UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

Date: *Dated as shown on electronic signatures*

Subj: Inspection Report
Clean Water Act
Timken Aerospace

From: John (Jack) Melcher, Enforcement Officer

JOHN MELCHER Digitally signed by JOHN MELCHER
Date: 2022.11.04 11:18:01 -04'00'

Michelle Coombs, Inspector

MICHELLE COOMBS Digitally signed by MICHELLE COOMBS
Date: 2022.11.04 12:22:31 -04'00'

Appendices:

Appendix A - Timken City Industrial Discharge Permit 2022 DRAFT
Appendix B - Photographs
Appendix C - 2014 Process Flow Diagrams
Appendix D - September 20 and 21 Water Usage
Appendix E - Stormwater Drainage Plan
Appendix F - Monitoring and Reporting Procedures
Appendix G - Volatile Organic Compounds
Appendix H - Base Neutral and Acid Extractables
Appendix I - Total Cyanide
Appendix J - Pesticides and PCBs
Appendix K - Total Metals

I. Facility Information

A. Facility Name: Timken Aerospace

B. Facility Location: 336 Mechanic Street
Lebanon, NH 03766

C. Facility Contacts: Aaron Mills, Area Manager – Support Services
603-442-6929, aaron.mills@timken.com

Nelson Lewis, Plant Manager

D. NPDES ID No(s).: NHPIU0012 (wastewater pretreatment)
NHR053126 (stormwater)

II. Background Information

A. *Date(s) of inspection:* September 20 - September 21, 2022

B. *Weather Conditions:* Heavy rain during the evening of September 20

C. *US EPA Representative(s):*
John (Jack) Melcher, Enforcement Officer
Michelle Coombs, Inspector
Shannon Brunelle, Inspector

D. *State/Local Representative(s):*
Adam Lewis, Chief of Quality Assurance, City of Lebanon (September 20 only)

E. *Federally Enforceable Requirements Covered During the Inspection:*
40 C.F.R. Part 403 – General Pretreatment Regulations for Existing and New Sources of Pollution[1]
40 C.F.R. § 433.17 – Metal Finishing Point Source Category, Pretreatment Standards for New Sources[2]
40 C.F.R § 122.26 – National Pollutant Discharge Elimination System ("NPDES") regulation for the discharge of stormwater

F. *Previous Enforcement Actions:*
No EPA Clean Water Act enforcement actions are on record since at least April 8, 2010.

III. Type and Purpose of Inspection

EPA conducted an Industrial User ("IU") Evaluation Inspection and an IU Sampling Inspection to evaluate compliance with the General Pretreatment Regulations at 40 C.F.R. Part 403 and the Metal Finishing Point Source Category, Pretreatment Standards for New Sources at 40 C.F.R. § 433.17 ("Metal Finishing PSNSs").

EPA conducted a Compliance Evaluation Inspection to evaluate compliance with the NPDES regulation for the discharge of stormwater at 40 C.F.R § 122.26.

IV. Facility Description

Timken Aerospace ("Timken" or "the Facility") is a manufacturer of precision ball and roller bearings for the aerospace industry.

[1] Available at: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-N/part-403?toc=1

[2] Available at: https://www.ecfr.gov/current/title-40/chapter-I/subchapter-N/part-433?toc=1

EPA's Enforcement Compliance History Online ("ECHO") website provides general environmental compliance data for Timken.[3]

A. Wastewater

Timken discharges to the City of Lebanon Publicly Owned Treatment Works ("POTW"; NPDES Permit No. NH0100366). The City's Wastewater Treatment Facility is an activated sludge plant with a design flow of 3.18 million gallons per day. The City's NPDES Permit does not require the City to implement a federally-approved industrial pretreatment program. Therefore, EPA Region 1 is the pretreatment "Control Authority" for Timken.

Processes discharging wastewater to the POTW include chemical etching, passivation, cleaning, and tumbling.

Average daily process wastewater flows are approximately 5,000 gallons per day with maximum daily flows of approximately 20,000 gallons per day.

EPA's previous on-site inspection to evaluate the facility's compliance with pretreatment standards was on March 21, 2007.

New Hampshire Department of Environmental Services performed a pretreatment inspection in February 2020.

