Environmental Protection Agency

Mike DeWine, Governor
John Husted, Lt. Governor
Anne M. Vogel, Director

September 28, 2023

Ms. Debra Shore
Regional Administrator
U.S. EPA Region V
77 W. Jackson Blvd.
Chicago, IL 60604

Re: Request for Approval of a Director-Approved Alternate Control Technology under Ohio Administrative Code (OAC) rule 3745-21-09(B)(2) into Ohio's State Implementation Plan (SIP) for Valgroup (OEPA ID 0332010121)

Dear Ms. Shore:

Ohio EPA (OEPA) is requesting approval of a director-approved alternate control technology under Ohio Administrative Code (OAC) rule 3745-21-09(B)(2). The Valgroup company (OEPA ID 0332010121) operates a non-Title V plastic film extrusion plant at 3441 N. Main St., Findlay, Ohio (Valgroup). On December 27, 2022, Valgroup applied to Ohio EPA to install a new cold cleaner at their facility. The cold cleaner is a part of a new flexographic printing line. The new line has been assigned emissions unit (EU) number L009.

The new cold cleaner is subject to a control requirement pursuant to OAC rule 3745-21-09(O)(2)(c). As designed, the unit cannot meet the options required in OAC rule 3745-21-09(2)(c)(i) or (ii). OAC rule 3745-21-09(O)(2)(c)(iii) allows for the approval of other systems of equivalent control by the Director. Valgroup evaluated alternative controls and determined that venting the cold cleaner to a regenerative thermal oxidizer (RTO) would be an equivalent or better alternative control system than is required by OAC rule 3745-21-09(O)(2)(c)(i) or (ii). As such, Valgroup requested the approval of the use of an RTO as a director approved alternative control system under OAC 3745-21-09(O)(2)(c)(iii).

On April 17, 2023, Valgroup provided an Equivalent Control Determination prepared by Arcadis U.S., Inc. In the study, Valgroup discussed the proposed system and feasibility of multiple different control options. In table 1 (Page 5/6) Valgroup determined that of all the discussed options, they proposed to use a regenerative thermal oxidizer (RTO) as their control. The addition of the RTO will provide at least an 88% overall control efficiency for the flexographic printing line. A copy of the Equivalent Control Determination is attached as Appendix A.

Upon review of Valgroup's request, OEPA agrees and has issued a draft permit for the new EU L009 approving the RTO pursuant to OAC rule 3745-21-09(O)(2)(c)(iii). Because this is a director-approved alternate control, OEPA is required under OAC 3745-21-09(B)(2) to submit this as a revision to Ohio's state implementation plan (SIP).

On July 18, 2023, Ohio EPA issued a final air pollution permit-to-install (permit number P0133504) to Valgroup at the above address. The primary purpose of issuing a new air pollution permit-to-install was to establish operating, recordkeeping, and reporting requirements for the new EU. A copy of the final permit-to-install and operate is attached as Appendix B.

Permit Terms and Conditions

At this time, Ohio EPA is requesting U.S. EPA approval of the following portions of the final permit-to-install (permit number P0133504), issued on July 18, 2023 to facility ID 0332010121, as amendments to the SIP to make them federally enforceable and fulfill the requirements of OAC rule 3745-21-09(B)(2):

B. Facility-wide terms and Conditions

There are no facility-wide terms and conditions that need to be entered into the SIP.

C. Emissions Unit (EU) Terms and Conditions

1. **L009, Cold Cleaning Solvent Degreaser/Parts Cleaner**

Paragraph C.2.b)(1) - Applicable Emission Limitations and/or Control Requirements

C.2.b)(1)d. -

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-21-09(O)(2)(c)(iii)	See b)(2)d.

Paragraph C.2.b)(2) - Additional Terms and Conditions

C.2.b)(2)d. - "Valgroup" (facility ID 0332010121) or any subsequent owner or operator of the "Valgroup" facility located at 3441 North Main Street, Findlay, Ohio shall not cause, allow or permit the discharge into the ambient air of any captured and controlled VOC from the cold cleaner (L009) unless all of the VOC emissions from the process stack that routes emissions from the vapor purging cycles in the main washing area are vented to a regenerative thermal oxidizer (RTO) that is designed and operated to achieve an 88% overall destruction efficiency for volatile organic compounds (the percent reduction in mass emissions between the inlet and outlet of the control system) for the VOC emissions in the exhaust stream.

Paragraph C.2.d) Monitoring and/or Recordkeeping Requirements. This paragraph contains Monitoring and/or recordkeeping requirements for EU L009 as follows:

C.2.d)(1) – The permittee shall collect and record the following information each day for the control equipment (RTO) and maintain the information at the facility for a period of five years:

a. A log of operating time for the control device (RTO), monitoring equipment; and

b. All 3-hour periods of operation during which the average combustion temperature was more than 50 degrees Fahrenheit below the average combustion temperature measured during the most recent performance test that demonstrated the emissions unit to be in compliance. Until compliance testing has been conducted, the RTO shall be operated and maintained in accordance with the manufacturer's recommendations, instructions and the operating manual.

Paragraph C.2.e) Reporting Requirements

C.2.e)(2) The permittee shall submit quarterly summaries of the records for the operating time and 3-hour average combustion temperatures of the control device monitored during the calendar quarter. These quarterly reports shall be submitted by April 30th, July 31st, October 31st, and January 31st, and shall cover the records for the previous calendar quarters.

Public Participation

The permit was made available for public comment and a potential public hearing in the Ohio EPA Director's Weekly Review and was published one time in the Courier/Review Times on June 17, 2023. The comment period ended July 17, 2023. No comments were received, and no hearing was requested. A copy of the public notice and confirmation of publication are attached as Appendix C.

Based on the information presented in this letter, Ohio EPA asks that U.S. EPA approve the use of the RTO on EU L009 as a system of equivalent control under OAC 3745-21-09(O)(2)(c)(iii) and accept the above presented Terms and Conditions from permit P0133504 as an amendment to Ohio's SIP in compliance with OAC 3745-21-09(B)(2).

Ohio EPA will be submitting this letter and attachments using U.S. EPA's State Planning Electronic Collaboration System (SPeCS).

Please contact Bob Hodanbosi robert.hodanbosi@epa.ohio.gov or (614) 644-3585 if you have any questions about this submittal.

Sincerely,

Anne M. Vogel
Director, Ohio Environmental Protection Agency

cc: Bob Hodanbosi, Chief Division of Air Pollution Control

Attachment

Appendix A

Copy of Valgroup Equivalent Control Determination Report

Clinton J. Reed
Environmental Specialist II
Ohio Environmental Protection Agency
347 North Dunbridge Rd.
Bowling Green, OH 43402

Arcadis U.S., Inc.
28550 Cabot Drive
Suite 500
Novi
Michigan 48377
Phone: 248 994 2240
Fax:
www.arcadis.com

Date: April 17, 2023
Our Ref: 30131580
Subject: Cold Cleaner – Equivalent Control Determination – Valgroup (P0133504)

Mr. Reed,

In December 2022, Valgroup, LLC (Facility ID: 0332010121) submitted a permit application for the installation of a flexographic printing line. One of the proposed processes included in the application is a parts washer (cold cleaner) with no add-on controls. However, per Ohio Administrative Code (OAC) rule 3745-21-09(O)(2)(c) one of the following vapor control measures is required to be installed as the solvent vapor pressure will be greater than 0.6 pounds per square inch absolute measured at one hundred degrees Fahrenheit:

> (i) Freeboard that gives a freeboard ratio greater than or equal to 0.7,
>
> (ii) Water cover (solvent shall be insoluble in and heavier than water), or
>
> (iii) Other systems of equivalent control, such as refrigerated chiller or carbon adsorption, approved by the director.

Valgroup has determined the installation of either device described in OAC rule 3745-21-09(O)(2)(c)(i) and 3745-21-09(O)(2)(c)(ii) are technically infeasible. Therefore, under OAC rule 3745-21-09(O)(2)(c)(iii), Valgroup is submitting this letter to obtain approval by the Director that a regenerative thermal oxidizer (RTO) is considered an equivalent control device for the proposed cold cleaner.

To obtain the Director's approval, the Ohio Environmental Protection Agency (OEPA) has requested the following information:

1. Why the facility cannot meet the options presented in OAC rule 3745-21-09(O)(2)(c)(i) and (ii);
2. Why the RTO should be considered an alternative control technique (ACT) and/or how the RTO satisfies US EPA "control technology guidelines" (CTGs); and
3. That the RTO will reduce emissions to a level equal to or greater than the options presented under OAC rule 3745-21-09(O)(2)(c).

The requested information is provided in the sections below.

Freeboard Ratio Applicability [OAC 3745-21-09(O)(2)(c)(i)]

OAC 3745-21-01(G)(5) defines "Freeboard ratio" meaning the freeboard height divided by the width of the degreaser air/solvent area.

OAC 3745-21-01(G)(4)(a) defines "freeboard height" for a cold cleaner as the distance from the solvent surface to the top edge of the degreaser tank. A typical cold cleaner is constructed similar to Figure 4.6-1 of USEPA AP-42 Chapter 4.6, shown below in Figure 1. As shown in Figure 1, when in operation (with the lid open) there is an easily defined freeboard height from the solvent surface to the top edge of the tank. Thus, a freeboard ratio can easily be calculated and compared to the 0.7 ratio limit.

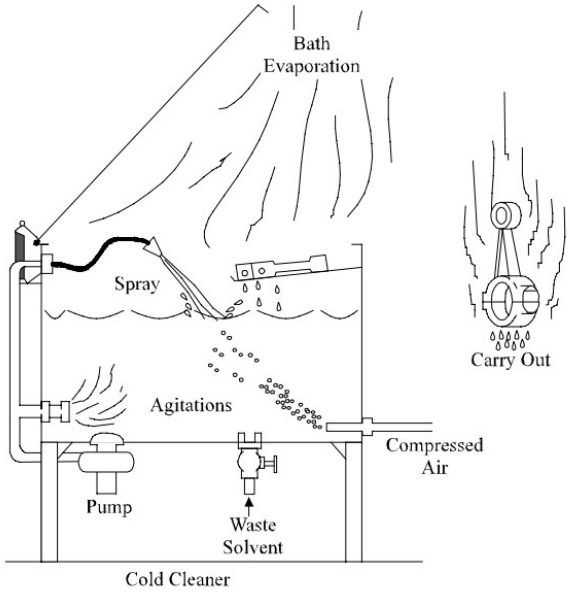

Figure 1: AP-42 Figure 4.6-1 Degreaser emissions points.

The proposed cold cleaner is an IST Model XTR 1000 as illustrated below in Figures 2 and 3. The proposed cold cleaner has a very different design from the traditional cold cleaner shown in Figure 1. The XTR 1000 unit operates by first loading parts via a door/tray on the side of the unit. Once loaded, the door is closed (door remains closed during the entire washing cycle) and the washing cycle begins. Solvent is then pumped from a holding tank and sprayed on the parts. The solvent is continuously drained by gravity during the cycle and when the front door is opened the internal washing area is completely dried. Since there is no constant liquid level in the cold cleaner, having an increased freeboard ratio is not technically feasible for this type of unit.

