



# NPDES Pretreatment Compliance Sampling Inspection Report

Marval Industries, Inc.

315 Hoyt Ave.  
Mamaroneck, New York 10543

40 CFR Parts 403 & 414  
Industrial User Permit # 1461

Inspection Dates: July 23-24, 2024

**Report Prepared by:**

**THUAN  
TRAN**

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THUAN TRAN  
Date: 2024.09.05  
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Thuan Tran, Physical Scientist

**Report Approved by:**

**PHILIP  
COCUZZA**

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COCUZZA  
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Phil Cocuzza, Supervisor  
Monitoring Operations Section

## **1.0 OBJECTIVE**

On July 23-24, 2024, at the request of the New York State Department of Environmental Conservation (NYSDEC), the United States Environmental Protection Agency (USEPA) conducted a Pretreatment Compliance Sampling Inspection (CSI) at Marval Industries, Inc. The objective of the Pretreatment CSI was to gather information necessary to determine if the facility is in compliance with the Federal Categorical Standard of 40 Code of Federal Regulations (CFR) Part 414.111 for Organic Chemicals, Plastic, and Synthetic Fibers Subpart K – Indirect Discharge Point Sources, the Federal General Pretreatment Regulations for Existing and New Sources of Pollution in 40 CFR Part 403, and Marval Industries, Inc. Wastewater Discharge Permit #1461 that was issued by the Westchester County Department of Environmental Facilities, and other related Federal regulations. The Wastewater Discharge Permit became effective January 01, 2023, and will expire on December 31, 2024.

## **2.0 KEY PARTICIPANTS**

Listed below are key inspection participants and contact information, grouped by organization.

### U.S. Environmental Protection Agency

Thuan Tran, Lead Inspector

732-321-4455, email: [tran.thuan@epa.gov](mailto:tran.thuan@epa.gov)

Robert Morrell, Geologist

### Marval Industries, Inc.

Thomas Zimmerman, President

914-381-2400, email: [tzimmerman@marvalindustries.com](mailto:tzimmerman@marvalindustries.com)

Logan Osberg, Operations Manager

914-381-2400, email: [losberg@marvalindustries.com](mailto:losberg@marvalindustries.com)

### HydroEnvironmental Solutions, Inc.

Nicholas Carbone, Environmental Engineer

914-276-2560, email: [ncarbone@hesny.com](mailto:ncarbone@hesny.com)

### Westchester County Department of Environmental Facilities

Monika Wieleba, Industrial Pretreatment Program (IPP) Coordinator

914-813-5720 (x-5715), email: [mew3@westchestercountyny.gov](mailto:mew3@westchestercountyny.gov)

## **3.0 FACILITY DESCRIPTION**

### **3.1 General Information:**

Marval Industries, Inc. is a family owned and operated company since 1956. The company originated from Mount Vernon, New York (NY) and moved to its current location in Mamaroneck. Marval Industries, Inc. operates eight (8) single screw extruders and three (3)

twin screw extruders to provide colorants, additives, compounds, and resins to the plastic industry for injection molding, extrusion, blown film extrusion, blow molding, rotational molding and thermoforming. The final products are distributed to personal care, pharmaceutical, medical, cosmetic specialty packaging, advertising displays houseware, and toy industries.

Marval Industries, Inc. is located at 315 Hoyt Ave., Mamaroneck, New York (NY). The facility employs approximately 42 people, operating twenty-four (24) hours per five (5) days with three (3), 8-hour shifts (7AM–3PM, 3PM–11PM, & 11PM–7AM). Marval Industries, Inc. is categorized under Standard Industrial Classification (SIC) 3082 – Unsupported Plastics Profile Shapes and the North American Industry Classification System (NAICS) 326121 – Unlaminated Plastics Profile Shape Manufacturing.

### 3.2 Process Information

Marval Industries, Inc. receives municipal water for sanitary usage and manufacturing operation. Municipal water is not treated prior to use in the manufacturing operation. Generated process and sanitary waste streams comingled before discharging into the town sanitary sewer collection system.

The manufacturing process starts by combining the dry raw material [Polyethylene, Polypropylene, Polystyrene, Polyamide (Nylon), Acrylic, Acrylonitrile Butadiene Styrene (ABS), colorants and additives] into the Blender. The raw materials are tumbled and mixed to create a uniform blend. After blending, the entire content is deposited into a Gaylord box and is forklifted onto a higher platform. The dry blend is fed into a receiving hopper. The hopper feeds the barrel and screw extruders. The extrusion process involves the application of heat around 420 degrees Fahrenheit (°F) and pressure to force the dry blend into a molten or semi-solid state enabling the barrel/screws to create the resin. Colors are mixed with the resin after the extruder die plates to acquire the specific color and texture requested. The extruded resin emerges from the die plates in a continuous stream of pliable resin into the cooling trough. The plastic resin is cool and harden as it moves through the water. As the plastic resin emerges from the cooling trough, an air blower dries the plastic resin to minimize water loss and further cools the plastic resin. From the cooling trough, the plastic resin is fed into the Pelletizer to be cut into small pellets. The small plastic resin pellets slide onto the Classifier. The small pellets are categorized by size. Finally, the accepted pellets are collected and packaged to be ship to their customers. Any undersized and oversized pellets are collected and returned to the receiving hopper.

Municipal water is used to replenish the cooling troughs in Building No. 1 and Building No. 2. As the hot extruded resin is fed into the cooling troughs, the water is displaced and/or evaporated. The displaced water overflows into a side-screen compartment that captures lost and/or excess plastic resin from the extrusion process. In Building No. 1, the process

waste streams are combined with sanitary wastewater in the drained pipe that connects to Building No. 2 sewer line after the monitoring location. In Building No. 2, all the process waste streams from the cooling troughs are connected to the sump pit, except one. Solids within the waste streams are captured by a cloth filter as the waste streams free-fall into the sump pit for settling. As the water level rises in the sump pit, the pretreated process wastewater is pumped through the discharged pipe. Downstream of the discharged pipe, the pretreated process wastewater combines with the untreated process waste stream from the extrusion operation that is not connected to the sump pit. Further downstream, sanitary wastewater from bathrooms and breakroom mixes with the process wastewater before reaching the monitoring location.

Solids collected from the cooling trough screens and the cloth filter are disposed of as regular trash.

### 3.3 Facility Self-Monitoring Information

Marval Industries, Inc. hired HydroEnvironmental Solutions, Inc. to collect pretreated process wastewater samples for compliance purpose with Marval Industries, Inc. Wastewater Discharge Permit. All the parameters on the permit are obtained through a portable automatic composite sampler that is programmed to collect an aliquot every hour during the 24-hour sampling event. The parameters collected are BOD<sub>5</sub>, TSS, Metals (As, Cd, Cr, Cu, Pb, Hg, Ni, Ag & Zn), Total Cyanide, Total Phenolics, pH, O&G, SVOCs, and VOCs. The composite sample is distributed between the containers which are provided by York Analytical Laboratories and Phoenix Environmental Laboratories. The compliance samples are analyzed by York Analytical Laboratories located at 120 Research Drive in Stratford, Connecticut.

## **4.0 EPA SAMPLING/INSPECTION ACTIVITIES**

### 4.1 Sampling Activities

An ISCO automatic composite sampler was programmed to take 96 sample aliquots during the 24-hour sampling event at the monitoring location. The 24-hr composite sample was collected and analyzed for Metals (As, Ba, Cd, Cr, Cu, Pb, Hg, Ni, Se, Ag & Zn) and Hexavalent Chromium.

Grab-composite samples were collected at various time intervals for Non-Volatile Organic Analytes (NVOAs) and Total Cyanide.

Grab samples were collected for Oil & Grease (O&G), Total Phenols and Volatile Organic Analytes (VOAs). Four (4) sets of grab samples for VOAs were collected at various time

intervals during the 24-hour sampling event. The four sets of VOA grab samples were composited in the laboratory.

Furthermore, on-site grab samples were collected and analyzed for pH, Temperature, and Total Residual Chlorine (TRC).

All sample containers, preservation techniques and holding times were in accordance with USEPA requirements specified in 40 CFR Part 136. Signed and dated custody seals were placed across the lids and along the sides of the sample containers. The custody sealed sample containers were placed inside plastic sample bags and sealed. All samples were transported on ice to the USEPA Laboratory in Edison, New Jersey for analysis.

Split samples were collected and given to the facility representative.

#### 4.2 Inspection Activities

A Pretreatment Compliance Sampling Inspection (CSI) at Marval Industries, Inc. was conducted on July 23-24, 2024. The inspectors met with Thomas Zimmerman; President, Logan Osberg; Operations Manager, Nicholas Carbone; HydroEnvironmental Solutions, Inc. Environmental Engineer, and Monika Wieleba; Westchester County Department of Environmental Facilities Industrial Pretreatment Program Coordinator. Inspector's credential was presented, and business card was provided during the opening conference. The facility representatives were explained that the inspection purpose with supporting on-site activities was to determine if Marval Industries, Inc. is in compliance with the Federal limitations, requirements and conditions of 40 CFR Parts 414.111 & 403, the Wastewater Discharge Permit and other related Federal regulations.

Supporting on-site activities consist of collecting samples of the pretreated discharged effluent at the monitoring location, observing and evaluating the monitoring location, observing and evaluating Marval Industries, Inc. sampling protocol, observing and evaluating the process wastewater flow from the manufacturing operation, reviewing and evaluating the on-site sampling procedures, reviewing and evaluating the chain-of-custody, observing and evaluating the laboratory analytical data and sample containers, as well as, sample preservation, and interviewing the facility's representatives.

The facility's representatives were briefed on the inspection activities throughout the inspection and during the closing conference. On-site sample results and concerns discovered during the inspection were communicated to the facility's representatives so that they understand their responsibilities to comply with the conditions and limitations set forth in the Federal regulations and their Wastewater Discharge Permit.

4.3 Deviations and/or Environmental Conditions

Pretreated and untreated process waste streams, and sanitary wastewater from Building No. 2 are mixed before reaching the monitoring location. Furthermore, process waste streams and sanitary wastewater from Building No. 1 comingle with the wastewater from Building No. 2 after the monitoring location. Due to the various waste streams combining at different points within the facility’s sewer collection system between the two buildings and accessibility issue, representative sampling could not be obtained. A professional judgement was made to sample at the monitoring location based on interviews with representatives from the facility and the Westchester County Department of Environmental Facilities IPP Coordinator.

In addition, samples for O&G could not be collected from the monitoring location due to accessibility. A professional judgement was made to collect the samples from the sump pit in Building #2.

**5.0 ANALYTICAL RESULTS**

**Table 1: 40 CFR Part 414.111 – Organic Chemicals, Plastic, & Synthetic Fibers**  
**Inspection Dates: July 23-24, 2024**

POLLUTANTS	UNITS	40 CFR Part 414.111				EPA RESULT	
		Max for Any 1 Day	Mass Loading * (lbs/d)	Max. for Any Monthly Avg.	Mass Loading* (lbs/d)		lbs/d
Flow*	MGD	---	----	----	----	0.011	---
Temperature*	°C	</= 40	----	----	----	26	---
pH*	SU	>/=5.0	----	----	----	6.57	---
Acenaphthene	mg/l	0.047	0.004	0.019	0.002	U	---
Anthracene	mg/l	0.047	0.004	0.019	0.002	U	---
Benzene	mg/l	0.134	0.012	0.057	0.005	U	---
Bis(2-ethylhexy) phthalate	mg/l	0.258	0.024	0.095	0.009	U	
Carbon Tetrachloride	mg/l	0.380	0.034	0.142	0.013	U	---
Chlorobenzene	mg/l	0.380	0.034	0.142	0.013	U	---
Chloroethane	mg/l	0.295	0.027	0.110	0.010	U	---
Chloroform	mg/l	0.325	0.030	0.111	0.010	0.022	0.002
Di-n-butyl phthalate	mg/l	0.043	0.004	0.020	0.002	U J	---
1,2-Dichlorobenzene	mg/l	0.794	0.073	0.196	0.007	U	---
1,3-Dichlorobenzene	mg/l	0.380	0.035	0.142	0.013	U	---
1,4-Dichlorobenzene	mg/l	0.380	0.035	0.142	0.013	U	---
1,4-Dichloroethane	mg/l	0.059	0.005	0.022	0.002	U	---
1,2-Dichloroethane	mg/l	0.574	0.053	0.180	0.017	U	---
1,1-Dichloroethylene	mg/l	0.060	0.006	0.022	0.002	U	---

1,2-trans-Dichloroethylene	mg/l	0.066	0.006	0.025	0.002	U	---
1,2-Dichloropropane	mg/l	0.794	0.073	0.196	0.018	U	---
1,3-Dichloropropylene	mg/l	0.794	0.073	0.196	0.018	U	---
Diethyl phthalate	mg/l	0.113	0.010	0.046	0.004	U J	---
Dimethyl phthalate	mg/l	0.047	0.004	0.019	0.002	U J	---
4,6-Dinitro-o-cresol	mg/l	0.277	0.025	0.078	0.007	---	---
Ethylbenzene	mg/l	0.380	0.035	0.142	0.013	U	---
Fluoranthene	mg/l	0.054	0.005	0.022	0.002	U J	---
Fluorene	mg/l	0.047	0.004	0.019	0.002	U J	---
Hexachlorobenzene	mg/l	0.794	0.073	0.196	0.002	U J	---
Hexachlorobutadiene	mg/l	0.380	0.035	0.142	0.013	U L	---
Hexachloroethane	mg/l	0.794	0.073	0.196	0.018	U L	----
Methyl Chloride	mg/l	0.295	0.027	0.110	0.010	---	---
Methylene Chloride	mg/l	0.170	0.016	0.036	0.003	U	---
Naphthalene	mg/l	0.047	0.004	0.019	0.002	U J	---
Nitrobenzene	mg/l	6.402	0.587	2.237	0.205	U J	---
2-Nitrophenol	mg/l	0.231	0.021	0.065	0.006	U L	---
4-Nitrophenol	mg/l	0.576	0.053	0.162	0.015	U J	---
Phenanthrene	mg/l	0.047	0.004	0.019	0.002	U J	---
Pyrene	mg/l	0.048	0.004	0.020	0.002	U J	---
Tetrachloroethylene	mg/l	0.164	0.015	0.052	0.005	U	---
Toluene	mg/l	0.074	0.007	0.028	0.003	U	---
1,2,4-Trichlorobenzene	mg/l	0.794	0.073	0.196	0.018	U	---
1,1,1-Trichloroethane	mg/l	0.059	0.005	0.022	0.002	U	---
1,1,2-Trichloroethane	mg/l	0.127	0.011	0.032	0.003	U	---
Trichloroethylene	mg/l	0.069	0.006	0.026	0.002	U	---
Vinyl Chloride	mg/l	0.172	0.016	0.097	0.009	U	---
Total Cyanide	mg/l	1.20	0.110	0.420	0.039	U	---
Lead	mg/l	0.69	0.063	0.32	0.029	U	---
Zinc	mg/l	2.61	0.239	1.05	0.096	0.064	0.006

**Notes:**\* : 40 CFR Part 414.111(a): Mass Loading\* (lbs/d) = Conc. (mg/l) X Flow (MGD) x Conv. Factor (8.34 lbs/gal.)  
: Flow\* b/t: 6/14/24 to 7/14/24 for Bldgs. #1 & #2 breakdown to 11,023 GPD converts to 0.011 MGD  
: 40 CFR Part 403.5(b)(2): Specific Prohibition for pH  
: 40 CFR Part 403.5(b)(5): Specific Prohibition for Temperature  
: U- The analyte was not detected at or above the Reporting Limit (RL).  
: J- The identification of the analyte is acceptable; the reported value is an estimate.  
: L- The identification of the analyte is acceptable; the reported value may be biased low.

**Table 2 – Marval Industries, Inc. Wastewater Discharge Permit**  
**Inspection Dates: July 23-24, 2024**

POLLUTANTS	UNITS	LOCAL EFFLUENT LIMITATION (Daily Average)	EPA RESULT
Oil & Grease (O&G)	mg/l	100.0	23.8 L
Phenols	mg/l	4.0	0.138 K
Arsenic	mg/l	0.2	U
Barium	mg/l	2.0	U
Cadmium	mg/l	0.7	U
Chromium (Total)	mg/l	3.0	0.009
Chromium (Hexa)	mg/l	2.0	U L
Copper	mg/l	2.8	0.121
Cyanide (Total)	mg/l	0.8	U
Lead	mg/l	0.4	U
Mercury	mg/l	0.2	U
Nickel	mg/l	2.8	U
Selenium	mg/l	0.2	U
Silver	mg/l	0.8	U
Zinc	mg/l	1.8	0.064
TTO	mg/l	2.1	0.022
pH	SU	5.5 – 9.5	6.57

**Notes:\*** : U- The analyte was not detected at or above the Reporting Limit (RL).  
 : L- The identification of the analyte is acceptable; the reported value may be biased low.  
 : K- The identification of the analyte is acceptable; the reported value may be biased high.

## 6.0 FINDINGS

### 6.1 Sampling Result Findings

The EPA analytical results obtained during this inspection are within the acceptable limits.