The City of Lebanon issues Timken an Industrial Discharge Permit and performs annual sampling inspections of the Facility. The City's draft permit, dated August 11, 2022, is included as Appendix A of this report.

B. Stormwater

On January 15, 2021, EPA issued the NPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity ("2021 MSGP").

Timken submitted a Notice of Intent for coverage under the 2021 MSGP on May 26, 2021. The Notice of Intent states that the Facility's primary Standard Industrial Classification code is 3562 (Ball and Roller Bearings Manufacturing). Therefore, Section AB (Transportation Equipment, Industrial or Commercial Machinery Facilities) of the 2021 MSGP are applicable to the Facility.

EPA's previous on-site inspection to evaluate the facility's compliance with the MSGP was on March 21, 2007.

V. Inspection

Unless otherwise noted, this report describes conditions at the Facility/property as observed by EPA inspector(s), and/or through records provided to and/or information

[3] Available at: https://echo.epa.gov/detailed-facility-report?fid=110000313955

reported to EPA inspector(s) by Facility representatives and as understood by the inspector(s). This report may not capture all operations or activities ongoing at the time of the inspection. This report does not make final determinations on potential areas of concern. Nothing in this report affects EPA's authorities under federal statutes and regulations to pursue further investigation or action.

Observations made and descriptions provided by Facility representatives have been organized according to topic in this report; the report does not necessarily reflect the order in which topics were addressed during the inspection.

Mr. Melcher announced the inspection to the Facility on September 20, 2022.

Mr. Melcher and Adam Lewis arrived at approximately 10:30.

A. Opening Conference

Mr. Melcher and Adam Lewis met with Mr. Mills. Mr. Melcher explained the purpose of the inspection.

Mr. Mills said that Timken has multiple facilities, including in Keene, New Hampshire; North Carolina; South Carolina; and Ohio. The company is based in Ohio. The Lebanon, New Hampshire facility has approximately 250 employees.

Mr. Mills explained that Scott Turgeon, former Environmental Coordinator for the Lebanon and Keene, New Hampshire facilities separated from Timken in April 2022. Mr. Mills supervised Mr. Turgeon and is now filling Mr. Turgeon's duties at the Lebanon facility.

Mr. Mills said that Timken operates three shifts, with first shift from 07:00 to 15:00 being the busiest. The second shift, from 15:00 to 23:00, has approximately half of the staff as first shift. The third shift is a "skeleton crew" focusing on high need production areas.

Mr. Mills showed a site plan showing the location of the wastewater sampling manhole to the northeast of the building. Wastewater pipes leave the building at several locations and flow through a series of manholes before connecting to the City's POTW. Mr. Mills said that no stormwater drains are known to be connected to the wastewater pipes.

B. Sampling Manhole

Mr. Melcher, Adam Lewis, and Mr. Mills went to the sampling manhole, where they were joined by Nelson Lewis, Plant Manager for the Facility and two representatives of Pathways Consulting, LLC, Jake and Megan.

Select photographs taken during the inspection are included as Appendix B of this report. The time and date stamp on the photographs provides the incorrect month in the date. All photographs were taken on September 20 and 21, 2022. Photograph 1 shows the interior of the sampling manhole.

Jake and Megan explained that they use the City Industrial Discharge Permit as a reference in performing sampling. Biochemical Oxygen Demand monitoring is performed quarterly. Monitoring for the metals, cyanide, and Total Toxic Organics ("TTOs") listed in the Metal Finishing PSNSs is performed semi-annually. Monitoring for other parameters required by the City, including sulfate, aluminum, arsenic, iron, Total Suspended Solids, sulfite, Total Kjeldahl Nitrogen, Oil and Grease, and Total Petroleum Hydrocarbons is also performed semiannually. Monitoring for pH of the final effluent occurs at the start and the finish of semiannual composite sampling. Composite sampling for metals in the Metal Finishing PSNSs is time-proportioned.

Mr. Melcher said that, in most reports, the parameters detected in TTO monitoring are not enumerated. For example, the Facility's report dated July 15, 2022, states that 875 micrograms per liter of TTOs were detected but does not identify which ones. Mr. Melcher requested that chain-of-custody and laboratory analysis reports be provided along with semi-annual compliance reports to EPA.