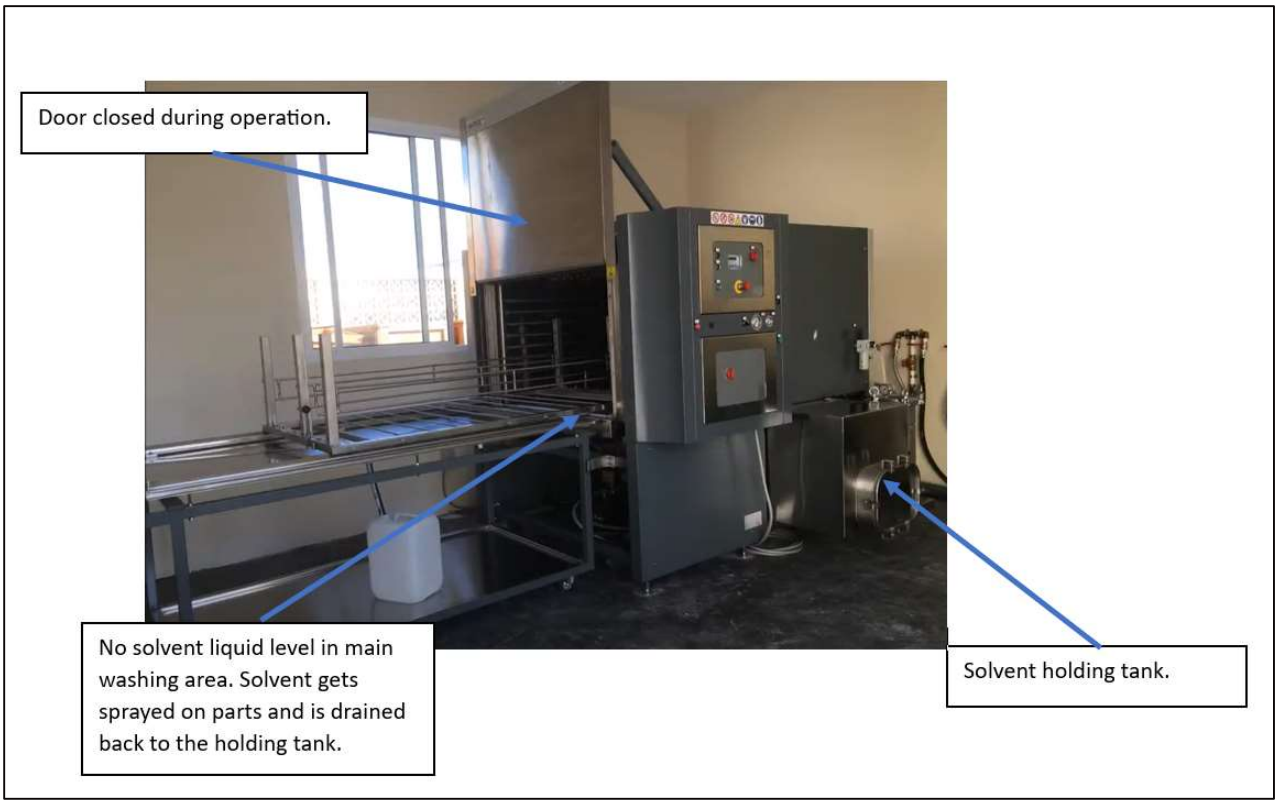

Figure 2: IST XTR 1000 Parts Washer Diagram

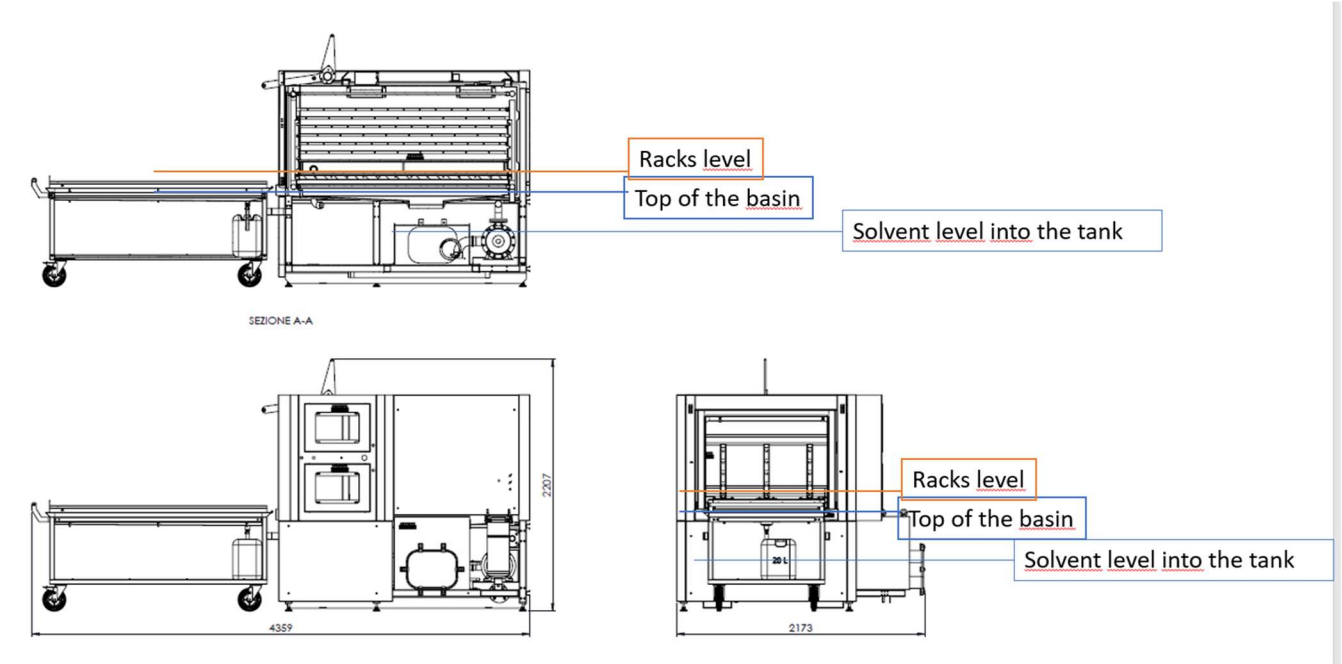

Figure 3: IST XTR 1000 Parts Washer Diagram

Water Cover Applicability [OAC 3745-21-09(O)(2)(c)(ii)]

A cold cleaner that utilizes a water cover for emission control has a layer of water that floats above the denser solvent, providing control of solvent emissions. This control method is technically infeasible for the proposed cold cleaner because there is not a constant solvent liquid level in the wash chamber and the proposed solvent (a mixture of isopropyl acetate and propyl alcohol) are less dense than water.

Review of US EPA "control technology guidelines" (CTGs)

Document Source: EPA-450/2-77-022, 1977/11 "Control of Volatile Organic Emissions from Solvent Metal Cleaning" (Solvent Metal Cleaning CTG)

The US EPA CTG document lists five main control devices that can "reduce emissions from a solvent bath".

1. Improved cover.
2. High freeboard.
3. Refrigerated chiller.
4. Carbon adsorption.
5. Safety switch.

As discussed previously, the proposed cold cleaner is not designed to have a "solvent bath"; therefore, high freeboard and a refrigerated chiller were determined to be technically infeasible. A summary of these options and the estimated control efficiencies are summarized in Table 1.

Alternative Control Device Determination

Valgroup is installing an RTO manufactured by Danau Carbon Technologies (DCT) to control print line emissions. Since the RTO is already being installed, Valgroup is proposing to vent the cold cleaner exhaust to the print line's RTO. Per manufacturer specification, the RTO will achieve a destruction efficiency of greater than 98%.

The Solvent Metal Cleaning CTG does indicate that incineration can be used as an alternate control technology but does not give any information regarding control efficiencies. The US EPA document (EPA-450/3-91-007, 1990/12) "Alternative Control Technology Document – Organic Waste Process Vents" was also reviewed to determine applicability as an alternative control device. As previously discussed, the proposed cold cleaner is not designed and does not operate the same as a traditional "bath" cold cleaner. The main source of emissions from the proposed cold cleaner is from vapor purging cycles, where the vapors contained in the main washing area are expelled through a process stack. The ACT document describes thermal incineration as an alternative control from organic waste process vent streams, similar to the part washing process proposed.

The ACT document describes control effectiveness as, "*Test results show that thermal oxidizers can achieve 98-percent destruction efficiency for most organic compounds at combustion chamber temperatures ranging from 700 to 1,300 C (1,300 to 2,370 F) and residence times of 0.5 to 1.5 s*." Manufacturer specifications, provided in Attachment A and previously submitted with the permit application, for the DCT RTO confirm that the proposed RTO will have a control efficiency of 98 percent.

<u>Control Option Comparison</u>

Table 1 below summarizes the control effectiveness of the proposed RTO compared to the options presented under OAC rule 3745-21-09(O)(2)(c) and the Solvent Metal Cleaning CTG. As demonstrated in the table, the RTO

will reduce emissions to a level equal to or greater than the options presented under OAC rule 3745-21-09(O)(2)(c).

Table 1: Comparison of Control Efficiency

Control Option	Control Efficiency	Source	Technically Feasible?
Cover[1]	55-69%	EPA-450/2-77-022, 1977/11 "Control of Volatile Organic Emissions from Solvent Metal Cleaning" USEPA AP-42 Chapter 4.6, Table 4.6-3	Yes (implemented)
Water Cover[1]	55-69%	USEPA AP-42 Chapter 4.6, Table 4.6-3	No
Freeboard	25-35%,	EPA-450/2-77-022, 1977/11 "Control of Volatile Organic Emissions from Solvent Metal Cleaning"	No
Refrigerated Chiller	43-62%	EPA-450/2-77-022, 1977/11 "Control of Volatile Organic Emissions from Solvent Metal Cleaning"	No
Carbon Adsorption	40-65% (95% for non "bath" type cold cleaners. i.e. process waste streams)	EPA-450/2-77-022, 1977/11 "Control of Volatile Organic Emissions from Solvent Metal Cleaning"	Yes
RTO	98%	EPA-450/3-91-007, 1990/12- Alternative Control Technology Document – Organic Waste Process Vents & Manufacturer Specifications	Yes, Proposed Option

Notes:

[1] The estimated efficiency for a water cover is the combined total emissions reduction for installing a cover, drainage facility, water cover, and implementing proper operating procedures.

Clinton J. Reed
Ohio Environmental Protection Agency
April 17, 2023

Conclusion

Based on the analysis provided above, the options presented in OAC rule 3745-21-09(O)(2)(c)(i) and (ii) are technically infeasible for the proposed cold cleaner. Therefore, Valgroup is proposing to utilize the print line's RTO to control VOC emissions from the parts washer. As shown in Table 1, this is a feasible alternative control device as well as the most effective option in controlling emissions.

Sincerely,
Arcadis U.S., Inc.

Liz Carson
Principal Engineer, P.E.

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Direct Line: 248.266.0390
Mobile: 734.748.8537

CC. Tanner Florindo (Valgroup)
Jeannette Voelzke (Valgroup)
Christopher Pecora (Valgroup)
Andrea Moore (OEPA)
Alyse Wineland (OEPA)

Enclosures: Attachment A – RTO Specifications

Attachment A

RTO Specifications

Donau Carbon DCT Technologies

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VALGROUP
USA

Att. Mrs Fernando Delphino

RTO 10

Offer 9040-D rev0
Date 24/10/2022

INDEX

Layout N° 9040-D.03.01
P&I N° 9040-D.02.01

1. INTRODUCTION

Donau Carbon Technologies Srl is glad to submit you the supply of:

N° 1 RTO 10 (Regenerative Thermal Oxidiser)

The proposed **RTO is preassembled on a SKID** with **power and control panel supply**, the RTO will be delivered after being wired to the junction box and tested in our workshop.

The RTO will be used to treat the exhaust solvent laden flow, as specified in the DESIGN DATA paragraph.

RTO10 recently installed by Donau Carbon in Italy

Donau Carbon Technologies Srl (hereinafter DCT) is an innovative company with high reputation and has a long-lasting track record in providing solvent recovery plants, regenerative thermal oxidation plants and a broad range of other products.

~300 realized plants on a global scale

DCT is recognized as a reliable partner providing state of the art technologies to its customers in the fields of air treatment and related environmental areas on a global scale.