### 6.2 Inspection Findings

In addition to the analytical data, an inspection of the facility operations was conducted as discussed in Section 4.2 above. During the inspection, the following observations were noted which may contravene the requirements of the applicable Federal regulations and the Wastewater Discharge Permit:

6.2.1 The samples collected at the monitoring location is not representative of the pretreated effluent. According to Part II – Definitions in the Wastewater Discharge Permit, it states, “Self-Monitoring – Sampling and analyses performed at the Industry by the Industry itself in accordance with 40 CFR Part 403.” In 40 CFR Part 403.12(b)(5)(ii) for Measurement of Pollutants, it states, “In addition, the User shall submit the results of sampling and analysis identifying the nature and concentration (or mass, where required by the Standard or Control Authority) of regulated

*pollutants in the Discharge from each regulated process. Both daily maximum and average concentration (or mass, where required) shall be reported. The sample shall be representative of daily operations.* Furthermore, 40 CFR Part 403.12(b)(5)(iv) for Measurement of Pollutants, it states, *"Samples should be taken immediately downstream from pretreatment facilities if such exist or immediately downstream from the regulated process if no pretreatment exists."*

6.2.2 All the parameters in Marval Industries, Inc. Wastewater Discharge Permit are collected as 24-hour composite sample using an automatic sampler. Accordance to Part III – Discharge Limitations and Monitoring Parameters of the permit, some of the parameters are to be collected as grab. Based in 40 CFR Part 403.12(b)(5)(v) for Measurement of Pollutants, it states, *"Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR part 136 and amendments thereto."* In addition, 40 CFR Part 403.12(g)(3) states, *"..... Grab samples must be used for pH, cyanide, total phenols, oil and grease, sulfide, and volatile organic compounds."*

6.2.2.1 Oil and Grease (O&G) samples should be collected as a grab. Due to its' nature, O&G will adhere to any surfaces that it comes in-contact with resulting in bias low. In Section 8.3 Sample Collection, Preservation, and Storage of EPA Method 1664 (HEM), it states, *"The high probability that extractable matter may adhere to sampling equipment and result in measurements that are biased low precludes the collection of composite samples for determination of oil and grease. Therefore, samples must be collected as grab samples. If a composite measurement is required, individual grab samples collected at prescribed time intervals must be analyzed separately and the concentrations averaged. Alternatively, samples can be collected in the field and composited in the laboratory."*

6.2.2.2 Hydrogen Ion (pH) should be collected as a grab sample and analyzed within 15 minutes. According to 40 CFR Part 136 Table II – Required Containers, Preservation Techniques, and Holding Times, Hydrogen Ion (pH) sample must be *"analyze within 15 minutes."*

6.2.2.3 Phenol is collected as a composite sample. According to Part III – Discharge Limitations and Monitoring Parameters of the Wastewater Discharge Permit under "Sampling Type" column, phenols is to be collected as *"Grab."*

6.2.2.4 Volatile Organic Compounds (VOCs) listed on the permit are collected as *"composite."* Total Toxic Organics (TTOs) is collected as *"grab."* These are conflicting because VOCs are a part of the TTOs. VOCs should not be collected as a composite sample using an automatic sampler. According to Section 9- Sample Collection, Preservation, and Handling of EPA Method

624, it states, “ Collect the sample as a grab sample in a glass container having a total volume of at least 25-mL. Fill the sample bottles just to overflowing in such a manner that no air bubbles pass through the sample as the bottle is being filled. Seal the bottle so that no air bubbles are entrapped in it.” Since VOCs is required to be collected as a composite on the permit, the alternative would be to collect multiple grab samples within a certain time intervals. The multiple grab samples would then be composited in the laboratory.

## 7.0 ATTACHMENTS

**Attachment #1.** Extruders & process waste stream flows are shown for Building #1.

**Attachment #2.** Extruders & process waste stream flows are shown for Building #2.

**Attachment #3.** A production procedure is followed when starting up an extrusion process.

**Attachment #4.** A block diagram shows the extrusion process from start to end.

**Attachment #5.** USEPA Chain of Custody for Samples was submitted to the USEPA Lab.

**Attachment #6.** USEPA Analytical Data Package was received on 08/13/2024.

**Attachment #7.** Marval Industries, Inc. Discharge Permit #1461 expires on 12/31/2024.

## 8.0 PHOTOGRAPHS

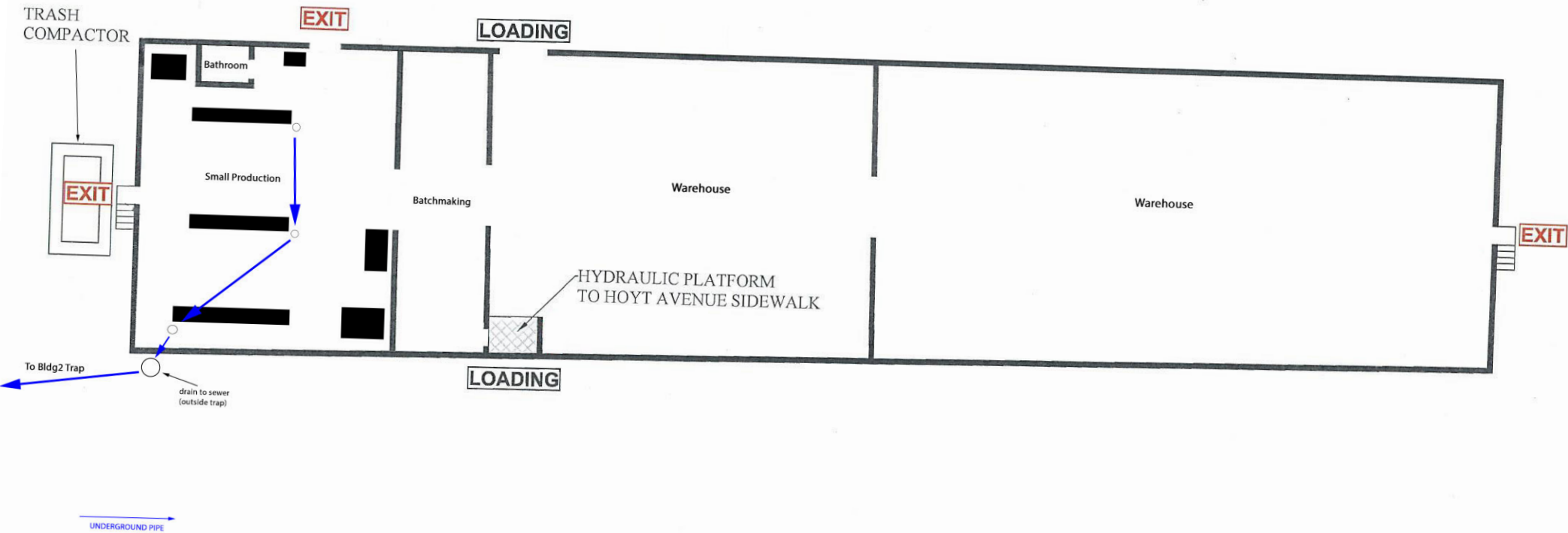
**Photo #1.** A composite sample was collected from the monitoring location.

**Photo #2.** Sample aliquots were drawn from the sampling point.

**Photo #3.** O&G samples were collected from the sump pit inside Building #2.

## **7.0 Attachments**

**Attachment #1.** Process waste streams and sanitary wastewater from Building #1 are conveyed to Building #2 after the monitoring location.



BUILDING NO. 1  
315 HOYT AVENUE  
STORAGE / COMPOUNDING

**Attachment #2.** Process waste streams and sanitary wastewater from Building #2 flow to the building trap before draining into the sewer.



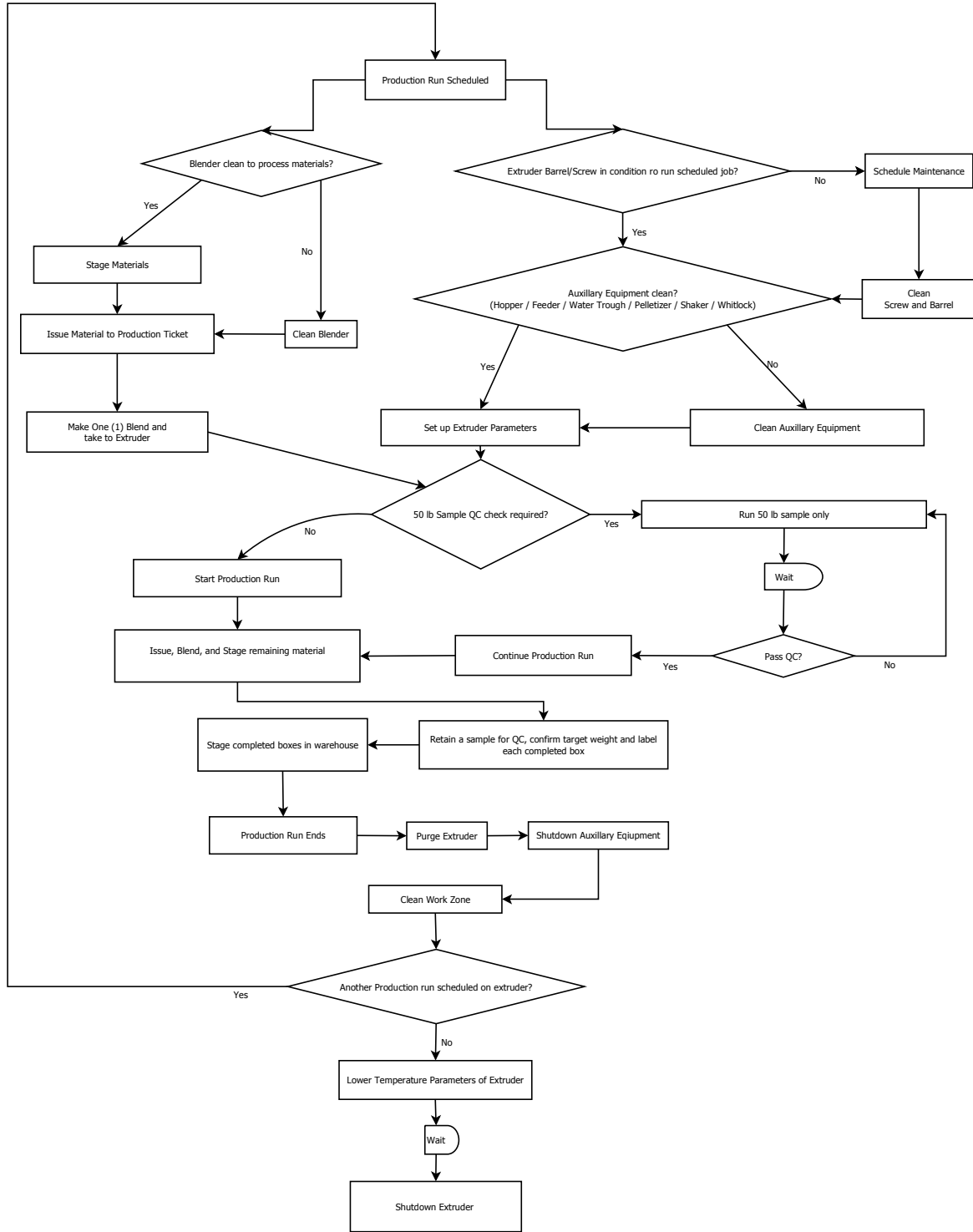
→  
Ceiling Pipe

→  
Underground / Ground Level Pipe

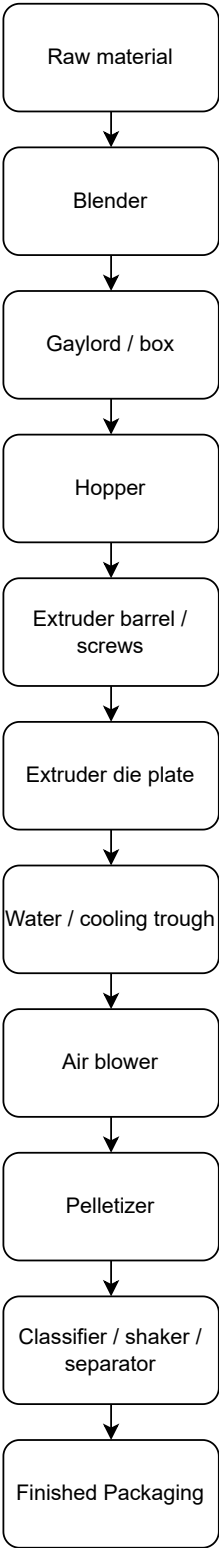
BUILDING NO. 2

333 HOYT AVENUE  
PRODUCTION  
BLDG

**Attachment #3.** A Production SOP is followed to start-up an extrusion operation.



Attachment #4. A block diagram depicts a typical extrusion operation.



US EPA REGION 2 LABORATORY  
CHAIN OF CUSTODY/ FIELD DATA FORM

SURVEY NAME & LOCALITY Marval Industries, Inc.

PROJECT LEADER Thuan Tran

PROGRAM: SF  :

SITE ID \_\_\_\_\_

OPERABLE UNIT \_\_\_\_\_

PROGRAM RESULTS CODE \_\_\_\_\_

Decision Unit Code Y206 RCRA  D210 RCRA ENF  D307 NPDES  B304 SDWA  C215 AM  B224 CAA  A305

TSCA  L306 OD  B253 FIFRA  CRIMINAL ENF

Permit #:  
SIU Permit #: 1461

LAB ID/ FIELD ID	CONTAINERS # OF	MATRIX	CHECK IF SPLIT SAMPLE	DESCRIPTION & INSTRUCTIONS INCLUDING LOCATION, ESTIMATED CONCENTRATIONS, SPECIAL REPORTING LIMITS, SPECIAL TEST REQUIREMENTS & ALIQUOTING	Res CL Checked	Preservative (circle)	Collection Time (24hr clock)		Collection Date mm/dd/yy	
							Begin	End		
Pretreated Effluent: 24-Hr Comp	3	A	<input checked="" type="checkbox"/>	1, 250-ml HDPE bottle: Metals*: 24-Hr Comp.	<input type="checkbox"/>	2407037-01	02	11:00	10:45	7/23-24/24
		A	<input checked="" type="checkbox"/>	1, 250-ml HDPE bottle: Mercury: 24-hr Comp.	<input type="checkbox"/>		02	11:00	10:45	7/23-24/24
		A	<input checked="" type="checkbox"/>	1, 250-ml HDPE bottle: Hexavalent Chromium: 24-Hr Comp.	<input type="checkbox"/>		0	11:00	10:45	7/23-24/24
Pretreated Effluent: Grab-Comp.	4	A	<input checked="" type="checkbox"/>	1, 125-ml HDPE bottle: Cyanide, T: Grab-Comp.	<input type="checkbox"/>	-02	05	11:31	10:43	7/23-24/24
		A	<input checked="" type="checkbox"/>	3, 1-L WM amber bottles: NVOAs: Grab-Comp.	<input type="checkbox"/>		0	11:31	10:43	7/23-24/24
Pretreated Effluent: Grab	15	A	<input checked="" type="checkbox"/>	3, 40-ml clear glass vials: VOAs*: Grab-Set 1	<input type="checkbox"/>	-03	0		11:30	7/23/2024
		A	<input checked="" type="checkbox"/>	3, 40-ml clear glass vials: VOAs*: Grab-Set 2	<input type="checkbox"/>	-04	0		14:00	7/23/2024
		A	<input checked="" type="checkbox"/>	3, 40-ml clear glass vials: VOAs*: Grab-Set 3	<input type="checkbox"/>	-05	0		16:00	7/23/2024
		A	<input checked="" type="checkbox"/>	3, 40-ml clear glass vials: VOAs*: Grab-Set 4	<input type="checkbox"/>	-06	0		11:00	7/24/2024
		A	<input checked="" type="checkbox"/>	3, 1-L WM clear glass bottles: O&G: Grab	<input type="checkbox"/>	-07	03		10:17	7/24/2024

COMMENTS & SPECIAL REQUIREMENTS:

**Notes:** Metals\*: As, Ba, Cd, Cr, Cu, Pb, Ni, Se, Ag & Zn.

VOAs\* Grab-Set 1 - Grab-Set 4 samples are to be laboratory composite.

Chlorine: Zero

\* 2407037-09 = Lab Composite-Set #1 to #4 7/24/24

24-7/24/24  
Preservative Added & Checked  
0=ice 7=FAS  
1=H2SO4 pH<2 8=ZnAc  
2=HNO3 pH<2 9=NaOH pH>12  
3=HCl pH<2 10=NH4Cl  
4=Na2S2O3  
5=NaOH pH>9  
6=Ascorbic Acid

Matrix: A=aqueous B=aqueous (chlorinated) C=soil D=sediment E=sludge F=multiphasic G=solvent H=biota I=oil J=other	Relinquished By:	Person Assuming Responsibility for Sample(s):	Time	Date
		Thuan Tran	Thuan Tran	1500
			1500	7/24/24

Survey Complete? Y  N

Direct from sampling, chubb & submitted. 24 7/24/24 revised 10/25/2004

US EPA REGION 2 LABORATORY  
CHAIN OF CUSTODY/ FIELD DATA FORM

SURVEY NAME & LOCALITY Marval Industries, Inc.

PROJECT LEADER Thuan Tran

PROGRAM: SF  : SITE ID \_\_\_\_\_

OPERABLE UNIT \_\_\_\_\_

PROGRAM RESULTS CODE \_\_\_\_\_

Decision RCRA  RCRA ENF  NPDES  SDWA  AM  CAA   
 Unit Code Y206 D210 D307 B304  C215 B224 A305

TSCA  OD  FIFRA  CRIMINAL ENF   
 L306 B253

LAB ID/ FIELD ID	CONTAINERS # OF	MATRIX	CHECK IF SPLIT SAMPLE	DESCRIPTION & INSTRUCTIONS INCLUDING LOCATION, ESTIMATED CONCENTRATIONS, SPECIAL REPORTING LIMITS, SPECIAL TEST REQUIREMENTS & ALIQUOTING	Res CL Checked	Preservative (circle)	Collection Time (24hr clock) //////////		Collection Date mm/dd/yy
							Begin	End	
Pretreated Effluent: Grab	1	A	<input checked="" type="checkbox"/>	1, 250-ml amber glass: Phenols: Grab <span style="float:right">2407037-08</span>	<input type="checkbox"/>	01		11:00	7/24/2024
TRIP BLANK	3	A	<input type="checkbox"/>	3, 40-ml clear glass vials: VOAs*: Grab <span style="float:right">-10</span>	<input type="checkbox"/>	0		1403	7/22/2024
			<input type="checkbox"/>		<input type="checkbox"/>	0 1 2 3 4 5 6 7 8 9 10			
			<input type="checkbox"/>		<input type="checkbox"/>	0 1 2 3 4 5 6 7 8 9 10			
			<input type="checkbox"/>		<input type="checkbox"/>	0 1 2 3 4 5 6 7 8 9 10			
			<input type="checkbox"/>		<input type="checkbox"/>	0 1 2 3 4 5 6 7 8 9 10			
			<input type="checkbox"/>		<input type="checkbox"/>	0 1 2 3 4 5 6 7 8 9 10			
			<input type="checkbox"/>		<input type="checkbox"/>	0 1 2 3 4 5 6 7 8 9 10			
			<input type="checkbox"/>		<input type="checkbox"/>	0 1 2 3 4 5 6 7 8 9 10			
			<input type="checkbox"/>		<input type="checkbox"/>	0 1 2 3 4 5 6 7 8 9 10			
			<input type="checkbox"/>		<input type="checkbox"/>	0 1 2 3 4 5 6 7 8 9 10			
			<input type="checkbox"/>		<input type="checkbox"/>	0 1 2 3 4 5 6 7 8 9 10			

COMMENTS & SPECIAL REQUIREMENTS:

**Preservative Added & Checked**

0=ice	7=FAS
1=H2SO4 pH<2	8=ZnAc
2=HNO3 pH<2	9=NaOH pH>12
3=HCl pH<2	10=NH4Cl
4=Na2S2O3	
5=NaOH pH>9	
6=Ascorbic Acid	

Matrix: A=aqueous B=aqueous (chlorinated) C=soil D=sediment E=sludge F=multiphasic G=solvent H=biota I=oil J=other	Relinquished By:	Person Assuming Responsibility for Sample(s):	Time	Date
		<u>Thuan Tran</u>	<u>Thuan Tran</u>	1500
	Relinquished By:	Received By:	1500	7/24/24
	Relinquished By:	Received By:		
	Relinquished By:	Received By:		

Survey Complete? Y  N



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**Region 2 Laboratory  
2890 Woodbridge Avenue  
Edison , New Jersey 08837  
732-906-6886 Phone  
732-906-6165 Fax**

August 13, 2024

Thuan Tran  
Monitoring & Assessment Branch  
LSASD/MAB  
Edison, NJ 08837

RE: Marval Industries, Inc. - 2407037

Enclosed are the results of analyses for samples received by the laboratory on 07/24/2024. The signature below reflects the laboratory's approval of the reported results. If you have any questions concerning this report, please refer to Project Number 2407037 and contact the laboratory.