Mr. Melcher asked what methods were used to analyze samples for TTOs. Megan said that sample were analyzed for volatile organics. Mr. Melcher said that, to capture the entire list of TTOs, three methods were needed: volatile organics, semivolatile organics, and pesticides and Polychlorinated Biphenyls ("PCBs"). Adam Lewis said that in its triennial permit application, the Facility was required to sample for pesticides and PCBs. Mr. Melcher recommended that the Facility utilize the provision in the Metal Finishing Standards that allow for certification in lieu of monitoring for TTOs.

Ms. Coombs and Ms. Brunelle joined the group and installed EPA's automated sampling unit in the sampling manhole. Details of EPA's sampling are provided in Section VI, below.

C. Wastewater

1. Records Review

At approximately 12:45, Mr. Melcher, Ms. Coombs, and Ms. Brunelle (the "EPA inspectors"), Adam Lewis, Mr. Mills, and Nelson Lewis convened in a conference room to plan a tour of the Facility's processes generating metal finishing wastewaters. The EPA inspectors showed their credentials.

Mr. Melcher showed a series of Process Flow Diagrams, dated January 2014, that show various processes generating wastewater at the Facility (Appendix C). The diagrams were provided by the New Hampshire Department of Environmental Services ("NH DES"). Mr. Mills said that the wastewaters labeled "drain" flow to the POTW without treatment; the wastewaters labeled "ultrafiltration" flow to the Facility's ultrafiltration system prior to discharge. All process wastewaters and non-process (e.g., sanitary) wastewater flowing to the POTW are directed through the sampling manhole.

The following processes send wastewaters to the ultrafiltration unit:

- Heat Treatment / Wash Line,

- Fluorescent Penetrant Inspection (also known as "Zylgo"),
- Ultrasonic Station, and
- Mop water.

The following processes send wastewaters to the POTW untreated:

- Nital Etch,
- Wash,
- Tumble / Tumble Area,
- Roller Tumbler,
- Black Oxide – M50 Steel,
- Black Oxide / Passivation 52-100 Steel,
- Superwash, and
- Passivation (Hot & Cold).

Mr. Mills provided Mr. Melcher with a copy of a letter from Sanborn, Head & Associates on behalf of Timken, dated February 2010, providing a Notice of Termination for coverage under the NPDES Remediation General Permit. Mr. Mills said that the groundwater pumping and treatment system was still operating and now discharges to the City's POTW.

Mr. Mills said that the Facility had two reverse osmosis units but he did not believe that reject wastewaters were generated by the units.

Mr. Mills said that he did not know where boiler blowdown wastewaters were discharged.

Mr. Mills said that Ian Cattabringe, Fluids Technician with the Facility's contractor Brenntag, was knowledgeable regarding operation of the ultrafiltration system and disposal of wastewaters from throughout the Facility.

2. Ultrafiltration System

The EPA inspectors, Adam Lewis, Mr. Mills, and Nelson Lewis met Mr. Cattabringe at the ultrafiltration room.

Mr. Cattabringe explained the flow of wastewater through the ultrafiltration room. Wastewaters are directed to a sump in the floor of the ultrafiltration room known as the "mop pit." A pump draws wastewater through a cartridge filter and into storage tanks 2 and 3. Photo 2 shows the pump, with the opening in the mop pit for mop water dumping visible on the right of the photograph and the filter visible on the left of the photograph. Photo 3 shows Storage Tanks 2 and 3. Wastewater is pumped from Storage Tanks 2 and 3 to Storage Tank 1 (Photo 4).

Wastewater flows from Storage Tank 1 the Process Tank for treatment (Photo 5). Wastewater is circulated from the Process Tank through an additional cartridge filter and the ultrafilter (Photo 6). The ultrafiltration system functions by directing wastewater through the center of the pipe containing the ultrafilter at a high pressure. Water passes

through the ultrafiltration membrane into an annular space and then is discharged. Impurities do not pass through the ultrafiltration membrane and stay in the center of the pipe, returning to the Process Tank. Discharge from the system goes through a pipe into the floor and then, with other Facility wastewater, to the sampling manhole and the City's POTW. Mr. Cattabringe said that it is not possible to bypass the ultrafiltration system and discharge to the City's POTW from the storage tanks.