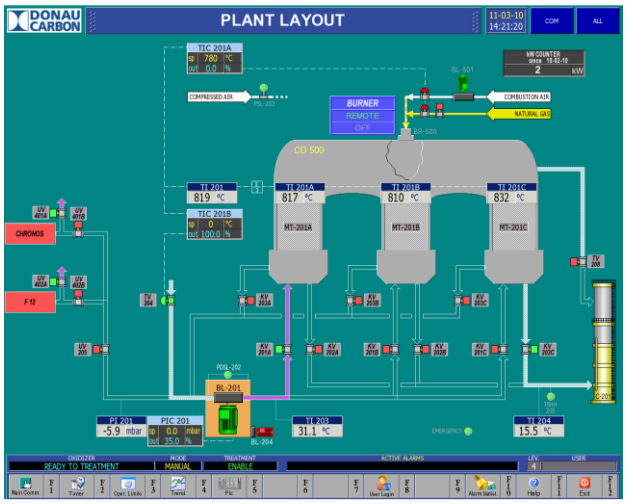
PECULIARITY OF OUR RTO

1. The material construction are in CS
2. we provide **thickness ceramic layer**, to minimize gas consumption
3. we provide (in addition to PLC Siemens S7-1500) safety PLC with DCT software to comply with EN12753 (safety rules)

and:

4. High turn down capability for both Solvent Laden Air flow and solvent concentrations
5. Very low auxiliary fuel consumption, as the system has high recovery efficiency, and subsequent min CO_2 and NO_x emissions
6. Proved design to achieve low maintenance costs and long lifetime
7. Consistent performances
8. Special design available for “heavy duty” applications
9. Selected long lasting and reliable components

With our SCADA software you can visualize in real time the status of all the devices connected in animated screens.
All the analogue values and the alarm are stored for historic management for more than 1 year.
A special screen provide you information of all the PLC’s I/O and diagnostic.



DCT SERVICE: “ON LINE HELP DESK” AND MAINTENANCE CONTRACTS

By means of internet access, DCT is able to look up, check and change operating parameters of each RTO worldwide from its headquarters in Guanzate desk via Internet (*service “ON LINE HELP DESK” available against monthly fee – separate quotation to be provided on request*).

The software for RTO operation and control has been developed by DCT's own software specialists: from DCT's experience, most of all arising problems can be managed by this approach – that means huge cost savings thanks to avoided travelling and the corresponding loss of working time.

Besides the remote RTO supervision, made by the technical people from the DCT headquarters, DCT offers its customers programmed maintenance contracts (*service available against yearly fee – separate quotation to be provided on request*) supporting them by a high-value service and always maintaining the RTO's state of the art condition, as:

- DCT has a long and proven experience (huge case history) and a multi-language staff
- DCT can assure a fast reaction and subsequent intervention
- DCT has not only the skills but also the mans to carry out check on site, such as FID portable device, certified instrumentations, infrared thermal camera
- DCT can produce proper records, highlighting:

    - RTO status and the necessary replacements
    - the preventive actions and spare parts to be shelved to minimize potential downtimes
    - the available retrofits and upgrades that provide Client with the opportunity for continuous improvement of RTO and
    - starting from historical data and measurements taken during the survey, to achieve system efficiency and accuracy of operation

2. DESIGN DATA

Special abbreviations:

DD	Detail Design: manufacturing drawings displaying the dimensions of the main components with details for construction of the equipment or machine, and/or all necessary details which will allow the fabricator to develop its final workshop drawings according to the standards in force in the Country, its local workshop procedures and available machines or process
TS/DS	Technical Specifications/ Data Sheets (whichever applicable) of commercial equipment
OL	One line drawings. Detailed engineering design and shop drawings will be supplied by Others
VSD	Variable Speed Drive motor (driven by frequency converter)
STW	Steel Works
DS	Data Sheet for equipment to be manufactured (with typical details)
CS	carbon steel
SS	stainless steel
SLA	Solvent Laden Air
PA	Purified Air
VOC	Volatile Organic Compounds
TOC	Total Organic Carbon
LEL	Lower Explosive Limit

Whether not differently and clearly indicated, SLA flow rate/ Temperature and Pressure/ VOC Concentration and Composition, are all referred at Battery Limit.

According to Customer indications the proposed RTO has been designed on the basis of the following data:

2.1 SLA Flow rate

Max	Nm^3/h	10.000
Normal	Nm^3/h	6.000
Min	Nm^3/h	3.000

2.2 SLA Temperature and Pressure

Average	°C	50
Range (Min÷Max)	°C	30÷60
Pressure	mbar	-5
Humidity		ambient

2.3 VOC Concentration and Composition in SLA

Concentration		
VOC (min)	g/Nm³	2,5
VOC (Max)	g/Nm³	8
VOC concentration (in all conditions according to EC rules – mandatory)		<25% LEL

Composition		
Acetate etile Alcool		
Average calorific value (of the mix)	kcal/g	6,5
Resins, plasticizing and other compounds which may condensate at design conditions		Absent
Chlorinated compounds, fluorinated compounds and organic nitrogenous compounds		Absent
Dust/ solids	mg/ Nm³	<1

2.4 RTO key figures

Combustion Chamber Temp. Range (Min÷Max)	°C	750 ÷ 1000
Combustion Chamber Residence time	s	≥ 0,6
Cycle time	s	60÷90
RTO Thermal Efficiency	%	≥ 95
Flow temperature at stack	°C	70÷100

2.5 Site conditions

OUTDOOR	
Plant site	USA
Altitude	To be defined
Temperature min./max.	To be defined
Relative humidity	ambient
Wind	<120 km/h (hold)
Classification	Not classified area
Acceleration coefficient of seismic area	To be defined

INDOOR	
Temperature inside the electrical rooms/working area	0÷35°C
Temperature inside the control room	15÷25°C

2.6 Emissions

VOC, as TOC	mg/Nm^3	≤20
CO*	mg/Nm^3	≤100
NO_x, as NO_2*	mg/Nm^3	≤100

*concentration at RTO inlet value = 0 g/Nm^3
Without nitrogen and organic nitrogen-based compounds at RTO inlet

where “emission” means the hourly average at main stack with RTO stable running at the design conditions, with SLA flow rate/ Temperature and Pressure/ VOC Concentration and Composition, within the indicated ranges.

2.7 Support Fuel Requirement (Natural Gas – 8.500 kcal/Nm3)

Start-up Support Fuel and Time Requirement				
Start-up, after 48 hours stop	Nm^3	34	Minutes	90
Start-up, after 36 hours stop	Nm3	24	Minutes	70
Start-up, after 24 hours stop	Nm3	18	Minutes	60
Start-up, after 8 hours stop	Nm^3	7	Minutes	34

where Start-up Support Fuel and Time Requirement are respectively the amount of the indicated support fuel and the time to achieve Min combustion temperature (785°C) as above indicated, with no SLA, starting from burner at max power.

Calculated at normal SLA flow (9.000 Nm^3/h)		**Fuel Gas consumption**
Concentration in SLA= 0 g/Nm^3		
Normal SLA flow 9.000 Nm^3/h	Nm^3/h	14
Concentration in SLA= 1 g/Nm3		
Normal SLA flow 9.000 Nm^3/h	Nm^3/h	6
Concentration in SLA= 2 g/Nm3		
Normal SLA flow 9.000 Nm^3/h	Nm3/h	0
Self-supporting Concentration Normal SLA flow 9.000	g/Nm^3	>2

where Fuel Consumption and Self-supporting concentration are referred to stable conditions, and Min combustion Temperature (785°C)

2.8 Electric Energy Consumption

Electric energy consumption		
Nominal SLA flow 9.000 Nm^3/h and concentration 0 g/Nm^3	kWh/h	15

where Electric Energy Consumption is referred to stable conditions, and Temperature (785°C) and Pressure, within the indicated ranges.

2.9 Noise

Noise	db(A)	≤85 at 1,5 m provided back ground noise level with RTO off ≤ 80

2.10 Battery Limits

SLA	Main fan inlet flange
Natural gas	Natural gas inlet connection on gas train of burner/s
Electric Energy	Electric Panels terminals of main circuit breaker
Compressed Air	Compressed air manifold next to the RTO
Technical gases	Process analyzer(s)
Signals from production	Control panel terminal strip
Ethernet	Control panel terminal strip
Telephone line	Control panel terminal strip

2.11 Applicable Codes and Standards

2.11.1 Engineering package

The following standards will be applied to the engineering package:

General Safety standards:	ISO 45001
P & I Diagram	ISA standards integrated with DIN standards for those items not foreseen under the ISA standards themselves
Mechanical engineering	According to ANSI / ISO / EN standards, SI units system
Electrical engineering	According to: UL508A
Manuals	According to EN standards

2.11.2 Standard language

The engineering package will be supplied as here under listed:

General and Technology package	English
Mechanical engineering	English
Electrical engineering	English
Manuals	English

2.11.3 Standard of the equipment

The equipment will follow the here under listed standards:

Mechanical equipment	According to ANSI / ISO / EN standards, SI units system
Electrical equipment	According to: UL508A

2.11.4 Painting

The equipment will be painted according to the following cycles:

Commercial components (e.g.: motors, gearboxes)	vendor std.
Steel structure	Painted or Galvanized
Part of support, and not insulated Equipment, external surface	Painted with inorganic paint thk 60 µm, and final paint thk. 60 µm

2.12 Others

The following figures are given for information only and are indicative.
Definitive ones shall be given after completion of Engineering phase.
Utilities shall be fully available at B.L., on continuous basis.

2.12.1 Estimated Space Requirements

Length (including shelter for Control Room)	m	11,400
Width	m	2,5
Height (RTO)	m	4
Stack height	m	11
Total weight	kg	23.000

2.12.2 Utilities required at Battery Limits

All these services shall be fully available at B.L., on continuous basis.

Electric Energy		
System	Nm^3/h	TN-S
Voltage, phases, frequency		400V/3ph/60Hz
Total installed power	kW	26
Compressed Air		
Flow-rate	Nm^3/h	5
Dew point (at working pressure)	°C	-20
Working pressure	barg	6
Other		Oil-free
Natural gas		
Flow-rate	Nm^3/h	30
Pressure	bar	0,2

3. SCOPE OF SUPPLY

3.1 Engineering services

DCT will supply one set of engineering documents relevant to the proposed scope of work, as per following paragraphs:

3.1.1 General and mechanical equipment

- ✓ Process and Instrumentation diagram of RTO (P&ID)
- ✓ Lay-out drawings (with elevations) developed with DCT's standard machines
- ✓ One-line drawing of utilities take over points
- ✓ List of utilities to be supplied at B.L.
- ✓ Basic engineering of the reinforced concrete works to enable the Client to perform the detailed engineering of the reinforced concrete foundations (Loads on reinforced concrete platforms)
- ✓ Technical specifications/ Data Sheets/ Engineering of bought out items, as indicated in the Equipment List (if any)
- ✓ Insulation material Technical specifications/ Data Sheets and details of installation (if the case)

3.1.2 Electrical equipment

- ✓ Motors list
- ✓ Motor data sheet
- ✓ Instrument and sensor List
- ✓ Instrument and sensor data sheet
- ✓ Detailed wiring diagram for the electrical panels supplied by DCT
- ✓ Detailed pneumatic diagram

3.1.3 Manuals

- ✓ Manual of the supplied machines and equipment, containing Functional description of the RTO and Operating instruction of SCADA system