Sincerely,

A handwritten signature in black ink that reads "John R. Bourbon". The signature is written in a cursive style.

John R. Bourbon  
Chief, LSASD/LB



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**Project Narrative:**

The National Environmental Laboratory Accreditation Conference Institute (TNI) is a voluntary environmental laboratory accreditation association of State and Federal agencies. TNI established and promoted a National Environmental Laboratory Accreditation Program (NELAP) that provides a uniform set of standards for the generation of environmental data that are of known and defensible quality. The EPA Region 2 Laboratory is NELAP accredited. The Laboratory tests that are accredited have met all the requirements established under the TNI Standards.

Condition Comments

None

Comment(s):

The "Sample Analysis Date and Time" is included in the results section for any analyte with a prescribed holding time of 72 hours or less.

SVOA: Due to poor response in ICV, twelve analytes in the sample were qualified with "J". Additionally due to matrix effects "L" qualifier is applied to several analytes for low recovery. All analytes are ND in the sample. Sample was re-run to confirm.

Oil & Grease: Due to matrix effects "L" qualifier is applied for low recovery.

Data Qualifier(s):

- U- The analyte was not detected at or above the Reporting Limit.
- J- The identification of the analyte is acceptable; the reported value is an estimate.
- K- The identification of the analyte is acceptable; the reported value may be biased high.
- L- The identification of the analyte is acceptable; the reported value may be biased low.
- NJ- There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification. The reported value is an estimate.



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

Reporting Limit(s):

The Laboratory was able to achieve the appropriate limit for each analyte requested.

**SUMMARY REPORT FOR SAMPLES**

<b>Field ID</b>	<b>Laboratory ID</b>	<b>Matrix</b>	<b>Date Sampled</b>	<b>Date Received</b>
Pretreated Effluent: 24-Hr Comp.	2407037-01	Aqueous	07/24/2024 10:45	07/24/2024 15:00
Pretreated Effluent: Grab-Comp.	2407037-02	Aqueous	07/24/2024 10:43	07/24/2024 15:00
Pretreated Effluent: Grab	2407037-07	Aqueous	07/24/2024 10:17	07/24/2024 15:00
Pretreated Effluent: Grab	2407037-08	Aqueous	07/24/2024 11:00	07/24/2024 15:00
Pretreated Effluent: Lab-Composite-Se	2407037-09	Aqueous	07/24/2024 00:01	07/24/2024 15:00
TRIP BLANK	2407037-10	Aqueous	07/22/2024 14:03	07/24/2024 15:00



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**SUMMARY REPORT FOR METHODS**

<b>Analysis</b>	<b>Method</b>	<b>Certification</b>	<b>Matrix</b>
624.1 VOA EPA-NPDES	EPA 624.1 SOP C-89 Rev 3.7	NELAP	Aqueous
625.1 SVOA NPDES	EPA 625.1 SOP C-90 Rev 3.9	NELAP	Aqueous
Chromium, Hexavalent	HACH 8023 SOP C-96 Rev 2.8	NELAP	Aqueous
Cyanide, Total	EPA 335.4 SOP C-28 Rev 2.8	NELAP	Aqueous
Mercury	EPA 245.1 SOP C-110 Rev 2.8	NELAP	Aqueous
Metals ICP TAL NPDES/DW	EPA 200.7 SOP C-109 Rev 3.7	NELAP	Aqueous
Oil & Grease	EPA 1664A SOP C-126 Rev 1.7	NELAP	Aqueous
Phenolics, Total	EPA 420.4 SOP C-29 Rev 2.8	NELAP	Aqueous



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

Analyte	Result	Qualifier	Reporting Limit	Units	Batch	Date and Time of Analysis*
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**Field ID: Pretreated Effluent: 24-Hr Comp.**

**Sample ID: 2407037-01**

**Metals ICP**

Arsenic	---	U	8.00	ug/L	B407145	
Barium	---	U	100	ug/L	B407145	
Cadmium	---	U	3.00	ug/L	B407145	
Chromium	8.95		5.00	ug/L	B407145	
Copper	121		10.0	ug/L	B407145	
Lead	---	U	8.00	ug/L	B407145	
Nickel	---	U	20.0	ug/L	B407145	
Selenium	---	U	20.0	ug/L	B407145	
Silver	---	U	5.00	ug/L	B407145	
Zinc	64.3		20.0	ug/L	B407145	

**Mercury CVAA**

Mercury	---	U	0.050	ug/L	B407165	
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**Sanitary**

Chromium, Hexavalent	---	U L	10.0	ug/L	B407134	07/24/2024 16:20
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**Field ID: Pretreated Effluent: Grab-Comp.**

**Sample ID: 2407037-02**

**NVOA GCMS**

Acenaphthene	---	U L	5.26	ug/L	B407140	
Acenaphthylene	---	U J	5.26	ug/L	B407140	
Anthracene	---	U J	5.26	ug/L	B407140	
Benzo(A)Anthracene	---	U	5.26	ug/L	B407140	
Benzo(A)Pyrene	---	U	5.26	ug/L	B407140	
Benzo(B)Fluoranthene	---	U	5.26	ug/L	B407140	
Benzo(G,H,I)Perylene	---	U	5.26	ug/L	B407140	
Benzo(K)Fluoranthene	---	U	5.26	ug/L	B407140	
Chrysene	---	U J	5.26	ug/L	B407140	
Dibenzo(A,H)Anthracene	---	U	5.26	ug/L	B407140	
Fluoranthene	---	U J	5.26	ug/L	B407140	
Fluorene	---	U J	5.26	ug/L	B407140	



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

Analyte	Result	Qualifier	Reporting Limit	Units	Batch	Date and Time of Analysis*
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**Field ID: Pretreated Effluent: Grab-Comp.**

**Sample ID: 2407037-02**

**NVOA GCMS**

Indeno(1,2,3-Cd)Pyrene	---	U	5.26	ug/L	B407140	
Naphthalene	---	U J	2.11	ug/L	B407140	
Phenanthrene	---	U J	5.26	ug/L	B407140	
1,2,4-Trichlorobenzene	---	U J	5.26	ug/L	B407140	
2,4,6-Trichlorophenol	---	U J	5.26	ug/L	B407140	
2,4-Dichlorophenol	---	U J	5.26	ug/L	B407140	
2,4-Dimethylphenol	---	U J	5.26	ug/L	B407140	
2,4-Dinitrotoluene	---	U J	5.26	ug/L	B407140	
2,6-Dinitrotoluene	---	U J	5.26	ug/L	B407140	
2,4-Dinitrophenol	---	U L	31.6	ug/L	B407140	
2-Chloronaphthalene	---	U J	5.26	ug/L	B407140	
2-Chlorophenol	---	U L	5.26	ug/L	B407140	
2-Nitrophenol	---	U L	31.6	ug/L	B407140	
3,3'- Dichlorobenzidine	---	U J	5.26	ug/L	B407140	
4,6-Dinitro-2-Methylphenol	---	U J	31.6	ug/L	B407140	
4-Bromophenyl-Phenylether	---	U J	5.26	ug/L	B407140	
4-Chloro-3-Methylphenol	---	U L	5.26	ug/L	B407140	
4-Chlorophenyl-Phenylether	---	U J	5.26	ug/L	B407140	
4-Nitrophenol	---	U J	31.6	ug/L	B407140	
Bis(-2-Chloroethoxy)Methane	---	U L	5.26	ug/L	B407140	
Bis(2-Chloroethyl)Ether	---	U L	5.26	ug/L	B407140	
Bis(2-Chloroisopropyl)Ether	---	U L	5.26	ug/L	B407140	
Bis(2-Ethylhexyl)Phthalate	---	U	5.26	ug/L	B407140	
Butylbenzylphthalate	---	U J	5.26	ug/L	B407140	
Azobenzene	---	U J	5.26	ug/L	B407140	
Diethylphthalate	---	U J	5.26	ug/L	B407140	
Dimethyl Phthalate	---	U J	2.11	ug/L	B407140	
Di-N-Butyl Phthalate	---	U J	5.26	ug/L	B407140	
Di-N-Octyl Phthalate	---	U	5.26	ug/L	B407140	



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

Analyte	Result	Qualifier	Reporting Limit	Units	Batch	Date and Time of Analysis*
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**Field ID: Pretreated Effluent: Grab-Comp.**

**Sample ID: 2407037-02**

**NVOA GCMS**

Hexachlorobenzene	---	U J	5.26	ug/L	B407140	
Hexachlorobutadiene	---	U L	2.11	ug/L	B407140	
Hexachlorocyclopentadiene	---	U L	31.6	ug/L	B407140	
Hexachloroethane	---	U L	2.11	ug/L	B407140	
Isophorone	---	U L	5.26	ug/L	B407140	
Nitrobenzene	---	U L	5.26	ug/L	B407140	
N-Nitrosodimethylamine	---	U L	5.26	ug/L	B407140	
N-Nitroso-Di-N-Propylamine	---	U L	5.26	ug/L	B407140	
N-Nitrosodiphenylamine	---	U J	5.26	ug/L	B407140	
Pentachlorophenol	---	U J	31.6	ug/L	B407140	
Phenol	---	U L	31.6	ug/L	B407140	
Pyrene	---	U J	5.26	ug/L	B407140	

**Sanitary**

Cyanide, Total	---	U	20.0	ug/L	B407146	
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**Field ID: Pretreated Effluent: Grab**

**Sample ID: 2407037-07**

**GC**

Oil & Grease	23.8	L	5.88	mg/L	B407157	
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**Field ID: Pretreated Effluent: Grab**

**Sample ID: 2407037-08**

**Sanitary**

Phenolics, Total	138	K	20.0	ug/L	B407160	
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**Field ID: Pretreated Effluent: Lab-Composite-Set 1-4**

**Sample ID: 2407037-09**

**VOA GCMS**

Chloromethane	---	U	5.00	ug/L	B407144	
Vinyl Chloride	---	U	5.00	ug/L	B407144	
Bromomethane	---	U	5.00	ug/L	B407144	
Chloroethane	---	U	5.00	ug/L	B407144	
Trichlorofluoromethane	---	U	5.00	ug/L	B407144	
1,1-Dichloroethene	---	U	5.00	ug/L	B407144	



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

Analyte	Result	Qualifier	Reporting Limit	Units	Batch	Date and Time of Analysis*
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**Field ID: Pretreated Effluent: Lab-Composite-Set 1-4**

**Sample ID: 2407037-09**

**VOA GCMS**

Methylene Chloride	---	U	5.00	ug/L	B407144
Acrylonitrile	---	U	5.00	ug/L	B407144
trans-1,2-Dichloroethene	---	U	5.00	ug/L	B407144
1,1-Dichloroethane	---	U	5.00	ug/L	B407144
Chloroform	22.2		5.00	ug/L	B407144
1,1,1-Trichloroethane	---	U	5.00	ug/L	B407144
Carbon Tetrachloride	---	U	5.00	ug/L	B407144
1,2-Dichloroethane	---	U	5.00	ug/L	B407144
Benzene	---	U	5.00	ug/L	B407144
Trichloroethene	---	U	5.00	ug/L	B407144
1,2-Dichloropropane	---	U	5.00	ug/L	B407144
Bromodichloromethane	---	U	5.00	ug/L	B407144
cis-1,3-Dichloropropene	---	U	5.00	ug/L	B407144
Toluene	---	U	5.00	ug/L	B407144
trans-1,3-Dichloropropene	---	U	5.00	ug/L	B407144
1,1,2-Trichloroethane	---	U	5.00	ug/L	B407144
Tetrachloroethene	---	U	5.00	ug/L	B407144
Dibromochloromethane	---	U	5.00	ug/L	B407144
Chlorobenzene	---	U	5.00	ug/L	B407144
Ethylbenzene	---	U	5.00	ug/L	B407144
Bromoform	---	U	5.00	ug/L	B407144
1,1,2,2-Tetrachloroethane	---	U	5.00	ug/L	B407144
1,3-Dichlorobenzene	---	U	5.00	ug/L	B407144
1,4-Dichlorobenzene	---	U	5.00	ug/L	B407144
1,2-Dichlorobenzene	---	U	5.00	ug/L	B407144

**Field ID: TRIP BLANK**

**Sample ID: 2407037-10**

**VOA GCMS**

Chloromethane	---	U	5.00	ug/L	B407144
Vinyl Chloride	---	U	5.00	ug/L	B407144



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

Final Report

Project: Marval Industries, Inc. - 2407037

Project Number: 2407037

Analyte	Result	Qualifier	Reporting Limit	Units	Batch	Date and Time of Analysis*
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Field ID: TRIP BLANK

Sample ID: 2407037-10

VOA GCMS

Bromomethane	---	U	5.00	ug/L	B407144	
Chloroethane	---	U	5.00	ug/L	B407144	
Trichlorofluoromethane	---	U	5.00	ug/L	B407144	
1,1-Dichloroethene	---	U	5.00	ug/L	B407144	
Methylene Chloride	---	U	5.00	ug/L	B407144	
Acrylonitrile	---	U	5.00	ug/L	B407144	
trans-1,2-Dichloroethene	---	U	5.00	ug/L	B407144	
1,1-Dichloroethane	---	U	5.00	ug/L	B407144	
Chloroform	---	U	5.00	ug/L	B407144	
1,1,1-Trichloroethane	---	U	5.00	ug/L	B407144	
Carbon Tetrachloride	---	U	5.00	ug/L	B407144	
1,2-Dichloroethane	---	U	5.00	ug/L	B407144	
Benzene	---	U	5.00	ug/L	B407144	
Trichloroethene	---	U	5.00	ug/L	B407144	
1,2-Dichloropropane	---	U	5.00	ug/L	B407144	
Bromodichloromethane	---	U	5.00	ug/L	B407144	
cis-1,3-Dichloropropene	---	U	5.00	ug/L	B407144	
Toluene	---	U	5.00	ug/L	B407144	
trans-1,3-Dichloropropene	---	U	5.00	ug/L	B407144	
1,1,2-Trichloroethane	---	U	5.00	ug/L	B407144	
Tetrachloroethene	---	U	5.00	ug/L	B407144	
Dibromochloromethane	---	U	5.00	ug/L	B407144	
Chlorobenzene	---	U	5.00	ug/L	B407144	
Ethylbenzene	---	U	5.00	ug/L	B407144	
Bromoform	---	U	5.00	ug/L	B407144	
1,1,2,2-Tetrachloroethane	---	U	5.00	ug/L	B407144	
1,3-Dichlorobenzene	---	U	5.00	ug/L	B407144	
1,4-Dichlorobenzene	---	U	5.00	ug/L	B407144	
1,2-Dichlorobenzene	---	U	5.00	ug/L	B407144	



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**VOA GCMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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**Batch B407144**

**Blank (B407144-BLK1)**

Chloromethane	--- U	5.00	ug/L						
Vinyl Chloride	--- U	5.00	ug/L						
Bromomethane	--- U	5.00	ug/L						
Chloroethane	--- U	5.00	ug/L						
Trichlorofluoromethane	--- U	5.00	ug/L						
1,1-Dichloroethene	--- U	5.00	ug/L						
Methylene Chloride	--- U	5.00	ug/L						
Acrylonitrile	--- U	5.00	ug/L						
trans-1,2-Dichloroethene	--- U	5.00	ug/L						
1,1-Dichloroethane	--- U	5.00	ug/L						
Chloroform	--- U	5.00	ug/L						
1,1,1-Trichloroethane	--- U	5.00	ug/L						
Carbon Tetrachloride	--- U	5.00	ug/L						
1,2-Dichloroethane	--- U	5.00	ug/L						
Benzene	--- U	5.00	ug/L						
Trichloroethene	--- U	5.00	ug/L						
1,2-Dichloropropane	--- U	5.00	ug/L						
Bromodichloromethane	--- U	5.00	ug/L						
cis-1,3-Dichloropropene	--- U	5.00	ug/L						
Toluene	--- U	5.00	ug/L						
trans-1,3-Dichloropropene	--- U	5.00	ug/L						
1,1,2-Trichloroethane	--- U	5.00	ug/L						
Tetrachloroethene	--- U	5.00	ug/L						
Dibromochloromethane	--- U	5.00	ug/L						
Chlorobenzene	--- U	5.00	ug/L						
Ethylbenzene	--- U	5.00	ug/L						
Bromoform	--- U	5.00	ug/L						
1,1,2,2-Tetrachloroethane	--- U	5.00	ug/L						
1,3-Dichlorobenzene	--- U	5.00	ug/L						
1,4-Dichlorobenzene	--- U	5.00	ug/L						
1,2-Dichlorobenzene	--- U	5.00	ug/L						
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>99.6</i>		<i>ug/L</i>	<i>100.0</i>		<i>99.6</i>	<i>60-140</i>		
<i>Surrogate: 2-Bromo-1-Chloropropane</i>	<i>95.4</i>		<i>ug/L</i>	<i>100.0</i>		<i>95.4</i>	<i>60-140</i>		
<i>Surrogate: 1,4-Dichlorobutane</i>	<i>101</i>		<i>ug/L</i>	<i>100.0</i>		<i>101</i>	<i>60-140</i>		

U.S.E.P.A Region 2 Laboratory

**NOTE:** The results recorded in this report relate only to the samples as received on the date and at the time noted  
Reported: 8/13/2024



