

U.S. Department of Labor

Occupational Safety and Health Administration
200 N. High Street
Room 620
Columbus, OH 43215
Phone: 614-469-5582 Fax: 614-469-6791



Citation and Notification of Penalty

To:

QG Printing II Corp., dba Quad Graphics
and its successors
4051 Fondorf Drive
Columbus, OH 43228

Inspection Number: 1188833

Inspection Date(s): 11/02/2016 - 03/10/2017

Issuance Date: 03/14/2017

Inspection Site:

4051 Fondorf Drive
Columbus, OH 43228

7016 0910 0000 4171 8887

The violation(s) described in this Citation and Notification of Penalty is (are) alleged to have occurred on or about the day(s) the inspection was made unless otherwise indicated within the description given below.

This Citation and Notification of Penalty (this Citation) describes violations of the Occupational Safety and Health Act of 1970. The penalty(ies) listed herein is (are) based on these violations. You must abate the violations referred to in this Citation by the dates listed and pay the penalties proposed, unless within 15 working days (excluding weekends and Federal holidays) from your receipt of this Citation and Notification of Penalty **you either call to schedule an informal conference (see paragraph below) or** you mail a notice of contest to the U.S. Department of Labor Area Office at the address shown above. Please refer to the enclosed booklet (OSHA 3000) which outlines your rights and responsibilities and which should be read in conjunction with this form. Issuance of this Citation does not constitute a finding that a violation of the Act has occurred unless there is a failure to contest as provided for in the Act or, if contested, unless this Citation is affirmed by the Review Commission or a court.

Posting - The law requires that a copy of this Citation and Notification of Penalty be posted immediately in a prominent place at or near the location of the violation(s) cited herein, or, if it is not practicable because of the nature of the employer's operations, where it will be readily observable by all affected employees. This Citation must remain posted until the violation(s) cited herein has (have) been abated, or for 3 working days (excluding weekends and Federal holidays), whichever is longer.

Informal Conference - An informal conference is not required. However, if you wish to have such a conference you may request one with the Area Director during the 15 working day contest period. During such an informal conference you may present any evidence or views which you believe would support an adjustment to the citation(s) and/or penalty(ies).

If you are considering a request for an informal conference to discuss any issues related to this Citation and Notification of Penalty, you must take care to schedule it early enough to allow time to contest after the informal conference, should you decide to do so. Please keep in mind that a written letter of intent to contest must be submitted to the Area Director within 15 working days of your receipt of this Citation. The running of this contest period is not interrupted by an informal conference.

If you decide to request an informal conference, please complete, remove and post the Notice to Employees next to this Citation and Notification of Penalty as soon as the time, date, and place of the informal conference have been determined. Be sure to bring to the conference any and all supporting documentation of existing conditions as well as any abatement steps taken thus far. If conditions warrant, we can enter into an informal settlement agreement which amicably resolves this matter without litigation or contest.

Right to Contest – You have the right to contest this Citation and Notification of Penalty. You may contest all citation items or only individual items. You may also contest proposed penalties and/or abatement dates without contesting the underlying violations. Unless you inform the Area Director in writing that you intend to contest the citation(s) and/or proposed penalty(ies) within 15 working days after receipt, the citation(s) and the proposed penalty(ies) will become a final order of the Occupational Safety and Health Review Commission and may not be reviewed by any court or agency.

Penalty Payment – Penalties are due within 15 working days of receipt of this notification unless contested. (See the enclosed booklet and the additional information provided related to the Debt Collection Act of 1982.) Make your check or money order payable to "DOL-OSHA". Please indicate the Inspection Number on the remittance. You can also make your payment electronically on www.pay.gov. On the left side of the pay.gov homepage, you will see an option to Search Public Forms. Type "OSHA" and click Go. From the results, click on **OSHA Penalty Payment Form**. The direct link is:

<https://www.pay.gov/paygov/forms/formInstance.html?agencyFormId=53090334>.

You will be required to enter your inspection number when making the payment. Payments can be made by credit card or Automated Clearing House (ACH) using your banking information. Payments of \$25,000 or more require a Transaction ID, and also must be paid using ACH. If you require a Transaction ID, please contact the OSHA Debt Collection Team at (202) 693-2170.