3.2 RTO Equipment List

Item	Description		Unit	Q.ty	Power	Weight	Supplied by
					kW	kg	
BL-201	**Process (SLA) Exhaust Fan**		N.	1	--	--	DCT
	The fan and motor are supplied on a common support frame						
	Design flow	11.000 Nm^3/h					
	Total Static Pressure	56 mbar					
	material	C.S.					
MBL-201	**Electric Motor**		N.	1	22	--	DCT
	For the Process (SLA) Exhaust Fan						
	Suitable for VSD						
	Feeding	460V/3ph/60Hz					
STW-201A÷C	**Regenerative canister**		N.	3	--	--	DCT
	Vertical refractory lined, to contain the ceramic bed						
	Steel frame to support the ceramic matrix						
	Material	c.s.					
MT-201A÷C	**Ceramic Media**		m^3	7,2		6768	DCT
	Type	honeycomb					
	Size	50x50 channels					
	Height of ceramic layer	1200 mm					
INS	**Internal insulation**		N.	3	--	--	DCT
STW-201A÷C	**For Regenerative canister**						
	Internal insulation made by ceramic fiber fixed to the wall by welded hooks						
	Thk. of ceramic fiber	250 mm					
CD-500	**Combustion Chamber**		N.	1	--	--	DCT
	To carry out oxidation of VOC						
	Connected to the upper part of the canisters and with natural gas burner and housing						
	Internal insulation made by ceramic fiber						
	Man-hole for inspection						
	Material	c.s.					
	Carbon steel tickness	5 mm					
INS	**Internal insulation**		N.	1	--	--	DCT
CD-500	**For Combustion Chamber**						

Item	Description		Unit	Q.ty	Power	Weight	Supplied by
					kW	kg	
	Internal insulation made by ceramic fiber fixed to the wall by welded hooks						
	Thk. of ceramic fiber	250 mm					
BR-500	**Natural Gas Burner**		N.	1	--	--	DCT
	Natural gas fired burner complete with UV control to monitor for ”flame out” conditions, pilot burner and air regulator						
	Automatic safety valves and air-gas mixing valves fitted to the main gas line to the burner						
	Capacity	210 kW					
	Range	1:15Min					
BL-501	**Combustion Fan**		N.	1	--	--	DCT
	To provide combustion air to Natural Gas Burner						
	Design flow	200 Nm^3/h @ 20°C					
	Total Pressure	650 mmWG					
MBL-501	**Electric Motor**		N.	1	2	--	DCT
	For the Combustion Fan						
	Suitable for frequency control device						
	Poles	2					
		400V/3ph/60Hz					
KV-201A÷C 202A÷C	**Process Valves IN/OUT**		N.	3+3	--	--	DCT
	For control of SLA inlet and outlet from the canisters						
	The valves are poppet type – gasket ceramic fibre air tight						
	Complete with pneumatic double-effect ON/OFF actuator						
	Material	C.S.					
KV-203A÷C	**Purge Valves**		N.	3	--	--	DCT
	The valves are butterfly type						
	Complete with pneumatic double-effect ON/OFF actuator						
	Material	cs					
TV-204	**Start-up valve**		N.	1	--	--	DCT
	The valves are butterfly type – single plate						

Item	Description		Unit	Q.ty	Power	Weight	Supplied by
					kW	kg	
	Complete with pneumatic regulation single-effect actuator						
	Material	cs					
UV-205	**Interception valve**		N.	1	--	--	DCT
	To intercept RTO						
	The valve is butterfly type – single plate						
	Complete with pneumatic single effect ON/OFF actuator						
	Material	C.S.					
HV-206	**Manual regulation purge valve**		N.	1	--	--	DCT
	To regulate purge						
	The valve is butterfly type – single plate						
	Material	C.S.					
STW-RTO	**Steel Works relevant to the RTO, within B.L., such as:**		Set	1	--	--	DCT
	Ducting						
	Diameter	Various					
	Material	C.S					
	Supporting Structures		Set	1	--	--	DCT
	Material	cs (galvanized)					
	Platforms						client
	For safe operation and maintenance of the equipment						
	Material	cs (galvanized)					
	Ladders						client
	To reach the burner platform and the measurements' stack platform						
	Material	cs (galvanized)					
	Stack						Client
	Stack height	11 m					
	Material	cs (painted)					
TV-208	**Hot-By pass valve**		N.	1	--	--	DCT
	To convey part of the process flow/ excess heat from combustion chamber directly into the stack						
	The valve is butterfly single plate						
	Complete with pneumatic regulation actuator						
	Material	cs with internal refractory layer					

Item	Description	Unit	Q.ty	Power	Weight	Supplied by
				kW	kg	
	Power and Control Panel					
	In two section:					
CP	**Control Panel**	N.	1	--	--	DCT
	Feeder bus-bars in columns. Painted cs RAL 7035. Protection IP54					
	The panel will contain					
	• PLC, S7-1500(CPU 315-2DP), with DCT software to automatic operation of the RTO					
	• safety PLC, with DCT software to comply with EN12753 (safety rules)					
	Suitable to be installed indoor in a non-hazardous area nearby the RTO					
PP	**Power Panel**	N.	1	--	--	DCT
	For the electric motors installed within B.L.					
	Composed by:					
QE-001	**Distribution section**	N.	1	--	--	DCT
	Distribution by means of feeder bus-bars in columns. Painted cs RAL 7035. Protection IP54 The section will feed					
VSD	**Variable Speed Drivers**	N.	1	22	--	DCT
SS	**DC supervision system** and **PC** (Human Interface machine), automation SUPERFLASH program by AUTOMA	N.	1	--	--	DCT
	PC with a flat screen of 17 inch					
INS	**Field Instruments**					
	Process instruments(connected to PLC Siemens)					
	Pressure transmitter for Suction Control (for VSD)	N.	1	--	--	DCT
	Temperature transmitter to control :					
	• False/Fresh air valve	N.	1	--	--	DCT
	• Burner of Combustion chamber	N.	1	--	--	DCT
	Pressure switch (compressed air)	N.	1	--	--	DCT
	Safety instruments (connected to PLC Pilz)					
	RTO outlet Temperature switch	N.	2	--	--	DCT
	LEL analyser (Safety Integrated Level #2)	N.	1			DCT
	Differential pressure switch	N.	1	--	--	DCT
	Emergency button	N.	1	--	--	DCT

3.3 Complementary Supplies

Item	Description	Unit	Q.ty	Power	Weight	Supplied by
				kW	kg	
SPARE	**Spare parts**	Set	1	--	--	Client
	DCT will issue a detailed spare parts list with itemized prices at a later stage					
	In any case, spare parts should be available at site before of plant commissioning					
	Commissioning spare part list shall be included in the list					
	Manual includes the main information in order said Spare parts can be purchased by Customer					
	Any part used during commissioning shall be replaced by DCT free of charge as soon as practicable					

3.4 Pre-assembling at Workshop

Item	**Description**	Unit	Q.ty	Power	Weight	Supplied by
				kW	kg	
	Pre-assembling at Workshop	N.	1	--	--	DCT
	Preassembling in the workshop to the max extent suitable for transportation to site					
	Items which exceed the limits allowed for transport shall be supplied disassembled and assembled on site					

RTO10 pre-assembled in the workshop in Italy




RTO10 pre-assembled loaded on truck ready to leave the workshop in Italy

Notes:

- In case of Customer purchase of item Shelter of previous point 3.3, POWER and CONTROL PANEL may be pre-installed inside the Shelter itself

3.5 Erection on site (mechanical, electric & pneumatic)

Item	**Description**	Unit	Q.ty	Power	Weight	Supplied by
				kW	kg	
	Erection Works on site	N.	1	--	--	Client
	Labour (workmanship - qualified), all material and services within the BL, including daily management of erection team					
	It includes:					
	• relevant tools and services, fittings, bolts, welding machines, consumables, scaffoldings					
	and **up to 5 m** (distance between QC and QE and RTO area):					
	• trays and railways in galvanized c.s.					
	• pneumatic connections					
	• power cables					

- control cables
- profibus

RTO 10 installed at Customer site

Notes:

- Erection on site includes the supply of relevant tools and services, fittings, bolts, welding machines, consumables,
- Scaffoldings and lifting devices/ cranes with operator/s are provided by Customer and excluded from DCT scope

Our RTO 10 is designed with “Plug & Play” philosophy, in order to reduce as much as possible erection works. In particular, a power cable connection, installation of stack and SLA duct connection are only required for this RTO to properly run.

3.6 Thermal Insulation

Item	**Description**	Unit	Q.ty	Power	Weight	Supplied by
				kW	kg	
	Thermal Insulation Works on site	N.	1	--	--	CLIENT
	Labour (workmanship - qualified), all material and services within the BL, including daily management of erection team					
	For personnel protection of hot surfaces exposed to operators only (if needed)					
	Notes:					
	• Thermal Insulation Works on site includes the supply of relevant thermal insulation materials, tools and services, fittings, bolts, welding machines, consumables					
	• Scaffoldings and lifting devices/ cranes with operator/s are provided by Customer whether not specifically included in DCT scope					

3.7 Technical Assistance

DCT will make available the technical assistance during the on-site erection, start-up, commissioning, including training of operators, and Take-over Test of the plant to be calculated on man-day basis.
Customer shall provide qualified personnel to carry out start-up, commissioning and Take-over Test.
Technical assistance at plant site will be calculated in terms of man-days of absence from DCT's Head Office and DCT supply includes:

Assistance to commissioning and start-up and personnel training	7	man-days

Round-trip flight expenses and all local expenses of DCT technical assistance personnel, namely traveling, all transport expenses, such as taxi and curriers, hotel with WIFI, living costs, such as bar, restaurant, and all other reasonable direct local expenses in connection with the stay on site is included up to the above indicated duration.
Operator training is carried out by DCT specialists during Commissioning and Start-Up activities.
Plant start-up and take-over test must be effected under DCT supervision for the enforcement of the guarantees.
Commissioning, take-over test and operator training activities are supposed to be carried out uninterruptedly.

4. EXCLUSIONS

- Civil works and buildings design and construction
- Utilities to the BL (natural gas, electricity and compressed air), according to the required quality and quantity
- Earthing plant and lightning protection system
- Surge Protection Devices (if necessary)
- Sound proofing of equipment (if necessary)
- Telephone line and Ethernet connection in order DCT can access QC and desktop PC from DCT Head Quarters
- Fire prevention and firefighting systems
- Unloading and safe storage area on site for DCT supplies
- Stack outside of skid
- Ladders and platform outside the skid
- Mechanical and electrical erection
- External thermal insulation.
- Lifting devices and cranes (with relevant crane operators)
- The obtainment of permits, authorization and licences of whatsoever nature in connection with this project
- Performance test by 3rd Party
- Transport from our factory to north Italian port (FOB)
- All equipment and services not clearly indicated as DC supply within the present proposal draft

5. TAKE OVER TEST

Compliance of performances with guaranteed performance data shall be verified during Take Over Test which shall be celebrated at the end of commissioning, immediately after DCT advises that the RTO system is ready for Take Over Test.
Once the successful Take Over Test has been achieved, the RTO system will be preliminary taken over by the Client (Provisional Acceptance). This includes also passing-over of any kind of risk and insurance covering.
In case the commissioning does not take place immediately after erection of the RTO for reasons not attributable to DCT, the RTO system will be automatically and preliminary taken over by the Client, and Provisional Acceptance achieved.
This preliminary Take Over will be stated by a Provisional Acceptance Certificate (PAC), to be issued and signed by DCT and Client on site before DCT personnel leaves the RTO, which may include notes, if any, regarding agreed pending issues to be closed to achieve Final Acceptance.
In case, despite the pending issues, the safety operation of the RTO is possible, Provisional Acceptance is anyhow achieved.

The Final Acceptance will be automatically achieved 30 days after Provisional Take Over, provided the pending issues are closed.
Should celebration of Take Over Test be prevented by events beyond DCT control, Final Acceptance will be automatically achieved 60 days after DCT advises that the RTO system is ready for Take Over Test.

Although the Warrantee period as defined above remains until expiration, once the successful Take Over Test has been achieved, the RTO system have demonstrated its ability to achieve the performances as per the present document and no claim on this regard shall be further accepted.
In case of failure, the Client shall give DCT the opportunity to carry out the corrective actions and repeat the Take Over Test.