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**VOA GCMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch B407144</b>									
<b>LCS (B407144-BS1)</b>									
Chloromethane	55.2	5.00	ug/L	50.00		110	19-205		
Vinyl Chloride	42.1	5.00	ug/L	50.00		84.2	5-195		
Bromomethane	51.2	5.00	ug/L	50.00		102	15-185		
Chloroethane	44.6	5.00	ug/L	50.00		89.3	40-160		
Trichlorofluoromethane	51.6	5.00	ug/L	50.00		103	50-150		
1,1-Dichloroethene	42.4	5.00	ug/L	50.00		84.8	50-150		
Methylene Chloride	45.0	5.00	ug/L	50.00		90.1	60-140		
Acrylonitrile	46.8	5.00	ug/L	50.00		93.6	60-140		
trans-1,2-Dichloroethene	46.4	5.00	ug/L	50.00		92.9	70-130		
1,1-Dichloroethane	47.5	5.00	ug/L	50.00		95.0	70-130		
Chloroform	48.0	5.00	ug/L	50.00		95.9	70-135		
1,1,1-Trichloroethane	47.8	5.00	ug/L	50.00		95.5	70-130		
Carbon Tetrachloride	49.8	5.00	ug/L	50.00		99.6	70-130		
1,2-Dichloroethane	48.3	5.00	ug/L	50.00		96.6	70-130		
Benzene	48.0	5.00	ug/L	50.00		96.0	65-135		
Trichloroethene	47.5	5.00	ug/L	50.00		95.1	65-135		
1,2-Dichloropropane	49.2	5.00	ug/L	50.00		98.4	35-165		
Bromodichloromethane	47.8	5.00	ug/L	50.00		95.7	65-135		
cis-1,3-Dichloropropene	50.9	5.00	ug/L	50.00		102	25-175		
Toluene	49.6	5.00	ug/L	50.00		99.2	70-130		
trans-1,3-Dichloropropene	52.9	5.00	ug/L	50.00		106	50-150		
1,1,2-Trichloroethane	49.8	5.00	ug/L	50.00		99.5	70-130		
Tetrachloroethene	49.2	5.00	ug/L	50.00		98.4	70-130		
Dibromochloromethane	51.2	5.00	ug/L	50.00		102	70-135		
Chlorobenzene	49.8	5.00	ug/L	50.00		99.6	65-135		
Ethylbenzene	51.6	5.00	ug/L	50.00		103	60-140		
Bromoform	48.5	5.00	ug/L	50.00		96.9	70-130		
1,1,2,2-Tetrachloroethane	49.9	5.00	ug/L	50.00		99.8	60-140		
1,3-Dichlorobenzene	48.7	5.00	ug/L	50.00		97.4	70-130		
1,4-Dichlorobenzene	48.6	5.00	ug/L	50.00		97.1	65-135		
1,2-Dichlorobenzene	49.2	5.00	ug/L	50.00		98.3	65-135		
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>99.6</i>		ug/L	<i>100.0</i>		<i>99.6</i>	<i>60-140</i>		
<i>Surrogate: 2-Bromo-1-Chloropropane</i>	<i>99.3</i>		ug/L	<i>100.0</i>		<i>99.3</i>	<i>60-140</i>		
<i>Surrogate: 1,4-Dichlorobutane</i>	<i>100</i>		ug/L	<i>100.0</i>		<i>100</i>	<i>60-140</i>		



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**VOA GCMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch B407144</b>									
<b>LCS Dup (B407144-BSD1)</b>									
Chloromethane	55.3	5.00	ug/L	50.00		111	19-205	0.199	20
Vinyl Chloride	43.2	5.00	ug/L	50.00		86.5	5-195	2.62	20
Bromomethane	51.5	5.00	ug/L	50.00		103	15-185	0.682	20
Chloroethane	46.3	5.00	ug/L	50.00		92.6	40-160	3.67	20
Trichlorofluoromethane	52.0	5.00	ug/L	50.00		104	50-150	0.811	20
1,1-Dichloroethene	43.0	5.00	ug/L	50.00		86.1	50-150	1.57	20
Methylene Chloride	45.7	5.00	ug/L	50.00		91.4	60-140	1.52	20
Acrylonitrile	48.4	5.00	ug/L	50.00		96.8	60-140	3.34	20
trans-1,2-Dichloroethene	46.3	5.00	ug/L	50.00		92.5	70-130	0.388	20
1,1-Dichloroethane	48.1	5.00	ug/L	50.00		96.1	70-130	1.13	20
Chloroform	48.6	5.00	ug/L	50.00		97.1	70-135	1.24	20
1,1,1-Trichloroethane	48.4	5.00	ug/L	50.00		96.8	70-130	1.33	20
Carbon Tetrachloride	50.3	5.00	ug/L	50.00		101	70-130	0.959	20
1,2-Dichloroethane	49.0	5.00	ug/L	50.00		98.0	70-130	1.46	20
Benzene	49.0	5.00	ug/L	50.00		97.9	65-135	1.96	20
Trichloroethene	47.6	5.00	ug/L	50.00		95.3	65-135	0.252	20
1,2-Dichloropropane	50.0	5.00	ug/L	50.00		100	35-165	1.71	20
Bromodichloromethane	48.7	5.00	ug/L	50.00		97.4	65-135	1.78	20
cis-1,3-Dichloropropene	51.2	5.00	ug/L	50.00		102	25-175	0.607	20
Toluene	50.4	5.00	ug/L	50.00		101	70-130	1.66	20
trans-1,3-Dichloropropene	53.8	5.00	ug/L	50.00		108	50-150	1.67	20
1,1,2-Trichloroethane	50.2	5.00	ug/L	50.00		100	70-130	0.781	20
Tetrachloroethene	49.2	5.00	ug/L	50.00		98.4	70-130	0.0407	20
Dibromochloromethane	51.3	5.00	ug/L	50.00		103	70-135	0.234	20
Chlorobenzene	50.0	5.00	ug/L	50.00		100	65-135	0.421	20
Ethylbenzene	52.0	5.00	ug/L	50.00		104	60-140	0.773	20
Bromoform	49.1	5.00	ug/L	50.00		98.2	70-130	1.27	20
1,1,2,2-Tetrachloroethane	52.0	5.00	ug/L	50.00		104	60-140	4.20	20
1,3-Dichlorobenzene	49.0	5.00	ug/L	50.00		98.0	70-130	0.594	20
1,4-Dichlorobenzene	48.7	5.00	ug/L	50.00		97.4	65-135	0.288	20
1,2-Dichlorobenzene	49.0	5.00	ug/L	50.00		98.0	65-135	0.326	20
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>99.6</i>		<i>ug/L</i>	<i>100.0</i>		<i>99.6</i>	<i>60-140</i>		
<i>Surrogate: 2-Bromo-1-Chloropropane</i>	<i>99.4</i>		<i>ug/L</i>	<i>100.0</i>		<i>99.4</i>	<i>60-140</i>		
<i>Surrogate: 1,4-Dichlorobutane</i>	<i>99.6</i>		<i>ug/L</i>	<i>100.0</i>		<i>99.6</i>	<i>60-140</i>		



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**VOA GCMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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**Batch B407144**

**Matrix Spike (B407144-MS1)**

**Source: 2407037-09**

Chloromethane	48.6	5.00	ug/L	50.00	ND	97.2	19-273		
Vinyl Chloride	43.4	5.00	ug/L	50.00	ND	86.9	49-251		
Bromomethane	48.1	5.00	ug/L	50.00	ND	96.1	21-242		
Chloroethane	47.0	5.00	ug/L	50.00	ND	94.0	14-230		
Trichlorofluoromethane	50.3	5.00	ug/L	50.00	ND	101	17-181		
1,1-Dichloroethene	50.1	5.00	ug/L	50.00	ND	100	52-234		
Methylene Chloride	47.3	5.00	ug/L	50.00	ND	94.6	69-221		
Acrylonitrile	49.5	5.00	ug/L	50.00	ND	99.0	40-160		
trans-1,2-Dichloroethene	49.0	5.00	ug/L	50.00	ND	98.0	54-156		
1,1-Dichloroethane	49.0	5.00	ug/L	50.00	ND	98.1	59-155		
Chloroform	69.3	5.00	ug/L	50.00	22.2	94.3	51-138		
1,1,1-Trichloroethane	50.1	5.00	ug/L	50.00	ND	100	52-162		
Carbon Tetrachloride	51.7	5.00	ug/L	50.00	ND	103	70-140		
1,2-Dichloroethane	48.0	5.00	ug/L	50.00	ND	95.9	49-155		
Benzene	49.1	5.00	ug/L	50.00	ND	98.3	37-151		
Trichloroethene	48.5	5.00	ug/L	50.00	ND	97.0	70-157		
1,2-Dichloropropane	49.1	5.00	ug/L	50.00	ND	98.2	74-210		
Bromodichloromethane	50.6	5.00	ug/L	50.00	ND	101	35-155		
cis-1,3-Dichloropropene	49.6	5.00	ug/L	50.00	ND	99.2	80-227		
Toluene	49.3	5.00	ug/L	50.00	ND	98.5	47-150		
trans-1,3-Dichloropropene	50.1	5.00	ug/L	50.00	ND	100	17-183		
1,1,2-Trichloroethane	48.3	5.00	ug/L	50.00	ND	96.5	52-150		
Tetrachloroethene	49.1	5.00	ug/L	50.00	ND	98.2	64-148		
Dibromochloromethane	49.2	5.00	ug/L	50.00	ND	98.4	53-149		
Chlorobenzene	49.0	5.00	ug/L	50.00	ND	98.0	37-160		
Ethylbenzene	50.8	5.00	ug/L	50.00	ND	102	37-162		
Bromoform	49.8	5.00	ug/L	50.00	ND	99.5	45-169		
1,1,2,2-Tetrachloroethane	49.0	5.00	ug/L	50.00	ND	97.9	46-157		
1,3-Dichlorobenzene	48.0	5.00	ug/L	50.00	ND	95.9	59-156		
1,4-Dichlorobenzene	48.0	5.00	ug/L	50.00	ND	95.9	18-190		
1,2-Dichlorobenzene	48.3	5.00	ug/L	50.00	ND	96.6	18-190		
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>99.5</i>		<i>ug/L</i>	<i>100.0</i>		<i>99.5</i>	<i>60-140</i>		
<i>Surrogate: 2-Bromo-1-Chloropropane</i>	<i>99.8</i>		<i>ug/L</i>	<i>100.0</i>		<i>99.8</i>	<i>60-140</i>		
<i>Surrogate: 1,4-Dichlorobutane</i>	<i>101</i>		<i>ug/L</i>	<i>100.0</i>		<i>101</i>	<i>60-140</i>		



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**VOA GCMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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**Batch B407144**

**Matrix Spike Dup (B407144-MSD1)**

**Source: 2407037-09**

Chloromethane	49.9	5.00	ug/L	50.00	ND	99.9	19-273	2.72	28
Vinyl Chloride	43.1	5.00	ug/L	50.00	ND	86.1	49-251	0.879	28
Bromomethane	51.2	5.00	ug/L	50.00	ND	102	21-242	6.40	28
Chloroethane	48.8	5.00	ug/L	50.00	ND	97.5	14-230	3.68	28
Trichlorofluoromethane	52.9	5.00	ug/L	50.00	ND	106	17-181	5.08	28
1,1-Dichloroethene	52.4	5.00	ug/L	50.00	ND	105	52-234	4.39	28
Methylene Chloride	49.9	5.00	ug/L	50.00	ND	99.7	69-221	5.25	28
Acrylonitrile	50.8	5.00	ug/L	50.00	ND	102	40-160	2.51	28
trans-1,2-Dichloroethene	52.0	5.00	ug/L	50.00	ND	104	54-156	5.86	28
1,1-Dichloroethane	51.2	5.00	ug/L	50.00	ND	102	59-155	4.37	28
Chloroform	72.8	5.00	ug/L	50.00	22.2	101	51-138	7.18	28
1,1,1-Trichloroethane	52.4	5.00	ug/L	50.00	ND	105	52-162	4.53	28
Carbon Tetrachloride	54.2	5.00	ug/L	50.00	ND	108	70-140	4.68	28
1,2-Dichloroethane	50.8	5.00	ug/L	50.00	ND	102	49-155	5.77	28
Benzene	51.7	5.00	ug/L	50.00	ND	103	37-151	5.16	28
Trichloroethene	50.6	5.00	ug/L	50.00	ND	101	70-157	4.38	28
1,2-Dichloropropane	51.5	5.00	ug/L	50.00	ND	103	74-210	4.73	28
Bromodichloromethane	53.9	5.00	ug/L	50.00	ND	108	35-155	6.34	28
cis-1,3-Dichloropropene	52.6	5.00	ug/L	50.00	ND	105	80-227	5.76	28
Toluene	52.2	5.00	ug/L	50.00	ND	104	47-150	5.70	28
trans-1,3-Dichloropropene	53.3	5.00	ug/L	50.00	ND	107	17-183	6.31	28
1,1,2-Trichloroethane	51.2	5.00	ug/L	50.00	ND	102	52-150	5.93	28
Tetrachloroethene	51.9	5.00	ug/L	50.00	ND	104	64-148	5.54	28
Dibromochloromethane	52.0	5.00	ug/L	50.00	ND	104	53-149	5.42	28
Chlorobenzene	51.5	5.00	ug/L	50.00	ND	103	37-160	4.98	28
Ethylbenzene	53.0	5.00	ug/L	50.00	ND	106	37-162	4.23	28
Bromoform	52.6	5.00	ug/L	50.00	ND	105	45-169	5.45	28
1,1,2,2-Tetrachloroethane	51.8	5.00	ug/L	50.00	ND	104	46-157	5.58	28
1,3-Dichlorobenzene	51.0	5.00	ug/L	50.00	ND	102	59-156	6.22	28
1,4-Dichlorobenzene	50.7	5.00	ug/L	50.00	ND	101	18-190	5.45	28
1,2-Dichlorobenzene	51.2	5.00	ug/L	50.00	ND	102	18-190	5.79	28
<i>Surrogate: 1,4-Difluorobenzene</i>	<i>99.7</i>		<i>ug/L</i>	<i>100.0</i>		<i>99.7</i>	<i>60-140</i>		
<i>Surrogate: 2-Bromo-1-Chloropropane</i>	<i>99.4</i>		<i>ug/L</i>	<i>100.0</i>		<i>99.4</i>	<i>60-140</i>		
<i>Surrogate: 1,4-Dichlorobutane</i>	<i>100</i>		<i>ug/L</i>	<i>100.0</i>		<i>100</i>	<i>60-140</i>		



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**NVOA GCMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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**Batch B407140**

**Blank (B407140-BLK1)**

Acenaphthene	--- U	5.00	ug/L						
Acenaphthylene	--- U	5.00	ug/L						
Anthracene	--- U	5.00	ug/L						
Benzo(A)Anthracene	--- U	5.00	ug/L						
Benzo(A)Pyrene	--- U	5.00	ug/L						
Benzo(B)Fluoranthene	--- U	5.00	ug/L						
Benzo(G,H,I)Perylene	--- U	5.00	ug/L						
Benzo(K)Fluoranthene	--- U	5.00	ug/L						
Chrysene	--- U	5.00	ug/L						
Dibenzo(A,H)Anthracene	--- U	5.00	ug/L						
Fluoranthene	--- U	5.00	ug/L						
Fluorene	--- U	5.00	ug/L						
Indeno(1,2,3-Cd)Pyrene	--- U	5.00	ug/L						
Naphthalene	--- U	2.00	ug/L						
Phenanthrene	--- U	5.00	ug/L						
1,2,4-Trichlorobenzene	--- U	5.00	ug/L						
2,4,6-Trichlorophenol	--- U	5.00	ug/L						
2,4-Dichlorophenol	--- U	5.00	ug/L						
2,4-Dimethylphenol	--- U	5.00	ug/L						
2,4-Dinitrotoluene	--- U	5.00	ug/L						
2,6-Dinitrotoluene	--- U	5.00	ug/L						
2,4-Dinitrophenol	--- U	30.0	ug/L						
2-Chloronaphthalene	--- U	5.00	ug/L						
2-Chlorophenol	--- U	5.00	ug/L						
2-Nitrophenol	--- U	30.0	ug/L						
3,3'- Dichlorobenzidine	--- U	5.00	ug/L						
4,6-Dinitro-2-Methylphenol	--- U	30.0	ug/L						
4-Bromophenyl-Phenylether	--- U	5.00	ug/L						
4-Chloro-3-Methylphenol	--- U	5.00	ug/L						
4-Chlorophenyl-Phenylether	--- U	5.00	ug/L						
4-Nitrophenol	--- U	30.0	ug/L						
Bis(-2-Chloroethoxy)Methane	--- U	5.00	ug/L						
Bis(2-Chloroethyl)Ether	--- U	5.00	ug/L						
Bis(2-Chloroisopropyl)Ether	--- U	5.00	ug/L						
Bis(2-Ethylhexyl)Phthalate	--- U	5.00	ug/L						

U.S.E.P.A Region 2 Laboratory

**NOTE:** The results recorded in this report relate only to the samples as received on the date and at the time noted  
Reported: 8/13/2024



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**NVOA GCMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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**Batch B407140**

**Blank (B407140-BLK1)**

Butylbenzylphthalate	--- U	5.00	ug/L						
Azobenzene	--- U	5.00	ug/L						
Diethylphthalate	--- U	5.00	ug/L						
Dimethyl Phthalate	--- U	2.00	ug/L						
Di-N-Butyl Phthalate	--- U	5.00	ug/L						
Di-N-Octyl Phthalate	--- U	5.00	ug/L						
Hexachlorobenzene	--- U	5.00	ug/L						
Hexachlorobutadiene	--- U	2.00	ug/L						
Hexachlorocyclopentadiene	--- U	30.0	ug/L						
Hexachloroethane	--- U	2.00	ug/L						
Isophorone	--- U	5.00	ug/L						
Nitrobenzene	--- U	5.00	ug/L						
N-Nitrosodimethylamine	--- U	5.00	ug/L						
N-Nitroso-Di-N-Propylamine	--- U	5.00	ug/L						
N-Nitrosodiphenylamine	--- U	5.00	ug/L						
Pentachlorophenol	--- U	30.0	ug/L						
Phenol	--- U	30.0	ug/L						
Pyrene	--- U	5.00	ug/L						
1,4-Dioxane	--- U	2.00	ug/L						

<i>Surrogate: 2-Fluoroaniline</i>	<i>33.6</i>		<i>ug/L</i>	<i>50.00</i>		<i>67.1</i>	<i>60-140</i>		
<i>Surrogate: Phenol-D6</i>	<i>ND</i>		<i>ug/L</i>	<i>50.00</i>		<i>34.9</i>	<i>60-140</i>		
<i>Surrogate: Naphthalene-D8</i>	<i>ND</i>		<i>ug/L</i>	<i>50.00</i>		<i>51.9</i>	<i>60-140</i>		
<i>Surrogate: 1-Fluoronaphthalene</i>	<i>ND</i>		<i>ug/L</i>	<i>50.00</i>		<i>50.7</i>	<i>60-140</i>		
<i>Surrogate: 2,4-Dibromophenol</i>	<i>32.3</i>		<i>ug/L</i>	<i>50.00</i>		<i>64.5</i>	<i>60-140</i>		
<i>Surrogate: Anthracene-D10</i>	<i>42.4</i>		<i>ug/L</i>	<i>50.00</i>		<i>84.7</i>	<i>60-140</i>		
<i>Surrogate: Chrysene-D12</i>	<i>40.8</i>		<i>ug/L</i>	<i>50.00</i>		<i>81.6</i>	<i>60-140</i>		

**LCS (B407140-BS1)**

Acenaphthene	24.3	5.00	ug/L	50.00		48.7	47-145		
Acenaphthylene	36.1	5.00	ug/L	50.00		72.1	33-145		
Anthracene	27.8	5.00	ug/L	50.00		55.6	27-133		
Benzo(A)Anthracene	38.2	5.00	ug/L	50.00		76.5	33-143		
Benzo(A)Pyrene	41.3	5.00	ug/L	50.00		82.6	17-163		
Benzo(B)Fluoranthene	40.5	5.00	ug/L	50.00		81.0	24-159		
Benzo(G,H,I)Perylene	42.8	5.00	ug/L	50.00		85.7	35-219		