OSHA does not agree to any restrictions or conditions or endorsements put on any check, money order, or electronic payment for less than the full amount due, and will process the payments as if these restrictions or conditions do not exist.

Notification of Corrective Action – For each violation which you do not contest, you must provide **abatement certification** to the Area Director of the OSHA office issuing the citation and identified above. This abatement certification is to be provided by letter within 10 calendar days after each abatement date. Abatement certification includes the date and method of abatement. If the citation indicates that the violation was corrected during the inspection, no abatement certification is required for that item. The abatement certification letter must be posted at the location where the violation appeared and the corrective action took place or employees must otherwise be effectively informed about abatement activities. A sample abatement certification letter is enclosed with this Citation. In addition, where the citation indicates that **abatement documentation** is necessary, evidence of the purchase or repair of equipment, photographs or video, receipts, training records, etc., verifying that abatement has occurred is required to be provided to the Area Director.

Employer Discrimination Unlawful – The law prohibits discrimination by an employer against an employee for filing a complaint or for exercising any rights under this Act. An employee who believes that he/she has been discriminated against may file a complaint no later than 30 days after the discrimination occurred with the U.S. Department of Labor Area Office at the address shown above.

Employer Rights and Responsibilities – The enclosed booklet (OSHA 3000) outlines additional employer rights and responsibilities and should be read in conjunction with this notification.

Notice to Employees – The law gives an employee or his/her representative the opportunity to object to any abatement date set for a violation if he/she believes the date to be unreasonable. The contest must be mailed to the U.S. Department of Labor Area Office at the address shown above and postmarked within 15 working days (excluding weekends and Federal holidays) of the receipt by the employer of this Citation and Notification of Penalty.

Inspection Activity Data – You should be aware that OSHA publishes information on its inspection and citation activity on the Internet under the provisions of the Electronic Freedom of Information Act. The information related to these alleged violations will be posted when our system indicates that you have received this citation. You are encouraged to review the information concerning your establishment at www.osha.gov. If you have any dispute with the accuracy of the information displayed, please contact this office.



NOTICE TO EMPLOYEES OF INFORMAL CONFERENCE

An informal conference has been scheduled with OSHA to discuss the citation(s) issued on 03/14/2017. The conference will be held by telephone or at the OSHA office located at 200 N. High Street, Room 620, Columbus, OH 43215 on _____ at _____.

_____. Employees and/or representatives of employees have a right to attend an informal conference.

CERTIFICATION OF CORRECTIVE ACTION WORKSHEET

Inspection Number: 1188833

Company Name: QG Printing II Corp., dba Quad Graphics
Inspection Site: 4051 Fondorf Drive, Columbus, OH 43228
Issuance Date: 03/14/2017

List the specific method of correction for each item on this citation in this package that does not read "Corrected During Inspection" and return to: **U.S. Department of Labor – Occupational Safety and Health Administration, 200 N. High Street, Room 620, Columbus, OH 43215**

Citation Number _____ and Item Number _____ was corrected on _____
By (Method of Abatement): _____

Citation Number _____ and Item Number _____ was corrected on _____
By (Method of Abatement): _____

Citation Number _____ and Item Number _____ was corrected on _____
By (Method of Abatement): _____

Citation Number _____ and Item Number _____ was corrected on _____
By (Method of Abatement): _____

Citation Number _____ and Item Number _____ was corrected on _____
By (Method of Abatement): _____

Citation Number _____ and Item Number _____ was corrected on _____
By (Method of Abatement): _____

I certify that the information contained in this document is accurate and that the affected employees and their representatives have been informed of the abatement.

Signature

Date

Typed or Printed Name

Title

NOTE: 29 USC 666(g) whoever knowingly makes any false statements, representation or certification in any application, record, plan or other documents filed or required to be maintained pursuant to the Act shall, upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment of not more than 6 months or both.