During Take Over Test all measurements shall be taken during 8 hours periods of steady conditions in order to calculate the daily average figures to be compared with the guaranteed figures.
In case of interruption up to 1 hour, Take Over Test shall be prolonged of the time lost; interruption larger than 1 hour, due to DCT, Take Over Test shall be repeated.
The total duration of the Take Over Test shall in no way exceed 12 hours.

6. GUARANTEES

DCT guarantees are given that both plant manufacture and process performances will comply with the EU codes & standard in force at the order time.
Guarantees are not applicable to Customer's existing equipments which are going to be re-used (if any).

6.1 Mechanical

DCT warrants proper workmanship for the equipment falling within its scope of supplies. In the case of defects resulting from faulty design, materials or workmanship, our liability shall be limited, to the exclusion of any further rights and remedies, to making good such defects either by rectification or replacement of the faulty equipment at our expense, at our option, in accordance with the terms of supply. Any repair or replacement shall be at DCT headquarters, unless otherwise directed, and shall be returned to DCT headquarters with return transportation prepaid by Client.
Excluded from our liability are wear and tear parts.
The equipment supplied by us is guaranteed for a period of 12 months from RTO first start-up, but not longer than 18 months from the readiness for dispatch.
The enforcement of any warranties is subject to the supplies being installed and commissioned by or on behalf of DCT or under the supervision of the DCT's personnel, supplies being operated under the stated design conditions and in accordance with DCT's operating instructions, phone line and internet connection to allow DCT at any time the remote access to the control system, without any limitation, being active 24 hours per day until the expiration of the Warranty, and required utilities are made available in sufficient quantity and quality.
Our warranty shall only cover defects that may develop despite the proper use of the equipment under the design and operating conditions provided for in the contract and that have been proved to be due to causes attributable to DCT and existing before the passing of the risk. It shall, in particular, not cover any defects which are caused by chemical or electrical action, normal wear and tear, or non-observance of the operating and maintenance instructions.
Our liability for repairs and replacements shall be the same as for the original equipment delivered but shall not extend beyond 3 months from the date on which the warranty for the latter expires.

6.2 Process

Stack emissions according to section 2.6.
Measurement will be run in 3 different periods, longer that 1 hour each, throughout the Take Over session.
Average measured emissions of TOC during every period must be lower than guaranteed values.
Utilities consumption according to section 2.7 and 2.8 (tolerance ±10%).
Total electric consumptions and total gas consumptions are understood as of the components supplied by DCT.
In order to check the thermal efficiency, the check will be made with support of natural gas fed by the burner.

7. COMMERCIAL

7.1 Limitation of liability

The rights and obligations of the contract parties are limited to those expressly stated in the contract, with the exclusion of any further remedies and claims. In particular, DCT shall not be liable, for whatever reasons, for any kind of financial loss, special, indirect or consequential damage.

7.2 Delivery point

FOB north Italian port

7.3 Effective Date of the Contract (EDC)

EDC is the date in which the contract is signed provided that DCT's bank has received the down-payment within 1 week from Contract signature.

7.4 Delivery time

Engineering will be carried out on the basis of:

A. project data as indicated within this proposal
B. environmental conditions
C. lay-out/installation drawings in *.dwg* format relevant to the area where the system is going to be located

to be given/confirmed by Client within the awarding papers in favor of DCT, and on the basis of:

D. process and instrumentation diagram (P&ID) (preliminary - issued for approval purpose)
E. lay-out drawings (with elevations) developed with the outline drawings of typical standard machines of DCT (preliminary - issued for approval purpose)

After approval (comments/approval to be released within the 5 working days from the submittal), said documents (D÷E) shall be frozen and DCT shall receive from Client an official **Notice To Proceed (NTP)**.
Any additional cost originated by changes of the above documents (A÷C), provided said changes are requested by Client after NTP, or are a direct or indirect consequence of Client actions and decisions taken after NTP, shall be paid by Client in accordance with the quotation submitted by DCT, if the case may be.

- Submittal of documents (D÷E) to Customer approval: within 2 weeks from EDC
- Delivery at delivery point: within 6 months from NTP
- Time from material ready on site and plant ready for commissioning /first start-up: less than 1 weeks
- Time from plant ready for commissioning and plant ready for celebration of Take Over Test: 1 week
  Christmas time: period within 24 DEC÷06 JAN excluded.
  Summer time: August excluded.

The terms for the supplies and services stated above will start with the EDC, i.e., after technical and commercial clarification and presupposes that the Customer is ready with his scope of work in due time. Otherwise, the target date is postponed.
DCT may claim direct additional cost due to Customer's delay in project execution.
Delay in processing payment by Customer shall consequently delay the terms of delivery.

7.5 Prices

7.5.1 DCT Supplies

RTO 10	**Engineering package**, as detailed in the relevant paragraph **3.1**	**€ 300.000,00**
	Supply of items marked as "**DCT**" supply at paragraph **3.2**, delivered FOB	
	Supply of services marked as "**DCT**" supply at paragraph **3.4**, delivered DAP	
	Technical assistance at site during erection works at site (according to the need), start-up, commissioning, including training of operators, and Take-over Test, as detailed in the relevant paragraph 3.7	
LEL	**Second IR LEL of safety**	
	Packing and transport to Italian Port	**€ 22.000,00**

The above prices do not include VAT or any duty in connection with DC scope of work to be paid outside Italy.

7.5.2 Additional Technical assistance - Unitary prices

The daily rate reserved to you for technical assistance at site, **in addition to the ones indicated at point 3.7**, for each day of absence of our personnel from DCT Head Office, is 1000 EUR / man-day.
Flight tickets, boarding, lodging and local transportation are not included in the a.m. daily rate and shall be reimbursed by Customer at cost +15%, if directly borne by DCT.
The above prices do not include VAT or any duty to be paid outside Italy.
Said fee is applicable to the additional technical assistance provided by DCT in consequence of delay generated by Customer.

7.6 Payment conditions

7.6.1 Supplies

Proposed payment

- 30% as down-payment within 2 weeks from PO issuing, against Bank Guarantee valid until delivery of material at delivery point
- 50% notice of material ready for shipment
- 10% at the first start-up, however not later than 90 days after delivery at delivery point, if DCT is not responsible for the delay

- 10% at final acceptance however not later than 90 days after delivery at delivery point, if DCT is not responsible for the delay

7.6.2 Technical Assistance

With reference to the Technical Assistance rendered by DCT specialists, Technical Assistance according to para 3.7 is included in the price figures of paragraph 7.5.1.

With reference to the Additional Technical Assistance rendered by DCT specialists as per para 7.5.3, said additional technical assistance shall be paid by bank transfer, pro-quota, according to the execution of technical services, against presentation of the following documents:

- signed commercial invoices,
- weekly log of the worked hours at site duly signed by Customer's representative

Customer shall directly cover round-trip flight expenses and all local expenses of DC technical assistance personnel, as pointed out at para. 7.5.2.
Said expenses, whether not paid directly by Customer, shall be reimbursed by Customer with surcharge of 15%.

7.7 Changes in the Scope of Services & Supplies

If the Customer requests additional services and supplies during contract execution or if they become necessary as the result of a change in the applicable law, regulations or technical standards after contract award, DCT will submit a proposal for such additional services and supplies. DCT will also indicate whether and to what extent the contractually agreed schedule(s) or guarantees have to be modified due to the additional services and supplies. Details are still to be mutually agreed between the client and DCT.

7.8 Quotation validity

30 days

7.9 Jurisdiction and Applicable Law

Applicable law: Italian law.

Exclusive Tribunal: Milan (Italy)

8. CONTACTS

For any inquiry and/or clarification on the present document please contact:

Donau Carbon Technologies Srl	Phone:	+39 031 939511 (operator)
Via Madonna 17	Fax:	+39 031 899505
22070 Guanzate (CO) Italy	e-mail	dct.contact@dct.co.com
Mr. Franco Balbo	Tel:	+39 031 939578 (direct line)
Sales Manager		+39 3482308915 (mobile phone)
	e-mail	franco.balbo@dct.co.com

Appendix B

Copy of Valgroup
Final Permit (P0332010121)

Ohio Environmental Protection Agency

Mike DeWine, Governor
Jon Husted, Lt. Governor
Anne M. Vogel, Director

07/18/2023

Certified Mail

Mr. John Pecora
Valgroup
3441 North Main St
Findlay, OH 45840

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0332010121
Permit Number: P0133504
Permit Type: Initial Installation
County: Hancock

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully. In this letter, you will find the information on the following topics:

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**
- **What should you do if you notice a spill or environmental emergency?**

How to appeal this permit

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to "Ohio Treasurer Robert Sprague," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
30 East Broad Street, 4th Floor
Columbus, OH 43215

How to save money, reduce pollution and reduce energy consumption

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and state tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: www.ohioairquality.org

How to give us feedback on your permitting experience

Please complete a survey at www.epa.ohio.gov/survey.aspx and give us feedback on your permitting experience. We value your opinion.

How to get an electronic copy of your permit

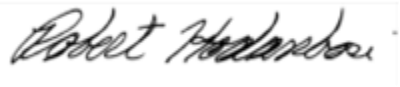
This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Ohio EPA document search webpage: https://epa.ohio.gov/help-center/edocument-search/edocument-search.

What should you do if you notice a spill or environmental emergency?

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, please contact at Ohio EPA DAPC, Northwest District Office at (419)352-8461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Robert Hodanbosi
Chief, Division of Air Pollution Control
cc: U.S. EPA
Ohio EPA-NWDO; Michigan; Indiana; Canada

FINAL

Division of Air Pollution Control
Permit-to-Install
for
Valgroup

Facility ID:	0332010121
Permit Number:	P0133504
Permit Type:	Initial Installation
Issued:	07/18/2023
Effective:	07/18/2023

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install
for
Valgroup

Table of Contents

Authorization

Facility ID:	0332010121
Facility Description:	Plastic Film Extrusion Plant
Application Number(s):	A0073490
Permit Number:	P0133504
Permit Description:	PTI for a flexographic print line, cold-wash parts cleaner, plate cleaner, turbo clean unit, solvent tanks, solvent process room and cleanup materials.
Permit Type:	Initial Installation
Permit Fee:	$1,200.00
Issue Date:	07/18/2023
Effective Date:	07/18/2023

This document constitutes issuance to:

Valgroup
3441 N Main Street
Findlay, OH 45840

of a Permit-to-Install for the emissions unit(s) identified on the following page.