A Programable Logic Controller is observed on the wall (Photo 7). Flow is displayed both instantaneously and as a total flow.

During treatment, additional wastewater is added to the Process Tank from Storage Tank 1 and wastewater is continually cycled through the ultrafilter system. Concentrations of impurities in the Process Tank and the ultrafilter increase and begin to decrease the flow rate of the treated water discharge. When the ultrafilter is clean, discharge flow rates are typically two to three gallons per minute. When discharge flow rates reach approximately one gallon per minute, operators cease adding wastewater to the Process Tank and the existing wastewater is processed through the ultrafilter to further concentrate the residual. Residual wastewater is concentrated to approximately 75 gallons and then removed from the Process Tank for shipment off-site. Following removal of residuals, clean water and bleach is run through the ultrafiltration system (known as "cleaning mode").

At the time of the inspection, the ultrafiltration system was being operated in cleaning mode. No discharge from the system was expected until September 22 or 23 (after the EPA sampling has concluded).

Hydrogen ion concentration ("pH") of the discharge from the ultrafiltration system is not typically monitored but is checked during quarterly maintenance.

Maintenance of the ultrafiltration system also includes the addition of a blue due; observation of the dye in the discharge from the system indicates that a leak is present.

3. Wastewater-Generating Processes

Mr. Cattabringe said that the Heat Treatment / Wash Line wastewaters were pumped directly to the ultrafiltration room mop pit. The Heat Treatment / Wash Line was not viewed.

Mr. Cattabridge said that the other processes sending wastewater to the ultrafilters first discharge into a second sump, the "Zyglo mop pit," located adjacent to the Fluorescent Penetrant Inspection equipment (Photo 8).

The group went to the Fluorescent Penetrant Inspection (also known as "Zylgo") process. A container labeled "Zyglo ZR-10E Hydrophilic Emulsifier" was observed. Mr. Mills said that the Zylgo liquid is used to look for part defects under a fluorescing light.

The group viewed the Ultrasonic Station. Parts are cleaned in baths of mild detergent, agitated at a high frequency.

The group viewed the Nital Etch process. Two lines, one line for large parts or batches, and one line for small parts of batches, were observed. Parts are etched with nitric acid and alchohol. Although the nitric acid is not discharged as wastewater, a continuous rinse tank discharges rinse water. Mr. Mills said that, over the last few years, the Facility has been moving to reduce its water use by limiting the amount of time that continuous rinse tanks are discharging. Mr. Cattabridge said that spent nital etch baths are shipped off-site approximately once per month.

Nelson Lewis said that most of the metal used in the Facility's products is "M50 steel." M50 steel maintains its mechanical properties even when heated to high temperatures.

The group viewed the Wash process. At the Wash process, like most other processes, wastewater discharge locations were not visible. Mr. Cattabridge said that wastewaters were piped away from baths and flowed below the floors. Like other processes, the pH of wastewaters was not regularly monitored.

The group viewed the tumbling processes. Unlike other processes, tumbling wastewaters were collected in an open drain along the wall of the room.

The group viewed the Black Oxide Room. Two lines were observed. Wastewater discharges included detergent and water.

The group viewed the Superwash process. Like other processes, baths were labeled with their contents.

The Passivation (Hot & Cold) processes were not viewed.

4. Records Review (Continued)

At approximately 14:15, the EPA inspectors, Mr. Mills, and Nelson Lewis returned to the conference room to continue to review records.

Mr. Mills showed the EPA inspectors a spreadsheet maintained by the Facility of water intake flows. Daily logs of water intakes for various processes are maintained. The spreadsheet is provided to Pathways periodically for reporting to the City and EPA. The nital etch process is the largest single contributor of process wastewater, with 60,000 gallons out of 214,000 gallons (28%) for an example month.

