2)

	PM	PM10	PM2.5	
where k =	4.9	1.5	0.15	lb/mi = particle size multiplier (AP-42 Table 13.2.2-2 for Industrial Roads)
s =	4.8	4.8	4.8	% = mean % silt content of unpaved roads (AP-42 Table 13.2.2-1 Sand/Gravel Processing Plant)
a =	0.7	0.9	0.9	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)
W =	28.8	28.8	28.8	tons = average vehicle weight (provided by source)
b =	0.45	0.45	0.45	= constant (AP-42 Table 13.2.2-2 for Industrial Roads)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [(365 - P)/365] (Equation 2 from AP-42 13.2.2)
Mitigated Emission Factor, Eext = E * [(365 - P)/365]
where P = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.2-1)

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	7.13	1.82	0.18	lb/mile
Mitigated Emission Factor, Eext =	4.69	1.20	0.12	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip)	0.52	0.13	0.01	0.34	0.09	0.01
Vehicle (leaving plant) (one-way trip)	0.52	0.13	0.01	0.34	0.09	0.01
Totals	**1.04**	**0.26**	**0.03**	**0.68**	**0.17**	**0.02**

Methodology
Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Unmitigated Emission Factor (lb/mile)) * (ton/2000 lbs)
Mitigated PTE (tons/yr) = (Maximum one-way miles (miles/yr)) * (Mitigated Emission Factor (lb/mile)) * (ton/2000 lbs)

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particulate Matter (<2.5 um)
PTE = Potential to Emit

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: White Flyer Targets
Address City IN Zip: 317 Kloeckner Drive, Knox, IN 46534
Permit Number: M149-34393-00027
Reviewer: Roger Osburn
Date: 4/16/2014

Material = Target Paint	Density (Lb/Gal)	Gallons of Material	Weight % Formaldehyde	Propylene Oxide	Formaldehyde Emissions (ton/yr)
128-1562 Orange	11.2	150.0	0.10%	NA	0.31
1564 Black	11.0	150.0	NA	1ppm	Negligible

Total Potential Emissions

Total HAPs	**0.31**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations
Emission Units P06a, P06b, P07a, P07b, P016a and P016b

Company Name: White Flyer Targets
Address City IN Zip: 317 Kloeckner Drive, Knox, IN 46534
Permit Number: M149-34393-00027
Reviewer: Roger Osburn
Date: 4/16/2014

Line	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Maximum Gallons (coating/day)	Pounds VOC per gallon of coating	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Transfer Efficiency	Control Efficiency
A (white)	12.2	68.81%	150.0	0.31	46.50	8.49	26.13	75%	98%
B (white)	12.2	68.81%	150.0	0.31	46.50	8.49	26.13	75%	98%
C (Black)	11.2	76.84%	75.0	0.20	15.00	2.74	8.90	75%	98%

	VOC	PM
Total Uncontrolled PTE	**19.71**	**61.16**
Controlled Emissions (tons/yr):	**NA**	**1.22**

Note: The pollutants represent the worst case scenerio for each line.

Methodology

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

TSD Appendix A: Emission Calculations
326 IAC 6-3-2 Compliance Summary

Company Name: White Flyer Targets
Source Address: 317 Kloeckner Drive, Knox, IN 46534
Permit Number: M149-34393-00027
Reviewer: Roger Osburn
Date: 4/16/2014

	Maximum Process Weight (lbs/hour)	Maximum Process Weight (tons/hour)	326 IAC 6-3 Allowable Particulate Emission Rate (lbs/hr) for each unit of that type	Uncontrolled PM Emission factor (lb/ton)	Uncontrolled PTE of PM (lbs/hr)	Is a Control Device Needed to Comply with 326 IAC 6-3-2?
Dry Material #1 - P03	6050.23	3.03	8.61	4.95	14.97	Yes
Dry Material #1 - P04	6050.23	3.03	8.61	4.95	14.97	Yes
Dry Material #1 - P012	2000.00	1.00	4.10	4.95	4.95	Yes
Dry Material #3 - P014	2273.97	1.14	4.47	4.95	5.63	Yes
Dry Mixer- P015	2273.97	1.14	4.47	4.95	5.63	Yes

Allowable emissions under 326 IAC 6-3-2 are calculated using the equation where the process weight rate is up to sixty thousand (60,000) pounds per hour:

$E = 4.10\ P^{0.67}$ where

E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The controlled emission factors are from AP-42 Ch. 11.19.2-4 (8/04)
The uncontrolled total particulate matter emission factor was calculated from the controlled total particulate matter using the following equation:
Uncontrolled emission factor = Controlled total particulate emission factor (100% - Efficiency %)/ 100%

Methodology
This tab includes emission units that have uncontrolled PTE greater than 0.551 lbs/hr
Maximum Process Weight (lbs/hr) are from the Material Storage and the Mixing and Process tabs Maximum Throughput (lbs/hr)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Tim Gunter
White Flyer Targets
317 Kloeckner Drive
Knox, Indiana 46534

DATE: October 7, 2014

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
MSOP – Renewal
149-34393-00027

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Robert Dritschel, Director of Regulatory Affairs / White Flyer Targets
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

October 7, 2014

TO: Starke County Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: White Flyer Targets
Permit Number: 149-34393-00027

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 6/13/2013

Mail Code 61-53

IDEM Staff	AWELLS 10/7/2014 White Flyer Targets 149-34393-00027 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: **CERTIFICATE OF MAILING ONLY**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing 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		Tim Gunter White Flyer Targets 317 Kloeckner Dr Knox IN 46534 (Source CAATS) confirmed delivery									
2		Robert Dritschel Director of Regulatory Affairs White Flyer Targets 317 Kloeckner Dr Knox IN 46534 *(RO CAATS)*									
3		Starke County Health Department Courthouse, 1st Floor, Main St Knox IN 46534-1148 *(Health Department)*									
4		Starke County Board of Commissioners 53 E. Mound Knox IN 46534 *(Local Official)*									
5		Starke County Public Library 152 West Culver Road Knox IN 46534 *(Library)*									
6		Knox City Council and Mayors Office 101 W Washington Street Knox IN 46534 *(Local Official)*									
7		Mr. Brian Skeuse Regent Chemical Research 115 US Hwy 202 Ringoes NJ 08551 *(Source - addl contact)*									
8											
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