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Rd.
Bowling Green, OH 43402
(419)352-8461

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Anne M Vogel

Anne M. Vogel
Director

Entered into the Journal of the Director on:

Date: 07/18/2023

Authorization (continued)

Permit Number: P0133504
Permit Description: PTI for a flexographic print line, cold-wash parts cleaner, plate cleaner, turbo clean unit, solvent tanks, solvent process room and cleanup materials.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	**K004**
Company Equipment ID:	Flexographic Print Line 1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**L009**
Company Equipment ID:	Parts Cleaner
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

Group Name: Flexographic Ink/Solvent Lines

Emissions Unit ID:	**P030**
Company Equipment ID:	Plate Cleaner
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P031**
Company Equipment ID:	Turbo Clean
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P032**
Company Equipment ID:	Ink/Solvent Mixer
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P801**
Company Equipment ID:	Wipe Rags
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

List of Commonly Used Abbreviations

AP-42 = U.S. EPA's Compilation of Air Pollution Emissions Factors	IBR = Incorporation by Reference	PER = Permit Evaluation Report
ASTM = American Society for Testing and Materials	ID = Identification Number (typically referring to a facility ten-digit ID number)	PM = particulate matter
BACT = Best Available Control Technology	LAER = Lowest Achievable Emission Rate	PM_{10} = particulate matter with an aerodynamic diameter less than or equal to 10 microns
BAT = Best Available Technology	lb(s)/hr = pound(s) per hour	$PM_{2.5}$ = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
CAA = Clean Air Act (1955, 70, 77, 80)	LDAR = Leak Detection and Repair	ppb = parts per billion
CAAA = Clean Air Act Amendments (1990)	LPG = liquefied petroleum gas/propane	ppm = parts per million
CAM = Compliance Assurance Monitoring	MACT = Maximum Achievable Control Technology	PSD = Prevention of Significant Deterioration
CEM = Continuous Emissions Monitor	MAGLC = Maximum Acceptable Ground Level Concentration	psi = pounds per square inch
CEMS = Continuous Emissions Monitoring System	mg/m3 = milligrams per cubic meter	psia = pounds per square inch absolute
CFC = chlorofluorocarbon	MM = million	PTE = Potential-to-Emit
CFR = Code of Federal Regulations	MMBtu = million British Thermal Units	PTI = Permit-to-Install
CH_4 = methane	MON = Miscellaneous Organic Chemical Manufacturing NESHAP	PTIO = Permit-to-Install and Operate
CI = compression ignition		PTO = Permit-to-Operate
CO = carbon monoxide	MSDS = Material Safety Data Sheet	PWR = process weight rate
CO_2 = carbon dioxide	MSW = Municipal Solid Waste	RACM = Reasonably Available Control Measures
COM = Continuous Opacity Monitor	NAAQS = National Ambient Air Quality Standard	RACT = Reasonably Available Control Technology
DAPC = Division of Air Pollution Control	NESHAP = National Emission Standard for Hazardous Air Pollutants	RATA = Relative Accuracy Test Audit
DO/LAA = District Office/Local Air Agency	NG = natural gas	RTO = regenerative thermal oxidizer
dscf = dry standard cubic foot	ng/m3 = nanograms per cubic meter	SB265 = Senate Bill 265
EAC = Emissions Activity Category	NH_3 = ammonia	scfm = standard cubic feet per minute
eDocs = Electronic Documents Database	NMHC = non-methane hydrocarbons	SI = spark ignition
ERAC = Environmental Review Appeals Commission	NMOC = non-methane organic compound	SIP = State Implementation Plan
ESP = electrostatic precipitator	NNSR = Nonattainment New Source Review	SM = Synthetic Minor
EU = Emissions Unit	NO = nitrogen oxide	SO_2 = sulfur dioxide
FEPTIO = Federally Enforceable Permit-to-Install and Operate	NO_2 = nitrogen dioxide	SOB = Statement of Basis
FER = Fee Emissions Report	NO_x = nitrogen oxides	SSMP = Startup, Shutdown and Malfunction Plan
FR = Federal Register	NSPS = New Source Performance Standard	T & C = Term and Condition
GACT = Generally Achievable Control Technology	NSR = New Source Review	TDS = total dissolved solids
GHG = greenhouse gases	NTV = Non-Title V	TLV = Threshold Limit Value
gr = grains	O&M = Operation and Maintenance	TO = thermal oxidizer
gr/dscf = grains per dry standard cubic foot	O_3 = ozone	TPH = ton(s) per hour
H_2S = hydrogen sulfide	OAC = Ohio Administrative Code	TPY = ton(s) per year
H_2SO_4 = sulfuric acid	OC = organic compound	TSP = total suspended particulates
HAP = hazardous air pollutant	OEPA = Ohio Environmental Protection Agency	VE = visible emissions
HCl = hydrochloride	ORC = Ohio Revised Code	VMT = vehicle miles traveled
HF = hydrogen fluoride	Pb = lead	VOC = volatile organic compound
Hg = mercury	PBR = Permit-By-Rule	WPP = Work Practice Plan
HON = Synthetic Organic Chemical Manufacturing NESHAP	PCB = polychlorinated biphenyl	µg/m3 = micrograms per cubic meter
hp = horsepower	PE = particulate emissions	
HVLP = high volume, low pressure	PEMS = Predictive Emissions Monitoring System	

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under state law only:

(1) Standard Term and Condition A.2.a), Severability Clause

(2) Standard Term and Condition A.3.c) through A. 3.e), General Requirements

(3) Standard Term and Condition A.6.c), Compliance Requirements

(4) Standard Term and Condition A.8., Air Pollution Nuisance

(5) Standard Term and Condition A.9., Reporting Requirements

(6) Standard Term and Condition A.10., Applicability

(7) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install

(8) Standard Term and Condition A.14., Public Disclosure

(9) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(10) Standard Term and Condition A.16., Fees

(11) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

a) A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

b) All terms and conditions designated in parts B. and C. of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the state and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under state law only, only if specifically identified in this permit as such.

3. General Requirements

a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

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

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.

(2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northwest District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the DO/LAA every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semiannual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Northwest District Office in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction). The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shut down of the emission unit(s) that is (are) served by such control system(s).

6. Compliance Requirements

a) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted local air agency, and/or any

other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

(1) At reasonable times, enter upon the permittee's premises where a source is located, or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c) The permittee shall submit progress reports to the Ohio EPA DAPC, Northwest District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Northwest District Office.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Northwest District Office. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

This permit-to-install is applicable only to the emissions unit(s) identified in the permit-to-install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s) not exempt from the requirement to obtain a permit-to-install.

11. Construction of New Sources(s) and Authorization to Install

a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended once by twelve months if application is made to the

Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shut down of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shut down emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted, no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or any other reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve months after commencing operation of the emissions units covered by this permit. However, if operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d) must be obtained before operating the source in a manner that would violate the existing Title V permit requirements.

13. Construction Compliance Certification

The applicant shall identify the following dates in the "Air Services" facility profile for each new emissions unit identified in this permit.

a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.

b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in "Air Services" once the transfer is legally completed. The change must be submitted through "Air Services" within thirty days of the ownership transfer date.

18. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

19. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) None.

C. Emissions Unit Terms and Conditions

1. K004, Flexographic Print Line 1

Operations, Property and/or Equipment Description:

Flexographic Print Line, including corona treater, controlled by a regenerative thermal oxidizer (RTO)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) b)(1)e. and d)(6).

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) OAC rule 3745-31-05(A)(3)	See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(a)(ii)	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the emissions of nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter 10 microns or less in size (PM_{10}), particulate matter 2.5 microns or less in size ($PM_{2.5}$), or ozone (O_3) emissions from this air contaminant source since the potential to emit is less than 10 tons per year for each pollutant.
c.	OAC rule 3745-31-05(D)	See b)(2)b.
d.	OAC rule 3745-21-09(Y)	See b)(2)c., c)(1), and d)(1) through d)(3), e)(1), f)(1)c. and f)(2).
e.	ORC rule 3704.03(F)(4)(b) OAC rule 3745-114-01	See d)(6).

(2) Additional Terms and Conditions

a. The BAT requirements for VOC emissions under OAC rule 3745-31-05(A)(3) and ORC 3704.03(T) have been determined to be in compliance with the emissions limitations and requirements established pursuant to OAC rule 3745-31-05(D).

b. This permit establishes federally enforceable emissions limitations for purposes of limiting potential to emit (PTE) to avoid Prevention of Significant Deterioration

(PSD). The federally enforceable emissions limitations are based on the operational restriction contained in c)(1):

i. Controlled: 7.05 pounds VOC/hr and 29.40 tons VOC per rolling, 12-month period from emissions units K004 and L009, combined from the regenerative thermal oxidizer (RTO); and

ii. Uncontrolled: 163.33 tons VOC per rolling, 12-month period from emissions units K004 and L009, combined.

c. The VOC collection and control system for the flexographic printing line shall have a capture efficiency of at least 65% by weight and a control efficiency of at least 90% by weight, both determined using the methods identified in OAC rule 3745-21-10(C)(2) and under the conditions identified in OAC rule 3745-21-10(C)(3).

The control equipment requirement established pursuant to OAC rule 3745-31-05(D) is more stringent than the control requirements established pursuant to OAC rule 3745-21-09(Y) [See c)(1)].

c) Operational Restrictions

(1) The following operational restriction has been included in this permit for the purpose of establishing federally enforceable requirements which limit PTE [See b)(2)b.]:

a. Emissions units K004 and L009 shall be equipped with an RTO designed and operated to achieve an 88% overall destruction efficiency [90% capture efficiency and 98% control efficiency] (the percent reduction in mass emissions between the inlet and outlet of the control system) for VOC emissions.

(2) The permittee shall install and operate continuous monitoring and recording devices for either temperature or VOC concentration. The continuous monitoring and recording devices shall be capable of accurately measuring the desired parameter and shall be operated and maintained in accordance with the manufacturer's recommendations.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each day for the control equipment and maintain the information at the facility for a period of three years:

a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated coating line or printing line; and

b. For a thermal incinerator, all 3-hour periods of operation during which the average combustion temperature was more than 50 degrees Fahrenheit below the average combustion temperature measured during the most recent performance test that demonstrated the printing line to be in compliance.

(2) The permittee shall maintain the records of the results from the stack testing conducted to demonstrate compliance with the capture and control efficiency of the subject flexographic printing line, and the records documenting the VOC content of each coating and ink applied in the printing line.

(3) The permittee shall collect and record the following information each month and shall maintain the information at the facility for 5 years for emissions unit K004:

a. The company identification for each coating, ink, and cleanup material employed in the flexographic printing line;

b. The number of gallons or pounds of each coating and ink employed in the flexographic printing line during the month;

c. The number of gallons or pounds of each cleanup material employed in the flexographic printing line during the month;

d. The VOC content of each coating, ink, and cleanup material employed in the flexographic printing line, in pounds per gallon or percent by weight;

e. The total uncontrolled VOC emissions from the coatings and inks employed during the month in the flexographic printing line, in pounds per month for the line [the summation of the products obtained from multiplying d)(3)b. times d)(3)d. above, for all the coatings and inks applied];

f. The total controlled VOC emissions from all coatings and inks employed during the month in the flexographic printing line, in pounds per month [d)(3)e. x (1 - the overall control efficiency of the capture system and control device), as determined during the most recent emission tests that demonstrated the/each printing line to be in compliance];

g. The VOC emissions from cleanup materials employed in the flexographic printing line, in pounds per month for the subject printing line [the summation of the products obtained from multiplying d)(3)c. times d)(3)d. above, for all the cleanup materials applied];

h. Following the first 12 months or full year of printing operations, the annual uncontrolled VOC emissions, in tons per year or per rolling, 12 months [the summation of the 12-month emissions from all coatings, inks, and cleanup materials applied, as recorded in d)(3)e. above, then the subtraction of the resulting controlled emissions in d)(3)f., divided by 2,000 lbs/ton]; and

i. Following the first 12 months or full year of printing operations, the annual controlled VOC emissions, in tons per year or per rolling, 12 months [the summation of the 12-month emissions from all coatings, inks, and cleanup materials applied, as recorded in d)(3)f. and d)(3)g. above, divided by 2,000 lbs/ton].

(4) The permittee shall collect and record the following information each month for emissions unit L009:

a. The company identification for each solvent employed;

b. The number of gallons of each solvent employed;

c. The VOC content for each solvent employed, in pounds per gallon;

d. The total uncontrolled VOC emissions from the solvents employed during the month, in pounds per month [the summation of the products obtained from multiplying d)(4)b. times d)(4)c. above, for all solvents employed];

e. The total controlled VOC emissions from all solvents employed during the month, in pounds per month [d)(4)d. x (1 - the overall control efficiency of the capture system and control device), as determined during the most recent emission tests that demonstrated the/each printing line to be in compliance];

f. Following the first 12 months or full year of operations, the annual uncontrolled VOC emissions, in tons per year or per rolling, 12 months [the summation of the 12-month emissions from all solvents employed, as recorded in d)(4)d. above, then the subtraction of the resulting controlled emissions in d)(3)e., divided by 2,000 lbs/ton]; and

g. Following the first 12 months or full year of operations, the annual controlled VOC emissions, in tons per year or per rolling, 12 months [the summation of the 12-month emissions from all solvents employed, as recorded in d)(3)e. and d)(3)f. above, divided by 2,000 lbs/ton].