POSTING: A copy of completed Corrective Action Worksheet should be posted for employee review

U.S. Department of Labor
Occupational Safety and Health Administration

Inspection Number: 1188833
Inspection Date(s): 11/02/2016 - 03/10/2017
Issuance Date: 03/14/2017



Citation and Notification of Penalty

Company Name: QG Printing II Corp., dba Quad Graphics
Inspection Site: 4051 Fondorf Drive, Columbus, OH 43228

Citation 1 Item 1 Type of Violation: **Serious**

29 CFR 1910.1200(h)(1): Employers shall provide employees with effective information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new chemical hazard the employees have not previously been trained about is introduced into their work area. Information and training may be designed to cover categories of hazards (e.g., flammability, carcinogenicity) or specific chemicals. Chemical-specific information must always be available through labels and safety data sheets:

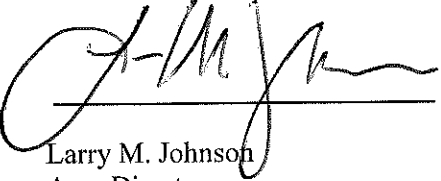
a. On or before December 16, 2016, the employer did not ensure that all employees, including temporary employees, were provided with effective information and training on the hazards of combustible paper dust.

b. On or before December 16, 2016, the employer did not ensure that all temporary employees and newly hired QG Printing II employees were provided hazard communication training with effective information and training on the hazardous chemicals in their work area for employees working with hazardous chemicals, including but not limited to the following: Ecolo-Clean (blanket wash), WD-40, Spray Nine Cleaner/Degreaser, inks, and silicone.

ABATEMENT DOCUMENTATION REQUIRED FOR THIS ITEM

Date By Which Violation Must be Abated:
Proposed Penalty:

04/17/2017
\$9959.00


Larry M. Johnson
Area Director

See pages 1 through 4 of this Citation and Notification of Penalty for information on employer and employee rights and responsibilities.

U.S. Department of Labor
Occupational Safety and Health Administration
200 N. High Street
Room 620
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Phone: 614-469-5582 Fax: 614-469-6791



INVOICE / DEBT COLLECTION NOTICE

Company Name: QG Printing II Corp., dba Quad Graphics
Inspection Site: 4051 Fondorf Drive, Columbus, OH 43228
Issuance Date: 03/14/2017

Summary of Penalties for Inspection Number	1188833
Citation 1, Serious	\$9959.00
TOTAL PROPOSED PENALTIES	\$9959.00

To avoid additional charges, please remit payment promptly to this Area Office for the total amount of the uncontested penalties summarized above. Make your check or money order payable to: "DOL-OSHA". Please indicate OSHA's Inspection Number (indicated above) on the remittance. You can also make your payment electronically on www.pay.gov. On the left side of the pay.gov homepage, you will see an option to Search Public Forms. Type "OSHA" and click Go. From the results, click on **OSHA Penalty Payment Form**. The direct link is <https://www.pay.gov/paygov/forms/formInstance.html?agencyFormId=53090334>. You will be required to enter your inspection number when making the payment. Payments can be made by credit card or Automated Clearing House (ACH) using your banking information. Payments of \$25,000 or more require a Transaction ID, and also must be paid using ACH. If you require a Transaction ID, please contact the OSHA Debt Collection Team at (202) 693-2170.

OSHA does not agree to any restrictions or conditions or endorsements put on any check, money order, or electronic payment for less than the full amount due, and will cash the check or money order as if these restrictions or conditions do not exist.

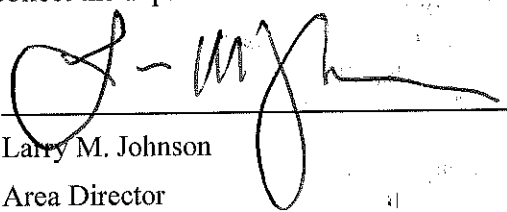
If a personal check is issued, it will be converted into an electronic fund transfer (EFT). This means that our bank will copy your check and use the account information on it to electronically debit your account for the amount of the check. The debit from your account will then usually occur within 24 hours and will be shown on your regular account statement. You will not receive your original check back. The bank will destroy your original check, but will keep a copy of it. If the EFT cannot be completed because of insufficient funds or closed account, the bank will attempt to make the transfer up to 2 times.

Pursuant to the Debt Collection Act of 1982 (Public Law 97-365) and regulations of the U.S. Department of Labor (29 CFR Part 20), the Occupational Safety and Health Administration is required to assess interest, delinquent charges, and administrative costs for the collection of delinquent penalty debts for violations of the Occupational Safety and Health Act.