Following the inspection, Mr. Mills provided EPA with a copy of the spreadsheet for September 1 through 21, 2022. Appendix D shows a portion of the spreadsheet, modified by EPA for purposes of inclusion in this report. On September 20, process wastewaters comprised approximately 7,800 gallons of the total 10,000 gallons (76%) of flow to the POTW. On September 21, process wastewaters comprised approximately 7,50 gallons of the total 11,000 gallons (68%) of flow to the POTW. The semiannual reports provided by the Facility typically use a Combined Wastestream Formula ration of 0.662, which is more conservative than the percentage of process wastewaters for the days of EPA sampling.

Mr. Melcher asked Mr. Mills if detergents spilled in the tumbling room had the potential to disrupt operations at the City's POTW. Mr. Melcher provided a copy of a letter sent by NH DES, dated February 2020, asking the Facility to provide confirmation of installing a spill containment system or other spill management practice. Mr. Mills said that he was not aware of the conversation with NH DES and would investigate the matter.

D. Stormwater

1. Records Review

Mr. Melcher said that EPA's data system showed that the Facility did not submit a Discharge Monitoring Report of Indicator Monitoring for the period from October 1, 2021, through December 31, 2021. As a result, the Facility is listed on EPA's ECHO website as in Type I ("significant") non-compliance. Mr. Mills said that he would investigate the matter and submit results if monitoring had, in fact, been performed.

Mr. Melcher read the summary of corrective action from the Facility's 2021 MSGP Annual Report, dated January 26, 2022, "Corrective actions included rebuilding a stone wall on retention pond and 2022 will see a reevaluation of control measures to better contain stormwater and slow flow to avoid erosion." Mr. Mills said that a project had been funded and would commence soon to improve erosion controls at the stormwater basin at the Facility's stormwater outfall to the northeast of the building.

Mr. Mills provided the EPA inspectors with a paper copy of the Facility's Stormwater Pollution Prevention Plan ("SWPPP") and associated records of training, Quarterly Visual Monitoring, and Routine Facility Inspections. Mr. Mills agreed to let the EPA inspectors review the SWPPP off-site. The EPA inspectors departed at 15:00 on September 20.

Following the inspection, Mr. Mills provided Mr. Melcher with an electronic copy of the SWPPP. The SWPPP Stormwater Drainage Plan is provided in Appendix E.

2. Roof Vents

The EPA inspectors returned to the Facility at approximately 07:00 on September 21.

The EPA inspectors and Mr. Mills visited the Heat Treat Room to observe equipment venting to the roof that are potential stormwater pollutant sources.

Mr. Mills pointed out a carburetor furnace. The carburetor furnace heats parts prior to dipping the parts in metal. Parts are clean when they enter the carburetor furnace and Mr. Mills said he did not think that the carburetor furnace was a likely pollutant source.

Mr. Mills pointed out a "burn-off machine." The burn-off machine is used to blend propane and methane used by the carburetor furnace. Propane is occasional burned off. Mr. Mills said he did not think that the burn-off machine was a likely pollutant source.

Mr. Mills pointed out an "oil pot machine." The oil pot machine quenches hot parts in oil. Mr. Mills said that the oil pot machines (there are three) are potential sources of oil in stormwater discharges.

The EPA inspectors and Mr. Mills visited the roof of the Facility. The vent for the carburetor furnace was observed. The vent for the burn-off machine was observed. No evidence of potential stormwater pollutants was observed at either vent.

The vent for an oil pot was observed (Photo 9). Mr. Mills said that the vent was designed to prevent oils from escaping. Oils are trapped in a trough between the bowl and the vertical stack. Excess oils can flow through a white pipe visible on the lower part of the vent and flow back to the oil pot. Mr. Mills said that he performs monthly inspections of the oil pot vents, looking for oil residue on the roof, in the nearby roof drain, and for excessive build-up in the trough. An outside contractor cleans the vents annually.

The boiler stacks were observed. Mr. Mills said that the Facility has stopped using fuel oil for heating and now uses only propane. The "Savasol" vent was observed. Mr. Mills said that Savasol was a solvent. No evidence of potential stormwater pollutants was observed at the stacks or the vent.

The Superwash and nital etch vents were observed. Mr. Mills said that the vents are present to remove excess vapors for operator safety and he does not think that the vents are likely sources of stormwater pollutants.