(5) The permittee shall collect and record the following information each month for emissions units K004 and L009, combined:

a. Following the first 12 months or full year of operations, the annual uncontrolled VOC emissions, in tons per rolling, 12 months [the summation of d)(3)h. and d)(4)f.]; and

b. Following the first 12 months or full year of operations, the annual controlled VOC emissions, in tons per rolling, 12 months [the summation of d)(3)i. and d)(4)g.].

(6) Modeling to demonstrate compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F)(4)(b), was not necessary because the EU's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than one TPY. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified PTI prior to making a *modification* as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes, in the composition of the materials or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above one TPY may require the permittee to apply for and obtain a new PTI.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. All exceedances of the controlled 29.40 tons VOC per rolling, 12-month period from emissions units K004 and L009, combined from the RTO emission limitation; and

b. All exceedances of the uncontrolled 163.33 tons VOC per rolling, 12-month period from emissions units K004 and L009, combined.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions in Section A of this permit.

(2) The permittee shall submit quarterly summaries of the records required by OAC 3745-21-09(B)(l), for the operating time and 3-hour average temperatures or VOC concentrations monitored during the calendar quarter. These quarterly reports shall be submitted by April 30th, July 31st, October 31st, and January 31st, and shall cover the records for the previous calendar quarters.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Controlled: 7.05 pounds VOC/hr and 29.40 tons VOC per rolling, 12-month period from emissions units K004 and L009, combined from the RTO

Applicable Compliance Method:

Compliance with the hourly limitation shall be based upon the testing requirements in section f)(2).

Compliance with annual limitation shall be based upon the recordkeeping requirements in d)(5).

b. Emission Limitation:

Uncontrolled: 163.33 tons VOC per rolling, 12-month period from emissions units K004 and L009, combined.

Applicable Compliance Method:

Compliance with the annual limitation shall be based upon the recordkeeping requirements in d)(5).

c. Emission Limitation:

The VOC collection and control system for the flexographic printing line shall have a capture efficiency of at least 65% by weight and a control efficiency of at least 90% by weight.

Applicable Compliance Method:

Compliance with the capture and total control efficiencies shall be based upon the testing requirements in section f)(2).

d. Emission Limitation:

88% overall destruction efficiency for volatile organic compounds (the percent reduction in mass emissions between the inlet and outlet of the control system)

Applicable Compliance Method:

Compliance shall be based on the emissions testing requirements as specified in f)(2).

(2) The permittee shall conduct, or have conducted, emissions testing for emissions units K004 and L009 per the following requirements:

a. The emission testing shall be conducted within 60 days of achieving the maximum production rate at which the emissions unit(s) will be operated, but not later than 180 days after initial startup and as required by the Director.

b. The emission testing shall be conducted to demonstrate compliance with the following:

i. 7.05 pounds VOC/hr from emissions units K004 and L009, combined from the RTO;

ii. The VOC collection and control system for the flexographic printing line shall have a capture efficiency of at least 65% by weight and a control efficiency of at least 90% by weight.; and

iii. 88% overall destruction efficiency for volatile organic compounds (the percent reduction in mass emissions between the inlet and outlet of the control system).

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emissions rate(s):

i. for the emission limitation in f)(2)b.i.: Methods 1 – 4 and 18, 25 or 25A, as appropriate, from 40 CFR, Part 60, Appendix A;

ii. for the capture and control efficiency: See f)(2)d. and f)(2)e.; and

iii. for the overall destruction efficiency: See f)(2)e.

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency per U.S. EPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (Ohio EPA will consider the request, including an evaluation of the applicability, necessity and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

e. The control efficiency (that is, the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined per the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and the total concentration, and on a consideration of the potential presence of interfering gases.

f. During the emissions testing, the EU shall be operated under operational conditions approved in advance by the appropriate Ohio DO/LAA. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.) or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under *worst case* conditions expected during the life of the permit. As part of the information provided in the Intent to Test (ITT) notification form described below, the permittee shall provide a description of the EU operational conditions they will meet during the emissions testing and describe why they believe *worst case* operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA DO/LAA that the proposed operating conditions constitute *worst case*. Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.

g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an ITT notification to the appropriate Ohio EPA DO/LAA. The ITT notification shall describe in detail the proposed test methods and procedures, the EU operating parameters, the time(s) and date(s) of the test(s) and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA DO/LAA's refusal to accept the results of the emission test(s).

h. Personnel from the appropriate Ohio EPA DO/LAA shall be permitted to witness the test(s), examine the testing equipment and acquire data and information necessary to ensure that the operation of the EU and the testing procedures provide a valid characterization of the emissions from the EU and/or the performance of the control equipment.

i. A comprehensive written report on the results of the emissions test(s) shall be signed by the person(s) responsible for the tests and submitted to the appropriate Ohio EPA DO/LAA within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA DO/LAA.

g) Miscellaneous Requirements

(1) None.

2. L009, Cold Cleaning Solvent Degreaser/Parts Cleaner

Operations, Property and/or Equipment Description:

Parts Cleaner Associated with Flexographic Print Line

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) b)(1)f. and d)(6).

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(D)	See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(a)(ii)	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the volatile organic compounds (VOC) emissions from these air contaminant sources since the potential to emit is less than 10 tons per year.
c.	OAC rule 3745-21-09(O)(2)(a), (b) and (d)	See b)(2)b., b)(2)c. and c)(1)
d.	OAC rule 3745-21-09(O)(2)(c)(iii)	See b)(2)d.
e.	OAC rule 3745-21-09(B)(2)	See b)(2)e.
f.	ORC rule 3704.03(F)(4)(b) OAC rule 3745-114-01	See d)(6).

(2) Additional Terms and Conditions

a. This permit establishes federally enforceable emissions limitations for purposes of limiting potential to emit (PTE) to avoid Prevention of Significant Deterioration (PSD). The federally enforceable emissions limitations are based on the operational restriction contained in c)(1):

i. Controlled: 7.05 pounds VOC/hr and 29.40 tons VOC per rolling, 12-month period from emissions units K004 and L009, combined from the regenerative thermal oxidizer (RTO); and

ii. Uncontrolled: 163.33 tons VOC per rolling, 12-month period from emissions units K004 and L009, combined.

b. The cold cleaner shall be operated with a cover; and if the solvent has a vapor pressure greater than 0.3 pound per square inch absolute, measured at 100 degrees Fahrenheit, or if the solvent is heated or agitated, the cover (door) shall be designed and constructed so that it can be easily operated with one hand. The cover shall remain closed at all times, except when parts are being handled or solvent is being added or removed. [OAC rule 3745-21-09(O)(2)(a)]

c. The cold cleaner shall be equipped with a device for draining the cleaned parts; and if the solvent has a vapor pressure greater than 0.6 pound per square inch absolute, measured at one hundred degrees Fahrenheit, the drainage facility shall be constructed internally so that parts are enclosed under the cover during draining unless an internal type drainage device cannot fit into the cleaning system. [OAC rule 3745-21-09(O)(2)(b)]

d. “Valgroup" (facility ID 0332010121) or any subsequent owner or operator of the "Valgroup" facility located at 3441 North Main Street, Findlay, Ohio shall not cause, allow or permit the discharge into the ambient air of any captured and controlled VOC from the cold cleaner (L009) unless all of the VOC emissions from the process stack that routes emissions from the vapor purging cycles in the main washing area are vented to a regenerative thermal oxidizer (RTO) that is designed and operated to achieve an 88% overall destruction efficiency for volatile organic compounds (the percent reduction in mass emissions between the inlet and outlet of the control system) for the VOC emissions in the exhaust stream.

e. This permit is issued under the provisions of OAC rule 3745-21-09(O)(2)(c)(iii) that allows for an alternative equivalent control. This specific alternative control measure must be submitted to U.S. EPA for approval into the Ohio State Implementation Plan.

c) Operational Restrictions

(1) The cold cleaner shall be operated and maintained in accordance with the following practices to minimize solvent evaporation from the unit:

a. A permanent, legible, conspicuous label, summarizing the operating requirements shall be maintained near or attached to the cold cleaner.

b. Waste solvent shall be stored in covered containers.

c. The cover (door) shall remain closed whenever parts are not being handled in the cleaner.

d. Cleaned parts shall drain until dripping ceases.

e. Porous and/or absorbent materials shall not be cleaned in the cold cleaner.

[OAC rule 3745-21-09(O)(2)(d)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each day for the control equipment (RTO) and maintain the information at the facility for a period of five years:

a. A log of operating time for the control device (RTO), monitoring equipment; and

b. All 3-hour periods of operation during which the average combustion temperature was more than 50 degrees Fahrenheit below the average combustion temperature measured during the most recent performance test that demonstrated the emissions unit to be in compliance. Until compliance testing has been conducted, the RTO shall be operated and maintained in accordance with the manufacturer's recommendations, instructions and the operating manual.

(2) The permittee shall maintain records of the following information:

a. The types of solvents employed in the cold cleaner, including the chemical name(s) and concentration;

b. The vapor pressure of each solvent applied, in pound per square inch absolute, measured at 100 degrees Fahrenheit;

c. The maximum temperature at which the solvent is maintained, if not maintained at room temperatures;

d. a record of any period of time during which the RTO system was not maintained in operation during cleaning operations; and

e. all control equipment maintenance.

The records for the types of solvents employed during each year and the vapor pressure of each solvent at 100 degrees Fahrenheit shall be maintained for at least five years and shall be made available to the Director or his representative upon verbal or written request.

(3) The permittee shall collect and record the following information each month and shall maintain the information at the facility for 5 years for emissions unit K004:

a. The company identification for each coating, ink, and cleanup material employed in the flexographic printing line;

b. The number of gallons or pounds of each coating and ink employed in the flexographic printing line during the month;

c. The number of gallons or pounds of each cleanup material employed in the flexographic printing line during the month;

d. The VOC content of each coating, ink, and cleanup material employed in the flexographic printing line, in pounds per gallon or percent by weight;

e. The total uncontrolled VOC emissions from the coatings and inks employed during the month in the flexographic printing line, in pounds per month for the line [the

summation of the products obtained from multiplying d)(3)b. times d)(3)d. above, for all the coatings and inks applied];

f. The total controlled VOC emissions from all coatings and inks employed during the month in the flexographic printing line, in pounds per month [d)(3)e. x (1 - the overall control efficiency of the capture system and control device), as determined during the most recent emission tests that demonstrated the/each printing line to be in compliance];

g. The VOC emissions from cleanup materials employed in the flexographic printing line, in pounds per month for the subject printing line [the summation of the products obtained from multiplying d)(3)c. times d)(3)d. above, for all the cleanup materials applied];

h. Following the first 12 months or full year of printing operations, the annual uncontrolled VOC emissions, in tons per year or per rolling, 12 months [the summation of the 12-month emissions from all coatings, inks, and cleanup materials applied, as recorded in d)(3)e. above, then the subtraction of the resulting controlled emissions in d)(3)f., divided by 2,000 lbs/ton]; and

i. Following the first 12 months or full year of printing operations, the annual controlled VOC emissions, in tons per year or per rolling, 12 months [the summation of the 12-month emissions from all coatings, inks, and cleanup materials applied, as recorded in d)(3)f. and d)(3)g. above, divided by 2,000 lbs/ton].