Interest: Interest charges will be assessed at an annual rate determined by the Secretary of the Treasury on all penalty debt amounts not paid within one month (30 calendar days) of the date on which the debt amount becomes due and payable (penalty due date). The current interest rate is one percent (1%). Interest will accrue from the date on which the penalty amounts (as proposed or adjusted) become a final order of the Occupational Safety and Health Review Commission (that is, 15 working days from your receipt of the Citation and Notification of Penalty), unless you file a notice of contest. Interest charges will be waived if the full amount owed is paid within 30 calendar days of the final order.

Delinquent Charges: A debt is considered delinquent if it has not been paid within one month (30 calendar days) of the penalty due date or if a satisfactory payment arrangement has not been made. If the debt remains delinquent for more than 90 calendar days, a delinquent charge of six percent (6%) per annum will be assessed accruing from the date that the debt became delinquent.

Administrative Costs: Agencies of the Department of Labor are required to assess additional charges for the recovery of delinquent debts. These additional charges are administrative costs incurred by the Agency in its attempt to collect an unpaid debt. Administrative costs will be assessed for demand letters sent in an attempt to collect the unpaid debt.


Larry M. Johnson
Area Director

3/14/2017
Date

U.S. Department of Labor

Occupational Safety and Health Administration
Columbus Area Office - Region V
Federal Office Building - Room 620
200 North High Street, Room 620
Columbus, Ohio 43215-2497
Phone: (614) 469-5582 FAX: (614) 469-6791



March 14, 2017

Mark Parrish, Manufacturing Manager
QG Printing II Corp., dba Quad Graphics
4051 Fondorf Drive
Columbus, OH 43228

RE: 1188833

Dear Mr. Parrish:

An OSHA inspection was conducted at your workplace located at 4051 Fondorf Drive, Columbus, Ohio 43228. Based on this inspection, the following recommendations are being provided to enhance employee safety and health:

During the Combustible Dust NEP inspection conducted at your facility November 2, 2016 through December 16, 2016, OSHA determined that your facility had excessive combustible paper dust accumulations on the floor and upper surfaces throughout the production floor/press area where electrical equipment and wiring was unclassified. In addition, shop and central vacuum systems were being used that were not rated for Class II environments. If practices allowing for the excess accumulation of combustible paper dust continue, those areas would have to be reclassified as Class II, Division 2 hazardous (classified) locations at a minimum. To avoid future OSHA violations of 1910.307(c), 1910.22(a)(1), 1910.22(a)(2), and 1910.176(c), OSHA recommends that your company take immediate action to remedy this situation.

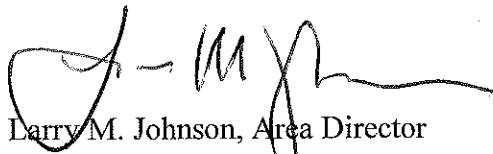
Among other methods, feasible and acceptable abatement methods to correct this hazard include the following: Developing, implementing, and maintaining a comprehensive housekeeping program and schedule to keep the production floor/press area clean and free of accumulations of combustible paper dust and using vacuum cleaning methods and portable vacuum cleaners meeting the requirements of the National Fire Protection Association (NFPA).

NFPA 652, Standard on the Fundamentals of Combustible Dust (2016 Edition), addresses housekeeping, vacuum cleaning methods, and other safe methods in Chapter 8, Hazard Management: Mitigation and Prevention, in particular, Section 8.4 Housekeeping.

NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids (2017 Edition), addresses housekeeping, portable vacuum cleaners, and other safe methods in Chapter 8, Fugitive Dust Control and Housekeeping.

OSHA welcomes any report of your efforts to reduce the above-mentioned exposures. If you have any questions concerning this matter, please contact this office.

Sincerely,

A handwritten signature in black ink, appearing to read 'J-M Johnson', with a long horizontal flourish extending to the right.