U.S.E.P.A Region 2 Laboratory

NOTE: The results recorded in this report relate only to the samples as received on the date and at the time noted

Reported: 8/13/2024



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**NVOA GCMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch B407140</b>									
<b>LCS (B407140-BS1)</b>									
Benzo(K)Fluoranthene	40.6	5.00	ug/L	50.00		81.2	11-162		
Chrysene	37.5	5.00	ug/L	50.00		74.9	17-168		
Dibenzo(A,H)Anthracene	42.5	5.00	ug/L	50.00		85.0	33-227		
Fluoranthene	39.2	5.00	ug/L	50.00		78.5	26-137		
Fluorene	26.1	5.00	ug/L	50.00		52.1	59-121		
Indeno(1,2,3-Cd)Pyrene	42.9	5.00	ug/L	50.00		85.8	39-171		
Naphthalene	23.3	2.00	ug/L	50.00		46.6	21-133		
Phenanthrene	27.3	5.00	ug/L	50.00		54.6	54-120		
1,2,4-Trichlorobenzene	20.2	5.00	ug/L	50.00		40.4	44-142		
2,4,6-Trichlorophenol	38.6	5.00	ug/L	50.00		77.1	37-144		
2,4-Dichlorophenol	25.1	5.00	ug/L	50.00		50.1	39-135		
2,4-Dimethylphenol	24.9	5.00	ug/L	50.00		49.7	32-120		
2,4-Dinitrotoluene	28.2	5.00	ug/L	50.00		56.3	39-139		
2,6-Dinitrotoluene	40.4	5.00	ug/L	50.00		80.7	50-158		
2,4-Dinitrophenol	15.4	30.0	ug/L	50.00		30.8	21-191		
2-Chloronaphthalene	35.5	5.00	ug/L	50.00		71.1	60-120		
2-Chlorophenol	38.2	5.00	ug/L	50.00		76.4	23-134		
2-Nitrophenol	42.5	30.0	ug/L	50.00		85.0	29-182		
3,3'- Dichlorobenzidine	60.9	5.00	ug/L	50.00		122	38-262		
4,6-Dinitro-2-Methylphenol	29.8	30.0	ug/L	50.00		59.5	17-181		
4-Bromophenyl-Phenylether	26.2	5.00	ug/L	50.00		52.4	53-127		
4-Chloro-3-Methylphenol	38.1	5.00	ug/L	50.00		76.2	22-147		
4-Chlorophenyl-Phenylether	25.4	5.00	ug/L	50.00		50.9	25-158		
4-Nitrophenol	12.3	30.0	ug/L	50.00		24.7	9-132		
Bis(-2-Chloroethoxy)Methane	41.7	5.00	ug/L	50.00		83.3	33-184		
Bis(2-Chloroethyl)Ether	41.8	5.00	ug/L	50.00		83.7	12-158		
Bis(2-Chloroisopropyl)Ether	44.4	5.00	ug/L	50.00		88.8	36-166		
Bis(2-Ethylhexyl)Phthalate	38.1	5.00	ug/L	50.00		76.3	8-158		
Butylbenzylphthalate	28.9	5.00	ug/L	50.00		57.7	38-152		
Azobenzene	27.5	5.00	ug/L	50.00		55.0	60-115		
Diethylphthalate	25.4	5.00	ug/L	50.00		50.8	31-114		
Dimethyl Phthalate	28.7	2.00	ug/L	50.00		57.5	28-120		
Di-N-Butyl Phthalate	27.8	5.00	ug/L	50.00		55.5	1-120		
Di-N-Octyl Phthalate	40.1	5.00	ug/L	50.00		80.2	4-146		
Hexachlorobenzene	25.9	5.00	ug/L	50.00		51.7	35-152		

U.S.E.P.A Region 2 Laboratory

**NOTE:** The results recorded in this report relate only to the samples as received on the date and at the time noted  
Reported: 8/13/2024



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**NVOA GCMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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**Batch B407140**

**LCS (B407140-BS1)**

Hexachlorobutadiene	27.7	2.00	ug/L	50.00		55.3	24-120		
Hexachlorocyclopentadiene	27.9	30.0	ug/L	50.00		55.8	15-76		
Hexachloroethane	29.2	2.00	ug/L	50.00		58.4	40-120		
Isophorone	46.5	5.00	ug/L	50.00		93.1	21-196		
Nitrobenzene	40.6	5.00	ug/L	50.00		81.2	35-180		
N-Nitrosodimethylamine	34.1	5.00	ug/L	50.00		68.2	17-127		
N-Nitroso-Di-N-Propylamine	42.2	5.00	ug/L	50.00		84.4	43-230		
N-Nitrosodiphenylamine	50.8	5.00	ug/L	50.00		102	79-139		
Pentachlorophenol	19.8	30.0	ug/L	50.00		39.7	14-176		
Phenol	19.1	30.0	ug/L	50.00		38.1	5-120		
Pyrene	29.9	5.00	ug/L	50.00		59.8	52-120		
1,4-Dioxane	27.1	2.00	ug/L	50.00		54.2	7-106		
<i>Surrogate: 2-Fluoroaniline</i>	<i>47.9</i>		<i>ug/L</i>	<i>50.00</i>		<i>95.8</i>	<i>60-140</i>		
<i>Surrogate: Phenol-D6</i>	<i>19.6</i>		<i>ug/L</i>	<i>50.00</i>		<i>39.2</i>	<i>60-140</i>		
<i>Surrogate: Naphthalene-D8</i>	<i>25.2</i>		<i>ug/L</i>	<i>50.00</i>		<i>50.5</i>	<i>60-140</i>		
<i>Surrogate: 1-Fluoronaphthalene</i>	<i>24.9</i>		<i>ug/L</i>	<i>50.00</i>		<i>49.7</i>	<i>60-140</i>		
<i>Surrogate: 2,4-Dibromophenol</i>	<i>38.6</i>		<i>ug/L</i>	<i>50.00</i>		<i>77.3</i>	<i>60-140</i>		
<i>Surrogate: Anthracene-D10</i>	<i>35.1</i>		<i>ug/L</i>	<i>50.00</i>		<i>70.3</i>	<i>60-140</i>		
<i>Surrogate: Chrysene-D12</i>	<i>44.2</i>		<i>ug/L</i>	<i>50.00</i>		<i>88.4</i>	<i>60-140</i>		

**LCS Dup (B407140-BSD1)**

Acenaphthene	31.1	5.00	ug/L	50.00		62.2	47-145	24.5	30
Acenaphthylene	21.5	5.00	ug/L	50.00		43.1	33-145	50.4	30
Anthracene	59.7	5.00	ug/L	50.00		119	27-133	72.9	30
Benzo(A)Anthracene	42.2	5.00	ug/L	50.00		84.5	33-143	9.94	30
Benzo(A)Pyrene	41.8	5.00	ug/L	50.00		83.6	17-163	1.16	30
Benzo(B)Fluoranthene	41.4	5.00	ug/L	50.00		82.8	24-159	2.20	30
Benzo(G,H,I)Perylene	43.9	5.00	ug/L	50.00		87.7	35-219	2.35	30
Benzo(K)Fluoranthene	40.9	5.00	ug/L	50.00		81.9	11-162	0.834	30
Chrysene	58.1	5.00	ug/L	50.00		116	17-168	43.1	30
Dibenzo(A,H)Anthracene	42.9	5.00	ug/L	50.00		85.9	33-227	1.05	30
Fluoranthene	41.1	5.00	ug/L	50.00		82.3	26-137	4.70	30
Fluorene	53.8	5.00	ug/L	50.00		108	59-121	69.5	30
Indeno(1,2,3-Cd)Pyrene	44.2	5.00	ug/L	50.00		88.4	39-171	2.96	30
Naphthalene	38.0	2.00	ug/L	50.00		76.0	21-133	48.0	30

U.S.E.P.A Region 2 Laboratory

**NOTE:** The results recorded in this report relate only to the samples as received on the date and at the time noted  
 Reported: 8/13/2024



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**NVOA GCMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch B407140</b>									
<b>LCS Dup (B407140-BSD1)</b>									
Phenanthrene	59.0	5.00	ug/L	50.00		118	54-120	73.5	30
1,2,4-Trichlorobenzene	32.4	5.00	ug/L	50.00		64.7	44-142	46.3	30
2,4,6-Trichlorophenol	22.6	5.00	ug/L	50.00		45.3	37-144	52.0	30
2,4-Dichlorophenol	37.1	5.00	ug/L	50.00		74.2	39-135	38.8	30
2,4-Dimethylphenol	10.9	5.00	ug/L	50.00		21.9	32-120	77.8	30
2,4-Dinitrotoluene	55.6	5.00	ug/L	50.00		111	39-139	65.5	30
2,6-Dinitrotoluene	22.9	5.00	ug/L	50.00		45.9	50-158	55.1	30
2,4-Dinitrophenol	11.6	30.0	ug/L	50.00		23.2	21-191	28.1	30
2-Chloronaphthalene	22.4	5.00	ug/L	50.00		44.7	60-120	45.5	30
2-Chlorophenol	37.5	5.00	ug/L	50.00		75.1	23-134	1.80	30
2-Nitrophenol	41.7	30.0	ug/L	50.00		83.5	29-182	1.85	30
3,3'- Dichlorobenzidine	51.6	5.00	ug/L	50.00		103	38-262	16.4	30
4,6-Dinitro-2-Methylphenol	50.7	30.0	ug/L	50.00		101	17-181	52.1	30
4-Bromophenyl-Phenylether	52.2	5.00	ug/L	50.00		104	53-127	66.2	30
4-Chloro-3-Methylphenol	32.9	5.00	ug/L	50.00		65.8	22-147	14.6	30
4-Chlorophenyl-Phenylether	52.9	5.00	ug/L	50.00		106	25-158	70.2	30
4-Nitrophenol	12.8	30.0	ug/L	50.00		25.7	9-132	4.05	30
Bis(-2-Chloroethoxy)Methane	43.4	5.00	ug/L	50.00		86.7	33-184	4.00	30
Bis(2-Chloroethyl)Ether	41.4	5.00	ug/L	50.00		82.7	12-158	1.15	30
Bis(2-Chloroisopropyl)Ether	46.4	5.00	ug/L	50.00		92.9	36-166	4.51	30
Bis(2-Ethylhexyl)Phthalate	38.8	5.00	ug/L	50.00		77.5	8-158	1.59	30
Butylbenzylphthalate	42.7	5.00	ug/L	50.00		85.3	38-152	38.6	30
Azobenzene	65.7	5.00	ug/L	50.00		131	60-115	82.0	30
Diethylphthalate	48.8	5.00	ug/L	50.00		97.6	31-114	63.0	30
Dimethyl Phthalate	17.7	2.00	ug/L	50.00		35.5	28-120	47.3	30
Di-N-Butyl Phthalate	39.4	5.00	ug/L	50.00		78.7	1-120	34.6	30
Di-N-Octyl Phthalate	40.7	5.00	ug/L	50.00		81.3	4-146	1.34	30
Hexachlorobenzene	49.6	5.00	ug/L	50.00		99.2	35-152	62.9	30
Hexachlorobutadiene	29.3	2.00	ug/L	50.00		58.6	24-120	5.79	30
Hexachlorocyclopentadiene	30.4	30.0	ug/L	50.00		60.9	15-76	8.71	30
Hexachloroethane	31.2	2.00	ug/L	50.00		62.3	40-120	6.53	30
Isophorone	45.2	5.00	ug/L	50.00		90.5	21-196	2.83	30
Nitrobenzene	42.2	5.00	ug/L	50.00		84.4	35-180	3.96	30
N-Nitrosodimethylamine	32.3	5.00	ug/L	50.00		64.5	17-127	5.60	30
N-Nitroso-Di-N-Propylamine	37.8	5.00	ug/L	50.00		75.5	43-230	11.1	30

U.S.E.P.A Region 2 Laboratory

**NOTE:** The results recorded in this report relate only to the samples as received on the date and at the time noted  
 Reported: 8/13/2024



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**NVOA GCMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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**Batch B407140**

**LCS Dup (B407140-BSD1)**

N-Nitrosodiphenylamine	102	5.00	ug/L	50.00		205	79-139	67.3	30
Pentachlorophenol	29.3	30.0	ug/L	50.00		58.5	14-176	38.4	30
Phenol	17.8	30.0	ug/L	50.00		35.6	5-120	6.78	30
Pyrene	42.7	5.00	ug/L	50.00		85.5	52-120	35.4	30
1,4-Dioxane	26.9	2.00	ug/L	50.00		53.8	7-106	0.704	30
<i>Surrogate: 2-Fluoroaniline</i>	<i>44.9</i>		<i>ug/L</i>	<i>50.00</i>		<i>89.8</i>	<i>60-140</i>		
<i>Surrogate: Phenol-D6</i>	<i>17.9</i>		<i>ug/L</i>	<i>50.00</i>		<i>35.9</i>	<i>60-140</i>		
<i>Surrogate: Naphthalene-D8</i>	<i>40.2</i>		<i>ug/L</i>	<i>50.00</i>		<i>80.3</i>	<i>60-140</i>		
<i>Surrogate: 1-Fluoronaphthalene</i>	<i>39.3</i>		<i>ug/L</i>	<i>50.00</i>		<i>78.6</i>	<i>60-140</i>		
<i>Surrogate: 2,4-Dibromophenol</i>	<i>21.9</i>		<i>ug/L</i>	<i>50.00</i>		<i>43.9</i>	<i>60-140</i>		
<i>Surrogate: Anthracene-D10</i>	<i>71.8</i>		<i>ug/L</i>	<i>50.00</i>		<i>144</i>	<i>60-140</i>		
<i>Surrogate: Chrysene-D12</i>	<i>48.4</i>		<i>ug/L</i>	<i>50.00</i>		<i>96.8</i>	<i>60-140</i>		

**Matrix Spike (B407140-MS1)**

**Source: 2407037-02**

Acenaphthene	36.3	5.49	ug/L	54.95	ND	66.1	47-145		
Acenaphthylene	37.5	5.49	ug/L	54.95	ND	68.3	33-145		
Anthracene	27.0	5.49	ug/L	54.95	ND	49.1	27-133		
Benzo(A)Anthracene	25.3	5.49	ug/L	54.95	ND	46.1	33-143		
Benzo(A)Pyrene	40.0	5.49	ug/L	54.95	ND	72.8	17-163		
Benzo(B)Fluoranthene	26.8	5.49	ug/L	54.95	ND	48.8	24-159		
Benzo(G,H,I)Perylene	23.9	5.49	ug/L	54.95	ND	43.5	35-219		
Benzo(K)Fluoranthene	27.6	5.49	ug/L	54.95	ND	50.3	11-162		
Chrysene	26.1	5.49	ug/L	54.95	ND	47.5	17-168		
Dibenzo(A,H)Anthracene	24.3	5.49	ug/L	54.95	ND	44.2	33-227		
Fluoranthene	37.9	5.49	ug/L	54.95	ND	69.0	26-137		
Fluorene	44.5	5.49	ug/L	54.95	ND	81.0	59-121		
Indeno(1,2,3-Cd)Pyrene	23.9	5.49	ug/L	54.95	ND	43.5	39-171		
Naphthalene	33.8	2.20	ug/L	54.95	ND	61.6	21-133		
Phenanthrene	27.7	5.49	ug/L	54.95	ND	50.3	54-120		
1,2,4-Trichlorobenzene	27.8	5.49	ug/L	54.95	ND	50.7	44-142		
2,4,6-Trichlorophenol	41.0	5.49	ug/L	54.95	ND	74.6	37-144		
2,4-Dichlorophenol	36.0	5.49	ug/L	54.95	ND	65.5	39-135		
2,4-Dimethylphenol	24.9	5.49	ug/L	54.95	ND	45.4	32-120		
2,4-Dinitrotoluene	45.4	5.49	ug/L	54.95	ND	82.6	39-139		
2,6-Dinitrotoluene	39.6	5.49	ug/L	54.95	ND	72.2	50-158		



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**NVOA GCMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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**Batch B407140**

**Matrix Spike (B407140-MS1)**

**Source: 2407037-02**

2,4-Dinitrophenol	33.9	33.0	ug/L	54.95	ND	61.8	21-191		
2-Chloronaphthalene	34.7	5.49	ug/L	54.95	ND	63.1	60-120		
2-Chlorophenol	28.6	5.49	ug/L	54.95	ND	52.1	23-134		
2-Nitrophenol	34.5	33.0	ug/L	54.95	ND	62.8	29-182		
3,3'- Dichlorobenzidine	10.5	5.49	ug/L	54.95	ND	19.2	38-262		
4,6-Dinitro-2-Methylphenol	48.3	33.0	ug/L	54.95	ND	87.8	17-181		
4-Bromophenyl-Phenylether	41.1	5.49	ug/L	54.95	ND	74.8	53-127		
4-Chloro-3-Methylphenol	40.3	5.49	ug/L	54.95	ND	73.3	22-147		
4-Chlorophenyl-Phenylether	42.4	5.49	ug/L	54.95	ND	77.2	25-158		
4-Nitrophenol	18.5	33.0	ug/L	54.95	ND	33.7	9-132		
Bis(-2-Chloroethoxy)Methane	34.9	5.49	ug/L	54.95	ND	63.5	33-184		
Bis(2-Chloroethyl)Ether	33.4	5.49	ug/L	54.95	ND	60.8	12-158		
Bis(2-Chloroisopropyl)Ether	33.2	5.49	ug/L	54.95	ND	60.5	36-166		
Bis(2-Ethylhexyl)Phthalate	30.3	5.49	ug/L	54.95	ND	55.1	8-158		
Butylbenzylphthalate	30.4	5.49	ug/L	54.95	ND	55.3	38-152		
Azobenzene	52.6	5.49	ug/L	54.95	ND	95.7	61-106		
Diethylphthalate	48.6	5.49	ug/L	54.95	ND	88.5	31-114		
Dimethyl Phthalate	39.2	2.20	ug/L	54.95	ND	71.4	28-120		
Di-N-Butyl Phthalate	44.6	5.49	ug/L	54.95	ND	81.3	1-120		
Di-N-Octyl Phthalate	45.4	5.49	ug/L	54.95	ND	82.6	4-146		
Hexachlorobenzene	37.3	5.49	ug/L	54.95	ND	67.9	35-152		
Hexachlorobutadiene	25.8	2.20	ug/L	54.95	ND	47.0	24-120		
Hexachlorocyclopentadiene	27.8	33.0	ug/L	54.95	ND	50.6	15-76		
Hexachloroethane	25.4	2.20	ug/L	54.95	ND	46.2	40-120		
Isophorone	32.1	5.49	ug/L	54.95	ND	58.4	21-196		
Nitrobenzene	31.8	5.49	ug/L	54.95	ND	58.0	35-180		
N-Nitrosodimethylamine	23.5	5.49	ug/L	54.95	ND	42.8	17-127		
N-Nitroso-Di-N-Propylamine	34.0	5.49	ug/L	54.95	ND	61.8	43-230		
N-Nitrosodiphenylamine	49.6	5.49	ug/L	54.95	ND	90.3	79-139		
Pentachlorophenol	27.7	33.0	ug/L	54.95	ND	50.5	14-176		
Phenol	17.6	33.0	ug/L	54.95	ND	32.1	5-120		
Pyrene	40.2	5.49	ug/L	54.95	ND	73.2	52-120		
1,4-Dioxane	15.5	2.20	ug/L	54.95	ND	28.2	7-106		
<i>Surrogate: 2-Fluoroaniline</i>	<i>35.1</i>		<i>ug/L</i>	<i>54.95</i>		<i>64.0</i>	<i>60-140</i>		