(4) The permittee shall collect and record the following information each month for emissions unit L009:

a. The company identification for each solvent employed;

b. The number of gallons of each solvent employed;

c. The VOC content for each solvent employed, in pounds per gallon;

d. The total uncontrolled VOC emissions from the solvents employed during the month, in pounds per month [the summation of the products obtained from multiplying d)(4)b. times d)(4)c. above, for all solvents employed];

e. The total controlled VOC emissions from all solvents employed during the month, in pounds per month [d)(4)d. x (1 - the overall control efficiency of the capture system and control device), as determined during the most recent emission tests that demonstrated the/each printing line to be in compliance];

f. Following the first 12 months or full year of operations, the annual uncontrolled VOC emissions, in tons per year or per rolling, 12 months [the summation of the 12-month emissions from all solvents employed, as recorded in d)(4)d. above, then the subtraction of the resulting controlled emissions in d)(3)e., divided by 2,000 lbs/ton]; and

g. Following the first 12 months or full year of operations, the annual controlled VOC emissions, in tons per year or per rolling, 12 months [the summation of the 12-month emissions from all solvents employed, as recorded in d)(3)e. and d)(3)f. above, divided by 2,000 lbs/ton].

(5) The permittee shall collect and record the following information each month for emissions units K004 and L009, combined:

a. Following the first 12 months or full year of operations, the annual uncontrolled VOC emissions, in tons per rolling, 12 months [the summation of d)(3)h. and d)(4)f.]; and

b. Following the first 12 months or full year of operations, the annual controlled VOC emissions, in tons per rolling, 12 months [the summation of d)(3)i. and d)(4)g.].

(6) Modeling to demonstrate compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F)(4)(b), was not necessary because the EU's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than one TPY. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified PTI prior to making a *modification* as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes, in the composition of the materials or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above one TPY may require the permittee to apply for and obtain a new PTI.

e) Reporting Requirements

(1) The permittee shall submit quarterly reports documenting any period of time during which a solvent with a vapor pressure greater 0.6 pound per square inch absolute, measured at 100 degrees Fahrenheit was used or the solvent was heated above 120 degrees F without also meeting the control requirements of OAC rule 3745-21-09(O)(2)(c); and any period of time during which the cold cleaner was not operated and maintained and/or its solvents handled in accordance with the requirements of this permit.

(2) The permittee shall submit quarterly summaries of the records for the operating time and 3-hour average combustion temperatures of the control device monitored during the calendar quarter. These quarterly reports shall be submitted by April 30th, July 31st, October 31st, and January 31st, and shall cover the records for the previous calendar quarters.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. All exceedances of the controlled 29.40 tons VOC per rolling, 12-month period from emissions units K004 and L009, combined from the RTO emission limitation; and

b. All exceedances of the uncontrolled 163.33 tons VOC per rolling, 12-month period from emissions units K004 and L009, combined.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions in Section A of this permit.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

Controlled: 7.05 pounds VOC/hr and 29.40 tons VOC per rolling, 12-month period from emissions units K004 and L009, combined from the RTO

Applicable Compliance Method:

Compliance with the hourly limitation shall be based upon the testing requirements in section f)(2).

Compliance with annual limitation shall be based upon the recordkeeping requirements in d)(5).

b. Emission Limitation:

Uncontrolled: 163.33 tons VOC per rolling, 12-month period from emissions units K004 and L009, combined.

Applicable Compliance Method:

Compliance with the annual limitation shall be based upon the recordkeeping requirements in d)(5).

c. Emission Limitation:

88% overall destruction efficiency for volatile organic compounds (the percent reduction in mass emissions between the inlet and outlet of the control system)

Applicable Compliance Method:

Compliance with the overall control efficiency shall be based upon the testing requirements in section f)(2).

(3) The permittee shall conduct, or have conducted, emissions testing for emissions units K004 and L009 per the following requirements:

a. The emission testing shall be conducted within 60 days of achieving the maximum production rate at which the emissions unit(s) will be operated, but not later than 180 days after initial startup and as required by the Director.

b. The emission testing shall be conducted to demonstrate compliance with the following:

i. 7.05 pounds VOC/hr from emissions units K004 and L009, combined from the RTO;

ii. The VOC collection and control system for the flexographic printing line shall have a capture efficiency of at least 65% by weight and a control efficiency of at least 90% by weight.; and

iii. 88% overall destruction efficiency for volatile organic compounds (the percent reduction in mass emissions between the inlet and outlet of the control system).

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emissions rate(s):

i. for the emission limitation in f)(2)b.i.: Methods 1 – 4 and 18, 25 or 25A, as appropriate, from 40 CFR, Part 60, Appendix A;

ii. for the capture and control efficiency: See f)(2)d. and f)(2)e.; and

iii. for the overall destruction efficiency: See f)(2)e.

Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA.

d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency per U.S. EPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (Ohio EPA will consider the request, including an evaluation of the applicability, necessity and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.)

e. The control efficiency (that is, the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined per the test methods and procedures specified in 3745-21-10 or an alternative test protocol approved by Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and the total concentration, and on a consideration of the potential presence of interfering gases.

f. During the emissions testing, the EU shall be operated under operational conditions approved in advance by the appropriate Ohio DO/LAA. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.) or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under *worst case* conditions expected during the life of the permit. As part of the information provided in the Intent to Test (ITT) notification form described below, the permittee shall provide a description of the EU operational conditions they will meet during the emissions

testing and describe why they believe *worst case* operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA DO/LAA that the proposed operating conditions constitute *worst case*. Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.

g. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an ITT notification to the appropriate Ohio EPA DO/LAA. The ITT notification shall describe in detail the proposed test methods and procedures, the EU operating parameters, the time(s) and date(s) of the test(s) and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA DO/LAA's refusal to accept the results of the emission test(s).

h. Personnel from the appropriate Ohio EPA DO/LAA shall be permitted to witness the test(s), examine the testing equipment and acquire data and information necessary to ensure that the operation of the EU and the testing procedures provide a valid characterization of the emissions from the EU and/or the performance of the control equipment.

i. A comprehensive written report on the results of the emissions test(s) shall be signed by the person(s) responsible for the tests and submitted to the appropriate Ohio EPA DO/LAA within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA DO/LAA.

g) Miscellaneous Requirements

(1) None.

3. Emissions Unit Group – Flexographic Ink/Solvent Lines: P030, P031, P032, P801

EU ID	Operations, Property and/or Equipment Description
P030	Plate Cleaner
P031	Turbo Clean Unit and Two Solvent Tanks
P032	Ink/Solvent Mixer - Solvent Process Room
P801	Wipe Rags - Flexographic Print Line

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) b)(1)c. and d)(1).

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures are identified below. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)(a)(ii)	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the volatile organic compounds (VOC) emissions from these air contaminant sources since the potential to emit is less than 10 tons per year.
b.	OAC rule 3745-21-07(M)	See b)(2)a.
c.	ORC rule 3704.03(F)(4)(b) OAC rule 3745-114-01	See d)(1).

(2) Additional Terms and Conditions

a. These emissions units are not subject to the requirements of the rule because they do not meet all the conditions outlined in OAC rule 3745-21-07(M)(3)(a).

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) Modeling to demonstrate compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F)(4)(b), was not necessary because the EU's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than one

TPY. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified PTI prior to making a *modification* as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes, in the composition of the materials or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above one TPY may require the permittee to apply for and obtain a new PTI.

e) Reporting Requirements

(1) None.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. None.

g) Miscellaneous Requirements

(1) None.

Appendix C

Public Participation

With this application, Valgroup is requesting relief from the requirements of OAC rule 3745-21-09(O), Solvent Metal Cleaning, by establishing an equivalent control for their cold cleaner. The cold cleaner is subject to a control requirement pursuant to 3745-21-09(O)(2)(c). As designed, the unit cannot meet the options required in OAC rule 3745-21-09(2)(c)(i) or (ii). OAC rule 3745-21-09(O)(2)(c)(iii) allows for the approval of other systems of equivalent control by the Director. Valgroup evaluated alternative controls and determined that venting the cold cleaner to a regenerative thermal oxidizer (RTO) would be an equivalent or better alternative control system than is required by OAC rule 3745-21-09(O)(2)(c)(i) or (ii). As such, Valgroup requests the approval of the use of an RTO as an alternative control system pursuant to OAC rule 3745-21-09(O)(2)(c)(iii). The use of the RTO on the cold cleaner will become effective upon approval of 3745-21-09(B)(2) by US EPA.

Pursuant to Part D of Title I of the Clean Air Act, Ohio EPA is required to establish a state implementation plan (SIP) for the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS). The above-mentioned rules are a part of Ohio's SIP and the proposed alternative limit will be submitted as a revision to Ohio's SIP as required under OAC rule 3745-21-28(C)(4)(c). Ohio EPA is seeking public comment to satisfy U.S. EPA requirements for public involvement in SIP related activities in accordance with 40 CFR 51.102

The permit and complete instructions for requesting information or submitting comments may be obtained at: http://epa.ohio.gov/dapc/permitsonline.aspx by entering the ID # or: Clinton Reed, Northwest District, 347 North Dunbridge Road, Bowling Green, OH 43402. Phone: (419) 352-8461

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ADNo: 502391 Customer Number: F10087
Customer Name: Company: OHIO EPA
Address: PO BOX 1049
City/St/Zip: COLUMBUS ,OH 43216
Phone: (614) 644-2129 Solicitor: DN
Category: 10 Class: 1000 Rate: LE-0 Start: 6-17-2023 Stop: 6-17-2023
Lines: 82 Inches: 10.25 Words: 389

Credit Card: Expire:
Order Number: 52443
Cost: 183.34 Adjustments: .00
Payments: .00 Discount: .00
Balance: 183.34

The following matters are the subject of this public notice by the Ohio Environmental Protection Agency. The complete public notice, including any additional instructions for submitting comments, requesting information, a public hearing, filing an appeal, or ADA accommodations may be obtained at: https://epa.ohio.gov/actions or Hearing Clerk, Ohio EPA, 50 W. Town St. P.O. Box 1049, Columbus, Ohio 43216. Ph: 614-644-3037 email: HClerk@epa.ohio.gov

Draft Permit to Install -
Subject to Revision
Valgroup
3441 N Main St, Findlay, OH 45840
ID #: P0133504
Date of Action: 06/13/2023
Permit Desc: PTI for a flexographic print line, cold-wash parts cleaner, plate cleaner, turbo clean unit, solvent tanks, solvent process room and cleanup materials. With this application, Valgroup is requesting relief from the requirements of OAC Rule 3745-21-09(O), Solvent Metal Cleaning, by establishing an equivalent control for their cold cleaner. The cold cleaner is subject to a control requirement pursuant to 3745-21-09(O)(2)(c). As designed, the unit cannot meet the options required in OAC rule 3745-21-09(2)(c)(i) or (ii). OAC Rule 3745-21-09(O)(2)(c)(iii) allows for the approval of other systems of equivalent control by the Director. Valgroup evaluated alternative controls and determined that venting the cold cleaner to a regenerative thermal oxidizer (RTO) would be an equivalent or better alternative control system than is required by OAC Rule 3745-21-09(O)(2)(c)(i) or (ii). As such, Valgroup requests the approval of the use of an RTO as an alternative control system pursuant to OAC Rule 3745-21-09(O)(2)(c)(iii). The use of the RTO on the cold cleaner will become effective upon approval of 3745-21-09(B)(2) by US EPA.

Pursuant to Part D of Title I of the Clean Air Act, Ohio EPA is required to establish a state implementation plan (SIP) for the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS). The above-mentioned rules are a part of Ohio's SIP and the proposed alternative limit will be submitted as a revision to Ohio's SIP as required under OAC Rule 3745-21-28(C)(4)(c). Ohio EPA is seeking public comment to satisfy U.S. EPA requirements for public involvement in SIP related activities in accordance with 40 CFR 51.102

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Publish June 17, 2023