Larry M. Johnson, Area Director
Columbus Area Office

U.S. Department of Labor

Occupational Safety and Health Administration
Columbus Area Office - Region V
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Columbus, Ohio 43215-2497
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March 14, 2017

Mark Parrish, Manufacturing Manager
QG Printing II Corp., dba Quad Graphics
4051 Fondorf Drive
Columbus, OH 43228

RE: 1188833

Dear Mr. Parrish:

An inspection of your workplace at 4051 Fondorf Drive, Columbus, Ohio 43228 on November 2, 2016 through December 16, 2016 disclosed the following potential hazards:

1. Indoor cyclone handling combustible paper dust

An indoor Oneida Air Systems model Pro 2000 cyclonic air-material separator/dust collector unit (cyclone) with a second stage enclosureless filtration cartridge was used to collect combustible paper dust from paper slitting processes. Employees working near the unit were potentially exposed to combustible dust explosion, deflagration, and other fire hazards as the unit lacked a means of: (1) explosion protection; (2) deflagration propagation protection (isolation) for the upstream process, the unit's material discharge, and exhaust duct/final filter; and (3) fire protection in that the exhaust air was discharged directly into the occupied building. In addition, the system's ducting was constructed out of non-conductive materials (i.e. plastic) and contained many design deficiencies (i.e. rapid changes in ducting size, 90 degree bends, non-smooth wall construction, internal valves, etc.). The non-conductive construction may introduce reasonable deflagration ignition sources through static electric accumulation and discharge. The ducting design deficiencies promote the hazardous settling and accumulation of combustible dust within the ducting.

Cyclones use inertia to separate the particulate from the conveyance air. As part of this separation process, particulate is intentionally concentrated near the cyclone's internal perimeter and separated into larger particulate and fines. This concentration of particulate is hazardous because it increases the chances for the creation of a dense enough dust cloud to support an internal deflagration capable of causing failure of

the cyclone's vessel walls (an explosion) as well as flame front propagation into the work area through vessel openings.

As a result of an internal deflagration within the cyclone, employees working at or adjacent to the cyclone may be exposed to explosion and flame front propagation hazards. The explosion hazard includes the possibility for exposure to a pressure wave, expanding fireball, and fragmentation of the vessel itself. The flame front propagation hazard includes the possibility of flame front travel through all openings in the unit (i.e. through the unit's material discharge and into the 55-gallon collection drum; through the unit's exhaust ducting and into the work area; and, although less likely due to the small size of the upstream ducting, into the upstream work area).

As a result of an internal fire occurring within the cyclone or the cyclone's collection drum, employees working in the building may be exposed to the fire hazards associated with the continued transmission of hazardous byproducts of the fire event into the work area. These hazardous byproducts may include sparks, embers, fire, smoke, and toxic combustion gases.

National Fire Protection Association's (NFPA) Standard 654 "*Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, 2017 ed.*" –

Sections 7.13.1.1.1 and 7.13.1.2.2 require that an air-material separator (dust collector) with a dirty side volume of 8 ft³ or greater and representing an explosion hazard be located outside and protected with a form of explosion protection such as deflagration venting in accordance with NFPA 68 "*Standard on Explosion Protection by Deflagration Venting*" or deflagration suppression systems in accordance with NFPA 69 "*Standard on Explosion Prevention Systems*". Alternatives do exist, however, for an air-material separator to remain located indoors provided that certain protections are in place (see Section 7.13.1.1.2).

Section 7.13.1.6 requires that the air exhausted from the air-material separator be discharged outside to a restricted area and away from air intakes unless several precautions are implemented including: 1) methods to prevent the transmission of both flame and pressure effects from a deflagration into the facility; and 2) methods to prevent the transmission of smoke and flame from a fire into the facility (see Section 7.13.1.6.3).

Section 7.1.6.1 requires that isolation devices, designed in accordance with NFPA 69, be used where an explosion hazard exists to prevent deflagration propagation between connected equipment and/or the work area.

Section 7.6.1 requires that ducting systems handling combustible particulate solids conform to the requirements of NFPA 91 *"Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Particulate Solids"*.

Section 7.6.2 requires that ductwork be constructed of metal or noncombustible, conductive material.

Section 7.6.6 requires that changes in duct sized be designed to prevent the accumulation of material by utilizing a tapered transformation piece with the included angle of the taper not more than 30 degrees.

Sections 9.3.2.1 and 9.3.2.3 require that all system components be conductive as well as bonded and grounded with a resistance of less than 1.0×10^6 ohms to ground.