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**NVOA GCMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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**Batch B407140**

**Matrix Spike (B407140-MS1)**

**Source: 2407037-02**

<i>Surrogate: Phenol-D6</i>	17.0		ug/L	54.95		30.9	60-140		
<i>Surrogate: Naphthalene-D8</i>	36.7		ug/L	54.95		66.7	60-140		
<i>Surrogate: 1-Fluoronaphthalene</i>	33.6		ug/L	54.95		61.1	60-140		
<i>Surrogate: 2,4-Dibromophenol</i>	36.4		ug/L	54.95		66.3	60-140		
<i>Surrogate: Anthracene-D10</i>	34.8		ug/L	54.95		63.3	60-140		
<i>Surrogate: Chrysene-D12</i>	26.2		ug/L	54.95		47.8	60-140		

**Matrix Spike Dup (B407140-MSD1)**

**Source: 2407037-02**

Acenaphthene	37.9	5.62	ug/L	56.18	ND	67.5	47-145	4.32	24
Acenaphthylene	38.8	5.62	ug/L	56.18	ND	69.0	33-145	3.18	24
Anthracene	57.8	5.62	ug/L	56.18	ND	103	27-133	72.7	24
Benzo(A)Anthracene	30.7	5.62	ug/L	56.18	ND	54.6	33-143	19.1	24
Benzo(A)Pyrene	44.0	5.62	ug/L	56.18	ND	78.4	17-163	9.60	24
Benzo(B)Fluoranthene	31.3	5.62	ug/L	56.18	ND	55.8	24-159	15.6	24
Benzo(G,H,I)Perylene	27.8	5.62	ug/L	56.18	ND	49.4	35-219	14.9	24
Benzo(K)Fluoranthene	31.1	5.62	ug/L	56.18	ND	55.4	11-162	12.0	24
Chrysene	31.6	5.62	ug/L	56.18	ND	56.2	17-168	19.0	24
Dibenzo(A,H)Anthracene	27.7	5.62	ug/L	56.18	ND	49.3	33-227	13.1	24
Fluoranthene	68.0	5.62	ug/L	56.18	ND	121	26-137	56.8	24
Fluorene	57.3	5.62	ug/L	56.18	ND	102	59-121	25.2	24
Indeno(1,2,3-Cd)Pyrene	27.0	5.62	ug/L	56.18	ND	48.0	39-171	12.1	24
Naphthalene	30.5	2.25	ug/L	56.18	ND	54.2	21-133	10.4	24
Phenanthrene	56.8	5.62	ug/L	56.18	ND	101	54-120	68.9	24
1,2,4-Trichlorobenzene	27.7	5.62	ug/L	56.18	ND	49.3	44-142	0.540	24
2,4,6-Trichlorophenol	41.2	5.62	ug/L	56.18	ND	73.3	37-144	0.356	24
2,4-Dichlorophenol	35.5	5.62	ug/L	56.18	ND	63.2	39-135	1.41	24
2,4-Dimethylphenol	9.53	5.62	ug/L	56.18	ND	17.0	32-120	89.4	24
2,4-Dinitrotoluene	62.0	5.62	ug/L	56.18	ND	110	39-139	30.9	24
2,6-Dinitrotoluene	37.1	5.62	ug/L	56.18	ND	66.0	50-158	6.73	24
2,4-Dinitrophenol	30.8	33.7	ug/L	56.18	ND	54.7	21-191	9.87	24
2-Chloronaphthalene	31.9	5.62	ug/L	56.18	ND	56.8	60-120	8.33	24
2-Chlorophenol	28.6	5.62	ug/L	56.18	ND	50.8	23-134	0.226	24
2-Nitrophenol	32.8	33.7	ug/L	56.18	ND	58.3	29-182	5.11	24
3,3'- Dichlorobenzidine	13.9	5.62	ug/L	56.18	ND	24.8	38-262	27.8	24
4,6-Dinitro-2-Methylphenol	52.3	33.7	ug/L	56.18	ND	93.1	17-181	8.06	24

U.S.E.P.A Region 2 Laboratory

**NOTE:** The results recorded in this report relate only to the samples as received on the date and at the time noted  
 Reported: 8/13/2024



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**NVOA GCMS - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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**Batch B407140**

**Matrix Spike Dup (B407140-MSD1)**

**Source: 2407037-02**

4-Bromophenyl-Phenylether	52.5	5.62	ug/L	56.18	ND	93.4	53-127	24.2	24
4-Chloro-3-Methylphenol	42.0	5.62	ug/L	56.18	ND	74.7	22-147	4.06	24
4-Chlorophenyl-Phenylether	54.5	5.62	ug/L	56.18	ND	97.0	25-158	25.0	24
4-Nitrophenol	24.3	33.7	ug/L	56.18	ND	43.3	9-132	27.1	24
Bis(-2-Chloroethoxy)Methane	31.9	5.62	ug/L	56.18	ND	56.7	33-184	9.09	24
Bis(2-Chloroethyl)Ether	34.7	5.62	ug/L	56.18	ND	61.7	12-158	3.69	24
Bis(2-Chloroisopropyl)Ether	31.1	5.62	ug/L	56.18	ND	55.3	36-166	6.69	24
Bis(2-Ethylhexyl)Phthalate	36.8	5.62	ug/L	56.18	ND	65.6	8-158	19.6	24
Butylbenzylphthalate	79.1	5.62	ug/L	56.18	ND	141	38-152	89.0	24
Azobenzene	63.1	5.62	ug/L	56.18	ND	112	61-106	18.2	24
Diethylphthalate	60.6	5.62	ug/L	56.18	ND	108	31-114	21.9	24
Dimethyl Phthalate	37.4	2.25	ug/L	56.18	ND	66.6	28-120	4.65	24
Di-N-Butyl Phthalate	42.6	5.62	ug/L	56.18	ND	75.9	1-120	4.60	24
Di-N-Octyl Phthalate	55.3	5.62	ug/L	56.18	ND	98.4	4-146	19.6	24
Hexachlorobenzene	48.7	5.62	ug/L	56.18	ND	86.6	35-152	26.4	24
Hexachlorobutadiene	23.7	2.25	ug/L	56.18	ND	42.2	24-120	8.41	24
Hexachlorocyclopentadiene	22.8	33.7	ug/L	56.18	ND	40.7	15-76	19.5	24
Hexachloroethane	25.9	2.25	ug/L	56.18	ND	46.2	40-120	2.14	24
Isophorone	29.7	5.62	ug/L	56.18	ND	52.8	21-196	7.85	24
Nitrobenzene	30.7	5.62	ug/L	56.18	ND	54.6	35-180	3.79	24
N-Nitrosodimethylamine	25.8	5.62	ug/L	56.18	ND	45.9	17-127	9.39	24
N-Nitroso-Di-N-Propylamine	35.4	5.62	ug/L	56.18	ND	63.0	43-230	4.02	24
N-Nitrosodiphenylamine	59.3	5.62	ug/L	56.18	ND	106	79-139	17.8	24
Pentachlorophenol	52.8	33.7	ug/L	56.18	ND	93.9	14-176	62.1	24
Phenol	18.5	33.7	ug/L	56.18	ND	33.0	5-120	5.05	24
Pyrene	68.9	5.62	ug/L	56.18	ND	123	52-120	52.6	24
1,4-Dioxane	17.2	2.25	ug/L	56.18	ND	30.7	7-106	10.6	24
<i>Surrogate: 2-Fluoroaniline</i>	<i>33.4</i>		<i>ug/L</i>	<i>56.18</i>		<i>59.4</i>	<i>60-140</i>		
<i>Surrogate: Phenol-D6</i>	<i>17.4</i>		<i>ug/L</i>	<i>56.18</i>		<i>31.0</i>	<i>60-140</i>		
<i>Surrogate: Naphthalene-D8</i>	<i>32.3</i>		<i>ug/L</i>	<i>56.18</i>		<i>57.4</i>	<i>60-140</i>		
<i>Surrogate: 1-Fluoronaphthalene</i>	<i>30.0</i>		<i>ug/L</i>	<i>56.18</i>		<i>53.4</i>	<i>60-140</i>		
<i>Surrogate: 2,4-Dibromophenol</i>	<i>36.9</i>		<i>ug/L</i>	<i>56.18</i>		<i>65.6</i>	<i>60-140</i>		
<i>Surrogate: Anthracene-D10</i>	<i>69.1</i>		<i>ug/L</i>	<i>56.18</i>		<i>123</i>	<i>60-140</i>		
<i>Surrogate: Chrysene-D12</i>	<i>30.9</i>		<i>ug/L</i>	<i>56.18</i>		<i>55.0</i>	<i>60-140</i>		

U.S.E.P.A Region 2 Laboratory

**NOTE:** The results recorded in this report relate only to the samples as received on the date and at the time noted  
Reported: 8/13/2024





**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**Metals ICP - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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**Batch B407145**

**Blank (B407145-BLK1)**

Arsenic	--- U	8.00	ug/L						
Barium	--- U	100	ug/L						
Cadmium	--- U	3.00	ug/L						
Chromium	--- U	5.00	ug/L						
Copper	--- U	10.0	ug/L						
Lead	--- U	8.00	ug/L						
Nickel	--- U	20.0	ug/L						
Selenium	--- U	20.0	ug/L						
Silver	--- U	5.00	ug/L						
Zinc	--- U	20.0	ug/L						

**LCS (B407145-BS1)**

Arsenic	203	8.00	ug/L	200.0		102	85-115		
Barium	206	100	ug/L	200.0		103	85-115		
Cadmium	202	3.00	ug/L	200.0		101	85-115		
Chromium	205	5.00	ug/L	200.0		103	85-115		
Copper	201	10.0	ug/L	200.0		101	85-115		
Lead	207	8.00	ug/L	200.0		103	85-115		
Nickel	205	20.0	ug/L	200.0		103	85-115		
Selenium	203	20.0	ug/L	200.0		101	85-115		
Silver	205	5.00	ug/L	200.0		102	85-115		
Zinc	206	20.0	ug/L	200.0		103	85-115		

**LCS Dup (B407145-BSD1)**

Arsenic	201	8.00	ug/L	200.0		100	85-115	1.23	20
Barium	205	100	ug/L	200.0		103	85-115	0.598	20
Cadmium	201	3.00	ug/L	200.0		101	85-115	0.441	20
Chromium	206	5.00	ug/L	200.0		103	85-115	0.161	20
Copper	200	10.0	ug/L	200.0		100	85-115	0.403	20
Lead	207	8.00	ug/L	200.0		103	85-115	0.00	20
Nickel	204	20.0	ug/L	200.0		102	85-115	0.371	20
Selenium	200	20.0	ug/L	200.0		100	85-115	1.07	20
Silver	203	5.00	ug/L	200.0		102	85-115	0.583	20
Zinc	205	20.0	ug/L	200.0		102	85-115	0.695	20



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**Metals ICP - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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**Batch B407145**

**Matrix Spike (B407145-MS1)**

**Source: 2407037-01**

Arsenic	209	8.00	ug/L	200.0	ND	105	80-120		
Barium	233	100	ug/L	200.0	26.1	104	80-120		
Cadmium	203	3.00	ug/L	200.0	ND	101	80-120		
Chromium	215	5.00	ug/L	200.0	8.95	103	80-120		
Copper	334	10.0	ug/L	200.0	121	107	80-120		
Lead	211	8.00	ug/L	200.0	4.79	103	80-120		
Nickel	209	20.0	ug/L	200.0	4.41	103	80-120		
Selenium	203	20.0	ug/L	200.0	ND	102	80-120		
Silver	205	5.00	ug/L	200.0	ND	103	80-120		
Zinc	277	20.0	ug/L	200.0	64.3	106	80-120		

**Matrix Spike Dup (B407145-MSD1)**

**Source: 2407037-01**

Arsenic	200	40.0	ug/L	200.0	ND	99.8	80-120	4.68	10
Barium	230	500	ug/L	200.0	26.1	102	80-120	1.62	10
Cadmium	203	15.0	ug/L	200.0	ND	101	80-120	0.0591	10
Chromium	214	25.0	ug/L	200.0	8.95	103	80-120	0.466	10
Copper	323	50.0	ug/L	200.0	121	101	80-120	3.45	10
Lead	212	40.0	ug/L	200.0	ND	106	80-120	0.639	10
Nickel	208	100	ug/L	200.0	ND	104	80-120	0.464	10
Selenium	211	100	ug/L	200.0	ND	105	80-120	3.81	10
Silver	203	25.0	ug/L	200.0	ND	101	80-120	1.18	10
Zinc	274	100	ug/L	200.0	64.3	105	80-120	1.08	10



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**Mercury CVAA - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch B407165</b>									
<b>Blank (B407165-BLK1)</b>									
Mercury	--- U	0.050	ug/L						
<b>LCS (B407165-BS1)</b>									
Mercury	0.936	0.050	ug/L	1.000		93.6	85-115		
<b>LCS Dup (B407165-BSD1)</b>									
Mercury	0.938	0.050	ug/L	1.000		93.8	85-115	0.213	20
<b>Matrix Spike (B407165-MS1)</b>									
		<b>Source: 2407037-01</b>							
Mercury	0.961	0.050	ug/L	1.000	ND	96.1	80-120		



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**Sanitary - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch B407134</b>									
<b>Blank (B407134-BLK1)</b>									
Chromium, Hexavalent	--- U	10.0	ug/L						
<b>Blank (B407134-BLK2)</b>									
Chromium, Hexavalent	--- U	10.0	ug/L						
<b>LCS (B407134-BS1)</b>									
Chromium, Hexavalent	514	10.0	ug/L	498.0		103	85-115		
<b>LCS Dup (B407134-BSD1)</b>									
Chromium, Hexavalent	518	10.0	ug/L	498.0		104	85-115	0.8	20
<b>Matrix Spike (B407134-MS1) Source: 2407039-11</b>									
Chromium, Hexavalent	491	10.0	ug/L	200.0	291	100	80-120		
<b>Matrix Spike (B407134-MS2) Source: 2407037-01</b>									
Chromium, Hexavalent	149	10.0	ug/L	200.0	7.51	71	80-120		
<b>Batch B407146</b>									
<b>Blank (B407146-BLK1)</b>									
Cyanide, Total	--- U	20.0	ug/L						
<b>LCS (B407146-BS1)</b>									
Cyanide, Total	678	100	ug/L	673.0		101	90-110		
<b>LCS Dup (B407146-BSD1)</b>									
Cyanide, Total	696	100	ug/L	673.0		103	90-110	3	20



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory**

**Final Report**

**Project: Marval Industries, Inc. - 2407037**

**Project Number: 2407037**

**Sanitary - Quality Control**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
<b>Batch B407146</b>									
<b>Matrix Spike (B407146-MS1)</b>		<b>Source: 2407039-13</b>							
Cyanide, Total	1180	100	ug/L	200.0	978	102	90-110		
<b>Matrix Spike (B407146-MS2)</b>		<b>Source: 2407037-02</b>							
Cyanide, Total	219	20.0	ug/L	200.0	ND	110	90-110		
<b>Batch B407160</b>									
<b>Blank (B407160-BLK1)</b>									
Phenolics, Total	--- U	20.0	ug/L						
<b>LCS (B407160-BS1)</b>									
Phenolics, Total	1750	40.0	ug/L	1670		105	90-110		
<b>LCS (B407160-BS2)</b>									
Phenolics, Total	1650	40.0	ug/L	1670		99	90-110		
<b>LCS Dup (B407160-BSD1)</b>									
Phenolics, Total	1730	40.0	ug/L	1670		104	90-110	1	20
<b>LCS Dup (B407160-BSD2)</b>									
Phenolics, Total	1810	40.0	ug/L	1670		108	90-110	9	20
<b>Matrix Spike (B407160-MS1)</b>		<b>Source: 2407039-14</b>							
Phenolics, Total	1390	200	ug/L	500.0	877	103	90-110		
<b>Matrix Spike (B407160-MS2)</b>		<b>Source: 2407037-08</b>							
Phenolics, Total	738	20.0	ug/L	500.0	138	120	90-110		

**Attachment #7.** Marval Industries, Inc. active industrial user permit expires on 12/31/2024.



**George S. Latimer**  
**County Executive**

Department of Environmental Facilities

Vincent F. Kopicki, P.E.  
Commissioner

**Westchester County**  
**Department of Environmental Facilities**

**WASTEWATER DISCHARGE PERMIT # 1461**

**ISSUED TO:** MARVAL INDUSTRIES INC.

**CLASSIFICATION:** OCP&SF 40CFR414.111

**LOCATED AT:** 315 HOYT AVENUE  
MAMARONECK, NY 10543

**Effective Dates:**

**From :** 1/1/2023  
**To :** 12/31/2024

**Dates are Inclusive**

**WASTEWATER DISCHARGE PERMIT**

**PART I**

**AUTHORIZATION**

Permit No. 1461

Effective Dates:

From : 1/1/2023  
To : 12/31/2024

Dates are Inclusive

In accordance with the provisions of the Westchester County Sewer Act:


MARVAL INDUSTRIES INC.  
315 HOYT AVENUE  
MAMARONECK, NY 10543

is hereby authorized to discharge industrial wastewater from the outfall(s) identified herein into the Yonkers sanitary sewer system in accordance with the conditions set forth in this permit. Compliance with this permit does not relieve the permittee of its obligations to comply with all applicable pretreatment regulations, standards, or requirements under County, State, and Federal laws that are, or may become, effective during the term of this permit.

Noncompliance with any term or condition of this permit shall constitute a violation of the Westchester County Sewer Act.

If the permittee wishes to continue to discharge after the expiration date of this permit, a letter with such intent must be filed for a renewal permit a minimum of ninety (90) days prior to the expiration date.

This discharge permit supersedes any previously issued discharge permit.