3. Building Perimeter

The EPA inspectors and Mr. Mills toured the building perimeter.

Plastic totes and metal drums were observed under an overhang on the northwest side of the building. Mr. Mills said that these containers were all empty and awaiting pickup. Mr. Mills said that containers with liquids inside were only stored inside the "Flam Locker," which has an integrated secondary containment system.

Mr. Mills pointed out a loading dock and said that it was used for bulk liquid deliveries (Photo 10). Mr. Mills said that the drain in the loading dock is covered with a mat during deliveries.

A roll-off dumpster with no cover was observed (Photo 10). The dumpster contained scrap wood. A sign next to the dumpster read, "wood only." Filter socks were placed around the dumpster. Mr. Mills said that some dumpsters had holes and the filter socks would trap pollutants carried by stormwater flowing out of these holes.

Two dumpsters were observed, labeled as recycling (Photo 11). Both dumpsters had covers but both were open. The dumpster on the left contained various materials, including metals scraps and foam board (Photo 12). Only cardboard was observed in the dumpster on the right.

A trash dumpster located inside a garage was observed.

The EPA inspectors and Mr. Mills walked along the edge of the parking lot on the north side of the building. Curbing was not present at the edge of pavement, but an earthen berm was present outside of the pavement. Several catch basins were observed; no oil sheen was present in any of the catch basins. Mr. Melcher asked if the catch basin sumps were cleaned to maintain a depth available for solids removal. Mr. Mills said that he was not aware of when catch basins had been cleaned and did not track the depth of solids in the sumps.

Mr. Mills pointed out a loading dock on the east side of the building where non-liquid deliveries were made. Mr. Mills said that a sensor at the loading dock automatically inflated a bladder when a truck entered the loading dock. Following a delivery, employees inspect the catch basin at the loading dock and then deflate the bladder if no spills had occurred.

The concrete "bunker" containing above-ground fuel oil and waste oil tanks on the east side of the building were observed. Mr. Mills said that fuel is no longer used by the Facility and these tanks are empty. Mr. Mills said that a spill kit is available in the overpack drum located on top of the bunker. Mr. Mills said that when pick-up of waste oil is performed, catchbasins in the vicinity are covered with mats.

The Facility's SWPPP states that the Facility has an oil Spill Prevention Control and Countermeasures plan.

E. Closing Conference

The EPA inspectors, Mr. Mills, and Nelson Lewis held a closing conference at approximately 08:30 on September 21.

Mr. Melcher provided a copy of EPA Region 1's Monitoring and Reporting Procedures document (an updated version of which is included as Appendix F). Mr. Melcher explained that the Facility's semiannual compliance reports should include copies of laboratory analytic reports and a chain of custody for sampling events. Mr. Melcher said that, in the future, semiannual compliance reports should be submitted in hard copy and electronically to the addresses provided in the Monitoring and Reporting Procedures document. Mr. Melcher said that notifications required by the General Pretreatment Regulations, including non-compliance notifications, should be sent to the email address included in the Monitoring and Reporting Procedures document.

Mr. Melcher summarized observations made during the inspection, including potential areas of concern.

1. Wastewater

Mr. Melcher said that the Facility's semiannual reports did not contain analysis for all TTOs nor provide a certification in lieu of monitoring. Additional information on certification in lieu of monitoring would be provided in an updated version of the Monitoring and Reporting Procedures document, to be provided following the inspection.

Mr. Melcher said that the lack of continuous monitoring of the pH of the Facility's discharge creates a potential for non-compliance with the federal prohibition on discharge to the POTW below 5 S.U.

2. Stormwater

Mr. Melcher said that the training records included with the Facility's SWPPP were from 2019. Mr. Mills said that these were the most recent training records he could locate.

Mr. Melcher said that the SWPPP was signed by the former Plant Manager, Todd Laquerre and that the SWPPP Coordinator, the SWPPP Team Member, and the Facility Emergency Contact were all Scott Turgeon, the former Environmental Coordinator. Mr. Melcher recommended updating the SWPPP.

Mr. Melcher provided the following summary of Quarterly Visual Monitoring, and Routine Facility Inspections records included with the Facility's SWPPP.