2. Outdoor cyclones handling shredded paper scraps

Two roof mounted cyclones were utilized to provide air-material separation for paper scrap material between conveyed between multiple paper shredders and paper balers. The ducting, cyclones, and baling systems downstream of the paper shredders lacked a means of fire detection and suppression. The processes upstream of the shredders did not include any means of removing foreign materials capable of causing ignition. In addition, air exhausted from the cyclones is returned directly to the facility during cold months and there was no system to detect a fire occurring in the cyclone and subsequently activate an abort gate to prevent the transmission of hazardous byproducts of a fire back into the facility. These hazardous byproducts may include sparks, embers, fire, smoke, and toxic combustion gases. Employees working inside of the building may be at risk of exposure to these fire hazards.

National Fire Protection Association's (NFPA) Standard 654 *"Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, 2017 ed."* –

Section 7.13.1.2.1 requires air-material separators having fire hazards be provided with methods of fire protection.

Section 7.13.1.6 requires that the air exhausted from the air-material separator be discharged outside to a restricted area and away from air intakes unless several precautions are implemented including methods to prevent the transmission of smoke and flame from a fire into the facility (see Section 7.13.1.6.3).

Section 7.14.1 requires that foreign materials, such as tramp metal, be excluded and removed by magnetic separators, pneumatic separators, or grates before being processed by size reduction equipment.

Section 7.14.3 requires that fire protection be provided to protect against any fire hazards presented by size reduction equipment.

Since no OSHA standard applies and it is not considered appropriate at this time to invoke Section 5(a)(1), the General Duty Clause of the Occupational Safety and Health Act, no citation will be issued for these specific potential hazards.

In the interest of workplace safety and health, I recommend that you voluntarily take the necessary steps to eliminate or materially reduce your employees' exposure to the hazards described above. Feasible methods of control may include, but are not limited to, the following:

Dust Hazard Analysis: All systems handling combustible particulate solids *[applies to both #1 and #2 above]*

As a starting point, a comprehensive Dust Hazard Analysis (DHA) should be performed on your combustible particulate solid conveying/exhaust systems using the guidelines in Chapter 7 of NFPA 652 "Standard on the Fundamentals of Combustible Dust, 2016 ed." The DHA Process allows for a thorough evaluation of the fire, deflagration, and explosion hazards and provides recommendations to manage any determined/confirmed hazards.

Relocation and other alternatives: Indoor Cyclone *[applies to #1 above]*

Consider the feasibility of moving the indoor cyclone to an outdoor location in addition to: 1) providing a safe method of explosion protection [see below for details]; 2) providing a safe method of deflagration propagation protection (isolation) [see below for details]; and 3) preventing the recycling of the unit's exhaust air back into the building [see below for details]. If the cyclone cannot be moved to an outdoor location, the unit should be equipped with means of explosion, deflagration, and fire protection as advisable through the DHA process. Alternatives to enclosed air-material separators include the use of enclosureless air-material separators/dust collection systems. See NFPA 654 (2017) section 7.13.1.1.2(4) for guidance on the allowable use of indoor enclosureless systems.

Duct Construction: Indoor Cyclone *[applies to #1 above]*

Ensure that ducting is constructed out of metal or other conductive materials. Ensure that the exhaust system is designed using recognized principles of safe and efficient air-material transport utilizing the guidelines in NFPA 91. Ensure that the entire dust collection system is effectively bonded and grounded.

Methods of Explosion Protection: Indoor Cyclone *[applies to #1 above]*

Safe methods for explosion protection by deflagration venting are outlined in NFPA 68. Other methods of explosion protection, such as active deflagration detection and subsequent chemical suppression, are outlined in NFPA Standard 69.

Methods of Deflagration Propagation Protection (Isolation): Indoor Cyclone
[applies to #1 above]

Deflagration propagation protection (isolation) methods are outlined in NFPA 69 (2014) Chapter 11 (Deflagration Control by Active Isolation) and Chapter 12 (Deflagration Control by Passive Isolation).

Upstream of the cyclone

An example of a passive isolation device that works on the inlet or dirty air side of a vented dust collector is a flow-actuated explosion flap valve. Examples of active isolation devices that will work include fast-acting mechanical valves, actuated pinch valves, and chemical suppression barriers.

For the cyclone's material discharge

Examples of a passive isolation techniques involving the use of a rotary valve (air-lock) designed to meet specific criteria include 1) flame quenching through a close clearance valve or 2) material blocking (maintaining product layer above the valve). An example of an active isolation technique is a deflagration detection and chemical suppression system.