By:   
Vincent F. Kopicki, P.E.  
Commissioner

Date of issue: 1 14 23

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## PART II

### DEFINITIONS

- a. Bypass The intentional diversion of wastes from any portion of a treatment facility.
- b. Compliance Monitoring The sampling and analyses performed at the Industry by the Control Authority (the County of Westchester) in accordance with 40CFR403.
- c. Commissioner The Commissioner of the Westchester County Department of Environmental Facilities.
- d. Composite Sample A combination of individual samples obtained at regular intervals over a specified time period. The volume of each individual sample should be proportional to the flow rate during the sampling period.
- e. Cooling Water
  - 1. Uncontaminated water used only for cooling purposes which has no direct contact with any raw material, intermediate or final product, and which does not contain a level of contaminants higher than that of the intake water.
  - 2. Contaminated water used only for cooling purposes which may become contaminated either through the use of water treatment chemicals used for corrosion inhibitors or biocides or by direct contact with process materials and/or wastewater.
- f. Daily Maximum The maximum allowable discharge of a pollutant during a calendar day. Where daily maximum limitations are expressed in units of mass, the daily discharge is the total mass discharged over the course of the day. Where daily maximum limitations are expressed in terms of concentration, the daily discharge is the arithmetic average measurement of the pollutant derived from all measurements taken that day.
- g. Flashpoint (Closed-Cup) The minimum temperature of a liquid at which the liquid gives off a vapor in sufficient concentration to ignite when tested using the methods specified in 40CFR261.21.
- h. Grab Sample An individual sample collected in less than 15 minutes, without regard to flow or time.
- i. Instantaneous Maximum Concentration The maximum concentration allowed in any single grab sample.

- j. Interference A discharge which alone or in conjunction with a discharge or discharges from other sources both:
1. Inhibits or disrupts the POTW, its treatment processes or operations or its sludge processes, use or disposal; and
  2. Causes a violation of any requirement of the POTW's SPDES permit (including an increase in the magnitude or duration of a violation) or prevents the use or disposal of sewage sludge in compliance with the following statutory provisions and regulations or permits issued there under (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) [including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA) and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SWDA], the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.
- k. Monthly Average The maximum allowable value for the average of all observations obtained during one calendar month.
- l. Pass-Through A discharge which exits the POTW into waters of the State of New York in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, cause a violation of any requirement of the POTW's SPDES permit (including an increase in the magnitude or duration of a violation).
- m. Publicly Owned Treatment Works (POTW) A treatment works as defined by Section 212 of the Clean Water Act which is owned by the State or municipality. This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW treatment plant.
- n. Regional Administrator (RA) The person in charge of Region II of the United States Environmental Protection Agency or his/her duly appointed representative.
- o. Resource Conservation and Recovery Act (RCRA) A federal statute regulating the management of hazardous waste from its generation through ultimate disposal. The Act contains requirements for waste generators, transporters and owners and operators of treatment, storage and disposal facilities.
- p. Self Monitoring Sampling and analyses performed at the Industry by the Industry itself in accordance with 40CFR403.
- q. Sewer Use Act Westchester County rules and regulations relating to the use of the public sewers.

- r. Significant Noncompliance Shall mean that an industrial user meets one or more of the following criteria:
1. Chronic violations of wastewater discharge limits, defined here as those in which sixty-six (66) percent or more of all of the measurements taken during a six (6) month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter;
  2. Technical Review Criteria (TRC) violations, defined here as those in which thirty-three (33) percent or more of all of the measurements for each pollutant parameter taken during a six (6) month period equal or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC (TRC = 1.4 for BOD, TSS, fats, oil and grease, and 1.2 for all other pollutants except pH);
  3. Any other violation of a pretreatment effluent limit (daily maximum or longer term average) that the Control Authority determines has caused, alone or in combination with other discharges, interference or pass-through (including endangering the health, or safety, of POTW personnel or the general public);
  4. Any discharge of a pollutant that has caused imminent endangerment to human health, welfare, or to the environment or has resulted in the POTW's exercise of its emergency authority under paragraph (f)(1)(vi)(B) of section 403.8 of the General Pretreatment Regulations (40CFR403) to halt or prevent such a discharge;
  5. Failure to meet, within ninety (90) days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance;
  6. Failure to provide, within thirty (30) days after the due date, required reports such as baseline monitoring reports, ninety (90) day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;
  7. Failure to adequately report noncompliance;
  8. Failure to pay the County for sampling and analyses performed at the facility;
  9. Any other violation or group of violations which the Control Authority determines will adversely affect the operation of the local pretreatment program.
- s. Slug Load Any pollutant (including Biochemical Oxygen Demand) released in a discharge at a flow rate or concentration which will cause a violation of the specific discharge prohibitions in 40CFR 403.5(b) to 403.12(f). Any discharge that is five times or more the daily average flow or concentration of pollutants therein, for any period of time is a slug load.

- t. Total Toxic Organics (TTO) The sum of the concentrations of the specific toxic organic compounds regulated by specific categorical, or Westchester County, pretreatment regulations, which is found in the discharge at specific quantifiable concentrations.

### PART III

#### DISCHARGE LIMITATIONS

In accordance with the Laws of the County of Westchester, Chapter 824, the maximum allowable concentration of any of the following pollutants in sewage being discharged to the County POTW shall not exceed the values contained below in the local limitations. Your facility will be monitored for these parameters. The Westchester County Department of Environmental Facilities will conduct sampling at your facility. The parameters which will be monitored are contained on page 7 of this permit. If the parameters are changed during the term of this permit, your facility will be notified as to the changes.

#### LOCAL LIMITATIONS

<u>REGULATED POLLUTANT</u>	<u>AVERAGE DAILY CONCENTRATION (mg/L)</u>
pH – Low	5.5
pH – High	9.5
Arsenic	0.2
Barium	2.0
Cadmium	0.7
Chromium (Total)	3.0
Chromium (Hex)	2.0
Copper	2.8
Cyanide (Total)	0.8
Lead	0.4
Mercury	0.2
Nickel	2.8
Oil & Grease	100.0
Phenols	4.0
Selenium	0.2
Silver	0.8
Total Toxic Organics	2.1
Zinc	1.8

PART III (cont.)

DISCHARGE LIMITATIONS  
&  
MONITORING PARAMETERS

MARVAL INDUSTRIES INC.

SAMPLE POINT #1

Categorical Classification :

Organic Chemicals, Plastics, & Synthetic Fibers  
40 CFR 414.111

<u>Parameter</u>	<u>Units</u>	<u>County Limits Day Ave</u>	<u>Federal Limits Day Max</u>	<u>Federal Limits Mon Ave</u>	<u>Sampling Type</u>
pH - Low	S.U.	5.5	N/A	N/A	Grab
pH - High	S.U.	9.5	N/A	N/A	Grab
Oil & Grease	mg/L	100.0	N/A	N/A	Grab
Arsenic	mg/L	0.2	N/A	N/A	Composite
Barium	mg/L	2.0	N/A	N/A	Composite
Cadmium	mg/L	0.7	N/A	N/A	Composite
Chromium	mg/L	3.0	N/A	N/A	Composite
Copper	mg/L	2.8	N/A	N/A	Composite
Lead	mg/L	0.4	0.69	0.32	Composite
Nickel	mg/L	2.8	N/A	N/A	Composite
Zinc	mg/L	1.8	2.61	1.05	Composite
Phenols	mg/L	4.0	N/A	N/A	Grab
TTOs*	mg/L	2.1	N/A	N/A	Grab
acenaphthene	mg/L	N/A	0.047	0.019	Composite
anthracene	mg/L	N/A	0.047	0.019	Composite
Benzene	mg/L	N/A	0.134	0.057	Composite
Bis phthalate	mg/L	N/A	0.258	0.095	Composite
carbon tetrachloride	mg/L	N/A	0.380	0.142	Composite
Chlorobenzene	mg/L	N/A	0.380	0.142	Composite

\* Note: See Definition of TTOs (Total Toxic Organics) on page 5.  
Sampling Point # 1 is shown on Facility Diagram on Last Page.

<u>Parameter</u>	<u>Units</u>	<u>County Limits Day Ave</u>	<u>Federal Limits Day Max</u>	<u>Federal Limits Mon Ave</u>	<u>Sampling Type</u>
Chloroethane	mg/L	N/A	0.30	0.11	Composite
Chloroform	mg/L	N/A	0.33	0.11	Composite
Di-n-butyl phthalate	mg/L	N/A	0.04	0.02	Composite
1,2 dichlorobenzene	mg/L	N/A	0.79	0.20	Composite
1,3-dichlorobenzene	mg/L	N/A	0.38	0.14	Composite
1,4-dichlorobenzene	mg/L	N/A	0.38	0.14	Composite
1,1 DCA	mg/L	N/A	0.06	0.02	Composite
1,2 DCA	mg/L	N/A	0.574	0.18	Composite
1,1 DCE	mg/L	N/A	0.06	0.022	Composite
1,2 trans DCE	mg/L	N/A	0.066	0.025	Composite
1,2 Dichloropropane	mg/L	N/A	0.794	0.196	Composite
1,3 Dichloropropene	mg/L	N/A	0.794	0.196	Composite
Diethyl phthalate	mg/L	N/A	0.113	0.046	Composite
Dimethyl phthalate	mg/L	N/A	0.047	0.019	Composite
4,6 Dinitro-o cresol	mg/L	N/A	0.277	0.078	Composite
Ethylbenzene	mg/L	N/A	0.38	0.142	Composite
Fluoranthene	mg/L	N/A	0.054	0.022	Composite
Fluorene	mg/L	N/A	0.047	0.019	Composite
Hexachlorobenzene	mg/L	N/A	0.794	0.196	Composite
Hexachlorobutadiene	mg/L	N/A	0.38	0.142	Composite
hexachloroethane	mg/L	N/A	0.794	0.196	Composite
Methyl chloride	mg/L	N/A	0.295	0.11	Composite
Methylene chloride	mg/L	N/A	0.17	0.036	Composite
Naphthalene	mg/L	N/A	0.047	0.019	Composite
Nitrobenzene	mg/L	N/A	6.402	2.237	Composite
2-Nitrophenol	mg/L	N/A	0.231	0.065	Composite
4-Nitrophenol	mg/L	N/A	0.576	0.162	Composite
Phenanthrene	mg/L	N/A	0.047	0.019	Composite
Pyrene	mg/L	N/A	0.048	0.02	Composite
Tetrachloroethylene	mg/L	N/A	0.164	0.052	Composite
Toluene	mg/L	N/A	0.074	0.028	Composite
Total Cyanide	mg/L	N/A	1.2	0.42	Composite
1,2,4 Trichlorobenzene	mg/L	N/A	0.794	0.196	Composite
1,1,1 TCA	mg/L	N/A	0.059	0.022	Composite
1,1,2 TCA	mg/L	N/A	0.127	0.032	Composite
TCE	mg/L	N/A	0.069	0.026	Composite
Vinyl chloride	mg/L	N/A	0.172	0.097	Composite

## PART IV

### MONITORING REQUIREMENTS

#### Compliance & Self Monitoring:

The permittee is required to self-monitor at least twice a year in accordance with 40CFR403. The samples must be analyzed using test procedures prescribed in 40CFR136 or otherwise approved by EPA or specified in this permit. The self-monitoring results shall be submitted to the Department within thirty (30) days of receipt.

The County performs all compliance monitoring at least twice a year in accordance with 40CFR403. The sampling crew, after showing proper identification, must be allowed into the facility to perform this mandated monitoring.

The permittee will be sent an invoice for all sampling and analyses performed at or for your facility by the County. The invoice is to be paid within sixty (60) days of receipt. Failure to pay this invoice will be considered a violation of this permit and will be subject to enforcement proceedings in accordance with the County Sewer Use Act.

#### Toxic Organic Management Plan

In lieu of the self-monitoring for TTOs, and upon written request, the Department may allow the permittee to satisfy the TTO self-monitoring sampling requirement by:

- a) Making the following certification in its periodic self-monitoring reports:

“Based upon my inquiry of the person or persons directly responsible for managing environmental affairs at my facility, I certify that, to the best of my knowledge and belief, there was no discharge to a public sewer of toxic organics during the past six (6) months. I also certify that the explanations provided concerning the disposal of toxic organics from the facility are true, accurate and complete. I further certify that this facility is implementing a toxic organics management plan to protect against the release of such compounds to a public sewer. I certify that I am duly authorized by the establishment to make this statement on its behalf, and am fully aware that there are significant civil and criminal sanctions for submitting false information, including the possibility of a fine and/or imprisonment.”

- b) Submitting a toxic organic management plan (TOMP) for approval by the Department. An acceptable TOMP must contain:

- i) a list of all toxic organic compounds used or stored at your facility.

- 
- ii) a description of the storage, handling and disposal practices for control of toxic compounds at your facility, including procedures for ensuring that toxic organics do not spill or leak into your wastewater.

## PART V

### ADDITIONAL MONITORING & REPORTING REQUIREMENTS

#### 1) Additional Monitoring

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures prescribed in 40 CFR Part 136 or otherwise approved by EPA or specified in this permit, the results of such monitoring shall be submitted to the Department within thirty (30) days of receipt of the sampling results.

#### 2) Automatic Re-sampling

If the results of the permittee's wastewater discharge sampling indicate a violation, the permittee shall:

a) Notify the Department within 24 hours of becoming aware of the violation

b) Repeat the sampling and analyses for the substance that was in violation of applicable regulations within thirty (30) days of the date the violation became known, and submit the analytical results of the sampling to the Department immediately.

#### 3) Accidental Discharge Notification

In the event of a bypass, upset, slug discharge, or accidental discharge in violation of any provisions of this permit, or the Sewer Use Act, the permittee shall immediately notify the Department, at any hour, by telephone at (914) 813-5720. Within five days following an accidental discharge, the permittee shall submit to the Department a detailed written report. This report shall contain:

a) A description of the bypass, upset, slug, or accidental discharge, the cause thereof, and the impact on the permittee's compliance status. The description should also include the location of the discharge, type, concentration and volume of waste.

b) The duration of noncompliance, including exact dates and time of noncompliance, and if the noncompliance continues, the time by which compliance is reasonable expected to occur.

c) All steps taken to reduce eliminate and prevent recurrence of such bypass, upset, slug, accidental discharge, or other conditions of noncompliance.

#### 4) Operating Upsets

Any permittee that experiences an upset in operations that places the permittee in a temporary state of noncompliance with the provisions of either this permit or the Sewer

Use Act shall inform the Department immediately upon the first awareness of the upset at (914) 813-5720.

A written follow-up report thereof shall be filed by the permittee with the Department within five (5) days. The report shall specify:

- a) Description of the upset, the cause(s) thereof and the upset's impact on the permittee's compliance status;
- b) Duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonable expected to occur;
- c) All steps taken or to be taken to reduce, eliminate and prevent recurrence of such upset, slug load or other conditions of noncompliance.

A documented and verified operating upset shall be an affirmative defense to any enforcement action brought against the permittee for noncompliance with categorical pretreatment standards attributable to the upset event if the requirements of 40 CFR 403.16 (c) are met.

#### 5) Changes

The Permittee shall notify the Department immediately of any changes affecting the potential for a slug discharge.

The permittee shall give notice to the Department within ninety (90) days prior to any facility expansion, production change, or process modification(s) which result(s) in new or significant change in discharges, or a change in the nature of the discharge.

#### 6) Anticipated Noncompliance

The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with this permit.

#### 7) Signatory Requirements

All applications, reports or information submitted to the Department shall contain the following certification and be signed as required in (a), (b), (c) or (d) below:

"I certify under penalty of law that I have personally examined and am familiar with the information contained in this document and all attachments therein. Furthermore, based on my inquiry of those persons immediately responsible for obtaining the information contained in this document, I believe that this information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment. I further certify that reported sampling results, if any, are representative of the facility's normal work cycles and expected pollutant discharges."

a) By a responsible corporate officer if the industrial user submitting the reports is a corporation. For the purpose of this paragraph, a responsible corporate officer means president, secretary, treasurer or vice-president of the corporation in charge of a principal business function or any other person who performs similar policy or decision making functions for the corporation.

b) By a general partner or proprietor if the industrial user submitting the report is a partnership or sole proprietorship.

c) By a duly authorized representative of the individual designated in paragraph (a) or (b) of this section if:

i) The authorization is made in writing by the individual described in paragraph (a) or (b);

ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the industrial discharge originates, such as the position of plant manager, or a position of equivalent responsibility, or a position having overall responsibility for environmental matters for the company; and

iii) The written authorization is submitted to the Department.

d) If an authorization under paragraph (c) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility or overall responsibility for the environmental matters of the company, a new authorization satisfying the requirements of paragraph (c) of this section must be submitted to the Department prior to or together with any reports to be signed by an authorized representative.

e) A need for a plan to control or prohibit a "slug" from entering the POTW will be evaluated at least once during the life of the permit. If an SDCP is required, it must be submitted to the County no later than forty-five (45) days after the requirement is noted. If the permittee feels as though it does not require an SDCP, it must notify the County in writing.

f) All reports required by this permit shall be submitted to the Department at the following address:

County of Westchester  
Department of Environmental Facilities  
270 North Avenue – 6<sup>th</sup> Floor  
New Rochelle, New York 10801  
Attn: Monika Wieleba, Program Coordinator

## PART VI

### OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

#### 1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems for the treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes but is not limited to: effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

#### 2. Duty to Halt or Reduce Activity

Upon reduction of efficiency of operation or loss or failure of all or part of the pretreatment facility, the permittee shall, to the extent necessary to maintain compliance with this permit, control production or all discharges until operation of the pretreatment facility is restored or an alternative method of pretreatment is provided. This requirement applies, for example, when the primary source of power of the pretreatment facility fails or is reduced. It shall not be a defense for a permittee in an enforcement action to state that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#### 3. Bypass of Treatment Facilities

a) Bypass is prohibited unless it is unavoidable to prevent loss of life, personal injury, severe property damage or no feasible alternatives exist.

b) The permittee may allow any bypass to occur which does not cause discharge limitations to be exceeded, but only if it is also for essential maintenance to assure efficient operation.

##### c) Notification of Bypass:

1) Anticipated bypass – if the permittee knows in advance of the need for a bypass, it shall submit prior written notice, at least ten (10) days before the date of the bypass to the Department.

2) Unanticipated bypass – the permittee shall immediately notify the Department and submit a written notice within 24 hours of becoming aware of the bypass.

#### 4. Disposal of Hazardous Wastes

All solids, sludges, resins or residues, filter backwash or other pollutants removed in the course of pretreatment of wastewater shall be handled and disposed of in accordance with all New York State hazardous wastes requirements and RCRA requirements including, but not limited to, subtitles C and D thereof.

## PART VII

### INSPECTION AND RECORDS

#### 1. Inspection and Entry

The permittee shall allow the Regional Administrator and/or duly authorized representatives of the Department, upon the presentation of credentials and other documents as may be required by law, to:

- a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c) Inspect, at any time that non-domestic wastewater is being discharged, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit;
- d) Sample or monitor, for the purposes of assuring permit compliance, any substance or parameters at any location; and
- e) Inspect any production, manufacturing, fabricating or storage area where pollutants, regulated or required under this permit could originate, be stored, or be discharged to the public sewer.