Downstream of the cyclone

Examples of passive isolation devices that work on the discharge or return air side of a dust collector include float valves and flame front diverters. Examples of active isolation devices that will work include fast-acting mechanical valves, actuated pinch valves, and chemical suppression barriers. An alternative to these technologies is prohibiting the exhaust of air directly into the building.

Methods of Fire Protection: Indoor Cyclone *[applies to #1 above]*

If the DHA process identifies the potential for a suitable (strong enough) ignition source capable of igniting a fire, then fire protection should be considered to include (at a minimum) precautions to prevent the transmission of smoke and flame back into the facility through either a fire detection and suppression system or a fire detection and abort/diversion to an alternative duct terminating outdoors.

Methods of Fire Protection: Outdoor Cyclones *[applies to #2 above]*

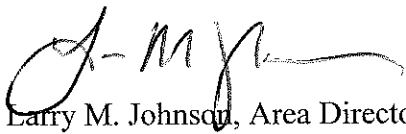
Consider the installation of a fire detection and abort system to detect a fire event occurring inside of the cyclone (or upstream of the cyclone) and temporarily abort the exhausted air from the cyclone to a safe outdoor location and thereby prevent the transmission of smoke and flame back into the facility. Also consider the installation of fire suppression systems on the cyclones to extinguish any sparks/embers/or flames capable of being transmitted downstream to the indoor baling equipment through the material discharge of the cyclones themselves.

Methods of Ignition Source Control: Shredding Systems *[applies to #2 above]*

Consider the installation of systems capable of preventing foreign materials from entering the shredding systems and generating material ignition. Feasible methods include, but are not limited to, permanent magnetic separators, electromagnetic separators, pneumatic separators, grates, or other separation devices.

OSHA welcomes any report of your efforts to reduce the above-mentioned exposures. If you have any questions concerning this matter, please feel free to contact this office.

Sincerely,



Larry M. Johnson, Area Director
Columbus Area Office

U.S. Department of Labor

Occupational Safety and Health Administration
Columbus Area Office - Region V
Federal Office Building - Room 620
200 North High Street, Room 620
Columbus, Ohio 43215-2497
Phone: (614) 469-5582 FAX: (614) 469-6791



March 14, 2017

Mark Parrish, Manufacturing Manager
QG Printing II Corp., dba Quad Graphics
4051 Fondorf Drive
Columbus, OH 43228

RE: 1188833

Dear Mr. Parrish:

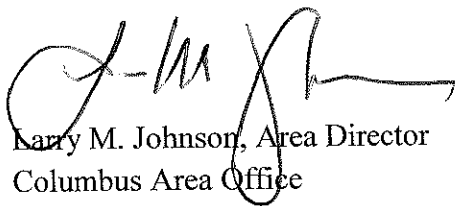
An OSHA inspection was conducted at your workplace located at 4051 Fondorf Drive, Columbus, Ohio 43228. Based on this inspection, the following recommendations are being provided to enhance employee safety and health:

During the Combustible Dust NEP inspection conducted at your facility November 2, 2016 through December 16, 2016, OSHA determined that the Oneida Air Systems Pro 2000 dust collector located at the slitter for press C7009 was not securely anchored to prevent it from moving or being knocked over. If the dust collector was to move or be knocked over, in addition to the struck-by hazard created, it could cause a breach in the piping connections between the cyclone and 55 gallon drum or filter potentially causing a combustible paper dust cloud to be formed. A combustible dust cloud then could be potentially ignited causing a fire hazard. The height (approximately 9 ft., 2.5 in.) of the dust collector adds to this possibility. Page 7 of the Oneida Pro 2000 dust collector Owner's Manual stated the following: "When the units are all assembled they are very heavy and top weighted." To avoid a future OSHA violation of 1910.212(b), OSHA recommends that your company take immediate action to remedy this situation.

Among other methods, feasible and acceptable abatement methods to correct this hazard include the following: Securing the Oneida dust collector by anchoring the dust collector stand to the floor with bolts.

OSHA welcomes any report of your efforts to reduce the above-mentioned exposures. If you have any questions concerning this matter, please contact this office.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. M. Johnson', written over the printed name and title.

Larry M. Johnson, Area Director
Columbus Area Office