The applicant, by accepting any permit issued, does hereby consent and agree to entry upon the premises as described herein.

#### 2. Retention of Records

a) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application as per Federal regulations 40CFR403.12(o)(2). This period may be extended by request of the Department or EPA at any time.

b) All records that pertain to matters that are subject of special orders or any other enforcement or litigation activities brought by the Department shall be retained and preserved by the permittee at least three (3) years or until all enforcement activities have concluded and all periods or limitations with respect to any and all appeals have expired, whichever is longer.

### 3. Record Contents

Records of sampling information shall include:

- a) The date, exact place, time and methods of sampling or measurement, and sample preservation techniques or procedures;
- b) Who performed the sampling or measurements;
- c) The date(s) analyses were performed;
- d) Who performed the analyses;
- e) The analytical techniques or methods used; and
- f) The results of each analysis.

### 4. Falsifying Records

It shall be unlawful to make any false statement representation or certification in any application, report, plan or other document required by this permit or to falsify, tamper with or knowingly render any monitoring device or method inaccurate.

## **PART VIII**

### **STANDARD CONDITIONS**

#### **1. Severability**

The provisions of this permit are severable, and if any provision of this permit or if any provision of the application for this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit, shall be affected thereby.

#### **2. Duty to Comply**

The permittee must comply with the provisions of the General Pretreatment Regulations (40CFR403), applicable Federal Categorical Standards, the Westchester County Sewer Use Act, and all conditions of this permit. Failure to comply with these requirements may be grounds for administrative action, or enforcement proceedings including civil or criminal penalties, injunctive relief and summary abatements.

#### **3. Duty to Mitigate**

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.

#### **4. Permit Action**

This permit may be modified, revoked and reissued, or terminated for good causes including, but not limited to, the following:

- a) Incorporation of any new or revised Federal, State, or local pretreatment standards or requirements;
- b) Material or substantial alterations or additions to the discharger's operations which were not covered in the effective permit;
- c) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge;
- d) Information indicating that the permitted discharge poses a threat to the Westchester County wastewater collection and treatment systems, POTW personnel or the receiving waters;
- e) Violation of any terms or conditions of this permit;

- f) Obtaining this permit by misrepresentation or failure to fully disclose all relevant facts;
- g) Upon request of the permittee, provided such request does not create a violation of any existing applicable requirements, standards, laws, or rules and regulations; or
- h) Correction of typographical or other errors in the permit.

The filing of a request by the permittee for a permit modification, revocation and re-issuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

#### 5. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any violation of Federal, State or local laws or regulations.

#### 6. Limitation on Permit Transfer

Wastewater discharge permits are issued to a specific user for a specific operation and are not assignable to another user or transferable to any other location without the prior written approval of the Department. In the event of a sale, the permittee must inform the Department of Environmental Facilities of the sale, and must inform the purchaser of all responsibilities and obligations under this permit.

#### 7. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must submit a request for and obtain a new permit. A written request must be submitted at least ninety (90) days before the expiration date of this permit.

#### 8. Dilution

The permittee shall not increase the use of process water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

#### 9. Applicable Regulations

The permittee shall comply at all times with any and all applicable County, State, and Federal pretreatment standards and requirements, including any such standards or requirements that may become effective during the term of this permit.

## 10. Confidentiality

Any information, except for discharge and effluent data, submitted to the Department may be claimed by the discharger to be confidential. Any such claim must be asserted at the time of submission of the information, and should contain a stamped legend or any other suitable form of notice on each page containing such information, employing language such as trade secret, proprietary or confidential business information. If no claim is asserted at the time of submission, the information may be made available to the public without further notice. If a claim is asserted, it will be treated in accordance with the Department of Environmental Facilities' business confidentiality procedures. Effluent data shall be available to the public without restriction.

## 11. Duty to Provide Information

The permittee shall furnish to the Department within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

## 12. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil and/or criminal penalties for noncompliance with any applicable County, State, or Federal regulations.

## 13. Penalties for Violations of Permit Conditions

The Westchester County Sewer Use Act provides that any person who fails to comply with any of the provisions of the Sewer Use Act, or the conditions or limitations of this permit shall be liable for a civil penalty of up to \$1,000.00 for each violation. In the case of a continuing violation, each day's continuance shall be a separate and distinct offense. The permittee may also be subject to sanctions under State and/or Federal law.

## 14. Spill Containment Plan (SPCP)

A need for a plan to contain a chemical spill within the confines of the permittee will be evaluated at least once during the life of the permit. If an SPCP is required, it must be submitted to the County no later than forty-five (45) days after the requirement is noted. If the permittee feels as though it does not require an SPCP, it must notify the County in writing.

## **PART IX**

### **GENERAL PROHIBITATIVE STANDARDS**

The permittee shall comply with all of the general prohibitive discharge standards in the General Pretreatment Regulations, 40CFR403, and the Department's Sewer Use Act. Except as expressly allowed in this permit no person shall discharge or cause to be discharged, or allow to run, leak, or escape into any public sewer, pipe, channel, pumping station, catch basin or any other sewer appurtenances, or waterway connecting with any public sewer, or into any private sewer connected with public sewer any of the following described materials, substances or wastes except such small quantities as may be present in normal household wastes:

- a) Construction materials, ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastic, wood, paunch manure, coffee grounds, fur, wax, or any solid or viscous substances capable of causing obstruction to the flow in sewers or other interference with the proper operation of the sewerage system;
- b) Snow and ice at unauthorized locations;
- c) Steam or wastewater above 140 degrees Fahrenheit (140°F) or 60 degrees Centigrade (60°C);
- d) Flammable or explosive liquids, solids or gases, including but not limited to gasoline, benzene and naphtha. Under no circumstances may any such substance be discharged into the sewerage system;
- e) Oil sludges;
- f) Coal tar, its derivatives and wastes;
- g) Paints and waste products from paint manufacturing which tend to clog or otherwise interfere with the operation of the sewerage system;
- h) Wastewaters having a pH lower than 5.5 or higher than 9.5, or having any other corrosive property likely to cause damage to the structures or equipment of the sewerage system or create a hazard to personnel;
- i) Toxic substances in such quantities which the person knows, or has reason to know, may, when discharged from a single source, or in combination with other sources:
  - 1) interfere with any sewage treatment process, including sludge treatment;
  - 2) limit the Department's options for operating its sewerage system or disposing of the sewage sludge, grit or scum generated at water pollution control plants;

- 3) be detrimental to the health of human beings, animals, or aquatic life;
  - 4) create any adverse effect in the receiving waters; or
  - 5) violate Federal or State laws or regulations or the requirements of a discharge permit of sewage treatment plant issued pursuant to section 403 of the Federal Water Pollution Control Act, commonly referred to as the Clean Water Act, as amended, or any other permit issued pursuant to Federal or State law.
- j) Any liquids or wastes containing pollutants of such quality and/or quantity that becomes burdensome in the operation and maintenance of a sewage treatment plant;
  - k) Any noxious or malodorous gas or substance capable of creating a public nuisance;
  - l) Any wastewater or substance, which in the opinion of the Commissioner, will result in a violation of any applicable Federal, State, or local water quality standard concerning discoloration or other undesirable physical changes in the appearance of the receiving waters;
  - m) No person shall discharge or cause to be discharged any radioactive material either directly or indirectly into the sewerage system, unless all restrictions, prohibitions, and requirements of the Westchester County Health Department are fully complied with;
  - n) Any pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, waste streams with closed cup flashpoint of less than 140 degrees Fahrenheit (140°F) or 60 degrees Centigrade (60°C), using the test methods specified in 40CFR261.21.

## EPA LIST OF 129 PRIORITY POLLUTANTS

### 31 ARE PURGEABLE ORGANICS

<u>CODE</u>	<u>COMPOUND</u>	<u>CODE</u>	<u>COMPOUND</u>	<u>CODE</u>	<u>COMPOUND</u>
G02	Acrolein	A50	1,1,2-Trichloroethane	A55	Bromoform
G03	Acrylonitrile	A51	1,1,2,2-Tetrachloroethane	A56	Dichlorobromoethane
D01	Benzene	A52	Chloroethane	A57	Trichlorofluoroethane
D02	Toluene	B25	2-Chloroethyl vinyl ether	A58	Dichlorodifluoroethane
D06	Ethylbenzene	A03	Chloroform	A59	Chlorodibromoethane
A04	Carbon tetrachloride	A60	1,2-Dichloropropane	A13	Tetrachloroethylene
A30	Chlorobenzene	A61	1,3-Dichloropropane	A12	Trichloroethylene
A48	1,2-Dichloroethane	A02	Methylene chloride	A10	Vinyl chloride
A07	1,1,1-Trichloroethane	A01	Methyl chloride	A28	1,2-trans-Dichloroethylene
A49	1,1-Dichloroethane	A54	Methyl bromide	B03	bis(Chloromethyl) ether
A26	1,1-Dichloroethylene				

### 46 ARE BASE/NEUTRAL EXTRACTABLE ORGANIC COMPOUNDS

<u>CODE</u>	<u>COMPOUND</u>	<u>CODE</u>	<u>COMPOUND</u>	<u>CODE</u>	<u>COMPOUND</u>
A31	1,2-Dichlorobenzene	F36	bis(2-Ethylhexyl) phthalate	D23	Indeno(1,2,3-c,d) pyrene
A32	1,3-Dichlorobenzene	F39	Di-n-octyl phthalate	D22	Dibenzol(a,h) anthracene
A33	1,4-Dichlorobenzene	F41	Dimethyl phthalate	D19	Benzo(g,h,i) perylene
A53	Hexachloroethane	F40	Diethyl phthalate	B33	4-Chloropheny; phenyl ether
A16	Hexachlorobutadiene	F38	Di-n-butyl phthalate	F43	3,3-Dichlorobenzidine
A35	Hexachlorobenzene	D20	Fluorene	F42	Benzidine
A34	1,2,4-Trichlorobenzene	D09	Fluoranthene	B20	bis(2-Chloroethyl) ether
A61	bis(2-Chloroethoxy) methane	D16	Chrysene	F20	1,2-Diphenylhydrazine
D05	Naphthalene	F99	Pyrene	A17	Hexachlorocyclopentadiene
A43	2-Chloronaphthalene	D21	Phenanthrine	G28	N-Nitrosodiphenylamine
G04	Idophorone	D18	Anthracene	D17	Acenophthylene
F33	Nitrobenzene	D13	Benzo(a)anthracene	D08	Acenophthene
F34	2,4-Dinitrotoluene	D14	Benzo(b)fluoranthene	F37	Butyl benzyl phthalate
F35	2,6-Dinitrotoluene	D15	Benzo(c)fluoranthene	G08	N-Nitrosedimethylamine
B34	4-Bromophenyl phenyl ether	D10	Benzo(d)pyrene	G29	N-Nitrosodi-n-propylamine
B27	bis(2-Chloroisopropyl) ether				

### 11 ARE ACID EXTRACTABLE ORGANIC COMPOUNDS

<u>CODE</u>	<u>COMPOUND</u>	<u>CODE</u>	<u>COMPOUND</u>	<u>CODE</u>	<u>COMPOUND</u>
D24	Phenyl	F32	4,5-Dinitro-o-cresol	B30	2,4-Dichlorophenol
F29	2-Nitrophenol	B31	Pentachlorophenol	B28	2,4-Trichlorophenol
F30	4-Nitrophenol	B32	p-Chloro-n-cresol	F44	2,4-Dimethylphenol
F31	2,4-Dinitrophenol	B29	2-Chlorophenol		

### 26 ARE PESTICIDES / PCB'S

<u>CODE</u>	<u>COMPOUND</u>	<u>CODE</u>	<u>COMPOUND</u>	<u>CODE</u>	<u>COMPOUND</u>
C36	alpha - Endosulfan	C34	4,4' - DDE	A38	Arochlor 1232
C37	beta - Endosulfan	C35	4,4' - DDD	A39	Arochlor 1242
C38	Endosulfan sulfate	C03	4,4' - DDT	A40	Arochlor 1248
A44	alpha - BHC	C41	Heptachlor	A41	Arochlor 1254
A45	beta - BHC	C42	Heptachlor epoxide	A42	Arochlor 1260
A47	delta - BHC	C02	Chlordane	B35	2,3,7,8 - Tetrachlorodibenzo-p-
dioxin					(TCDD)
C26	gamma - BHC (Lindane)	C10	Texaphene		
C01	Aldrin	A36	Arochlor 1016	C39	Endrin
C01	Dieldrin	A37	Arochlor 1221	C40	Endrin aldehyde

### 13 ARE METALS

<u>CODE</u>	<u>COMPOUND</u>	<u>CODE</u>	<u>COMPOUND</u>	<u>CODE</u>	<u>COMPOUND</u>
M01	Antimony	M06	Copper	M10	Selenium
M02	Arsenic	M07	Lead	M11	Silver
M03	Beryllium	M08	Mercury	M12	Thallium
M04	Cadmium	M09	Nickel	M13	Zinc
M05	Chromium				

TABLE 1 – SUBSTANCES OF CONCERN

**CLASS A – HALOGENATED HYDROCARBONS**

A01.	Methyl chloride
A02.	Methylene chloride
A03.	Chloroform
A04.	Carbon tetrachloride
A05.	Freon/Genatron
A06.	Other halomethanes
A07.	1,1,1-Trichloroethane
A08.	Other haloethanes
A09.	Vinyl fluoride
A10.	Vinyl chloride
A11.	Dichloroethylene
A12.	Trichloroethylene
A13.	Tetrachloroethylene
A14.	Chlorinated propane
A15.	Chlorinated propene
A16.	Hexachlorobutadiene
A17.	Hexachlorocyclopentadiene
A18.	Chlorinated benzene
A19.	Chlorinated toluene
A20.	Fluorinated toluene
A21.	Polychlorinated biphenyl (PCB)
A22.	Chlorinated naphthalene
A23.	Dechlorane (C <sub>10</sub> Cl <sub>2</sub> )
A24.	Hexachlorocyclohexane (BHC)
A99.	Halogenated hydrocarbons not specified above

**CLASS B – HALOGENATED ORGANICS  
(other than hydrocarbons)**

B01.	Phosgene
B02.	Methyl chloromethyl ether
B03.	bis-chloromethyl ether
B04.	Other chloroalkyl ethers
B05.	Benzoyl chloride
B06.	Chloroform
B07.	Chlorinated phenol
B08.	Chlorinated cresols or xylenols
B09.	Chloroacetic acid
B09.	Chloroacetic acid
B10.	Chloroalkyl ethers
B11.	Dichlorophene or hexachlorophene
B12.	Chlorinated aniline (including methylene bis (2-chloroaniline))
B13.	Dichlorobenzidine
B14.	Chlorinated diphenyl oxide
B15.	Chlorinated toluene
B16.	Kepon (C <sub>10</sub> Cl <sub>10</sub> O)
B17.	Dichlorovinyl sulfanyl pyridine
B18.	Chloropicrin
B19.	Trichloromethyl thio-phthalimide
B20.	Trichloro-propylsulfanyl pyridine
B21.	Tetrachloro-propylsulfanyl pyridine
B22.	Tetrachloro-isophthalonitrile
B99.	Halogenated organics not specified above

**CLASS C – PESTICIDES (includes herbicides, alkydols, biocides, allicides & mildewcides)**

C01.	Aldrin/Dieldrin
C02.	Chlordane and metabolites
C03.	DDT and metabolites
C04.	Endosulfan/Thiodan and metabolites
C05.	Endrin and metabolites
C06.	Heptachlor and metabolites
C07.	Malathion
C08.	Methoxychlor
C09.	Parathion
C10.	Toxaphene
C11.	Sevin
C12.	Kelthane
C13.	Diazinon
C14.	Dithane
C15.	Carbaryl
C16.	Silvex
C17.	Dithiocarbamates
C18.	Manel
C19.	Dioxathion
C20.	Tandex/Karbutilate
C21.	Carbofurans
C22.	Pentac
C23.	Folpet
C24.	Dichlone
C25.	Rotenone
C26.	Lindane/Isotex
C27.	Simazine
C28.	Methoprene
C99.	Pesticides not specified above

**CLASS D – AROMATIC HYDROCARBONS**

D01.	Benzene
D02.	Toluene
D03.	Xylene
D04.	Biphenyl
D05.	Naphthalene
D06.	Ethylbenzene
D07.	Styrene
D08.	Acenophthene
D09.	Flourathene
D99.	Aromatic hydrocarbons not specified above

**CLASS E – TARS**

E01.	Coal tar
E02.	Petroleum tar
E99.	Tars not specified above

**CLASS F – SUBSTITUTED AROMATICS**

(other than hydrocarbons and non-halogenated)

F01.	Phenol, cresol, or xylenol
F02.	Catechol, resorcinol, or hydroquinone
F03.	Nitrophenols
F04.	Nitrobenzenes
F05.	Nitrotoluenes
F06.	Aniline
F07.	Toluidines
F08.	Nitroanilines
F09.	Nitroanisols
F10.	Toluene dilsocyanide
F11.	Dimethylaminooxobenzene
F12.	Benzoic acid (and Benzoic salts)
F13.	Phthalic, isophthalic, or terephthalic acid
F14.	Phthalic anhydride
F15.	Phthalate azide
F16.	Phenoxyacetic acid
F17.	Phenylphenols
F18.	Nitrobiphenols
F19.	Aminobiphenyls (including benzidine)
F20.	Diphenylhydrazine
F21.	Naphthylamines
F22.	Carbazole
F23.	Acetylaminohexane
F24.	Dyes and organic pigments
F25.	Pyridine
F99.	Substituted aromatics not specified above

**CLASS G – MISCELLANEOUS**

G01.	Asbestos
G02.	Acrolein
G03.	Acrylonitrile
G04.	Isophorene
G05.	Nitrosamines
G06.	Ethylamines
G07.	Propylamines
G08.	Nitrosodimethylamine
G09.	Dimethyl hydrazine
G10.	Maleic anhydride
G11.	Methyl isocyanide
G12.	Epoxides
G13.	Nitrotheranes
G14.	Cyanide

**CLASS H – METALS & their compounds**

H01.	Antimony
H02.	Arsenic
H03.	Beryllium
H04.	Cadmium
H05.	Chromium
H06.	Copper
H07.	Lead
H08.	Mercury
H09.	Nickel
H10.	Selenium
H11.	Silver
H12.	Thallium
H13.	Zinc
H99.	Metals not specified above

## **8.0 Photographs**

**Photo #1.** An ISCO automatic composite sampler was set-up at the monitoring location.



**Photo #2.** Sample aliquots were collected during the 24-hour sampling event.



**Photo #3.** Due to accessibility, O&G samples were collected from the sump pit in Building #2.