- 2020:
    - Only one Quarterly Visual Monitoring record and
    - All monthly Routine Facility Inspections records are present;
- 2021:
    - Only one Quarterly Visual Monitoring record and
    - Only two monthly Routine Facility Inspections records are present;
- 2022:
    - The Quarterly Visual Monitoring record for January through March is missing and
    - The monthly Routine Facility Inspections records for January through March are missing.

The SWPPP site plan does not include the site acreage.

Mr. Melcher said that the 2021 MSGP requires that facilities keep all dumpster lids closed when not in use. For dumpsters and roll off boxes that do not have lids and could leak, ensure that discharges have a control (e.g., secondary containment, treatment). The roll-off dumpster containing wood was not covered, but perhaps the filter socks placed around the dumpster could be considered treatment. A dumpster containing metals scraps and foam board was observed with the dumpster lid open.

Mr. Melcher said that the 2021 MSGP requires that facilities clean catch basins when the depth of debris reaches two-thirds of the sump depth and keep the debris surface at least six inches below the lowest outlet pipe. Mr. Melcher recommend that the Facility's Routine Facility Inspections include an assessment of the depth of sediment in catch basin sumps.

The EPA inspectors departed at approximately 08:45 on September 21.

VI. Wastewater Sampling

EPA collected samples of the facility's pretreated effluent discharged to the Lebanon Wastewater Treatment Facility during the inspection beginning on September 20, 2022. The compliance monitoring point is located in the sewer manhole in the parking lot on the northeast side of the building. EPA offered to take split samples for the facility to analyze. Mr. Mills declined the offer for split samples. The sampling activities were conducted in accordance with the Standard Operating Procedure for the Collection of Chemical and Biological NPDES Water and Wastewater Samples (*FSBSOP-NPDESWater2*).

On September 20, 2022, at approximately 11:30, EPA representatives deployed an ISCO model 6712 automatic sampling device with twenty-four (24) aliquot containers inside, with a delayed start of 30 minutes. The purpose of the automatic sampler deployment was to collect a time-composited sample of the facility's discharge for the analysis of metals from the compliance monitoring point. EPA programmed the ISCO to pump 120mL of sample 4 times per hour (every 15 minutes) into each of the 24 aliquot bottles for 24 hours, so that each bottle would represent one hour of wastewater discharge activity during a 24-hour period.

On September 21, 2022, at approximately 12:03, EPA collected grab samples ("Timken-G") for analysis of volatile organic compounds (VOCs), base/neutral and acid extractables (BNAs) (otherwise known as semi-volatile organic compounds), pesticides, polychlorinated biphenyls (PCBs), and total cyanide from the flow discharging from the sewer manhole. An instantaneous grab sample was collected for the in-situ measurement of pH and Total Residual Chlorine (TRC). The sample was field tested for pH using an Oakton "pHtester" pH meter and TRC using a HACH "DR300" colorimeter. The pH was 8.03 Standard Units (S.U.) and the TRC was 0.00 mg/L. The total cyanide sample was collected in a 250-mL HDPE container and preserved with sodium hydroxide to attain a pH of above 12 S.U. The BNAs samples were collected in 1-liter amber jars with no preservative added. The pesticides/PCBs samples were collected in 1-liter amber jars with no preservative added. The VOC samples were collected in 40-mL amber vials and preserved with hydrochloric acid to attain a pH of less than 2 S.U.

On September 21, 2022, at approximately 12:10, EPA collected the composite sample for the analysis of total metals ("Timken-C"). Upon retrieving the sampler from the manhole, it was discovered that the battery died at approximately the 20th hour of sampling, therefore, only bottles 1-20 were full or almost full of sample. This means that the sampler collected discharge starting around 12:00 on September 20 and ended around 8:00 on September 21. Each sample aliquot bottle was emptied into a 5 gallon "cube-pack" container and homogenized. The sample was transferred from the homogenized "cube-pack" container into the sample bottle. The total metals sample was collected in a 250-mL HDPE container and preserved with nitric acid to attain a pH of less than 2 S.U.

No duplicate samples were collected during the sampling inspection. All samples were placed in coolers with ice to maintain an internal temperature of less than 4 degrees

Celsius and delivered to the to the EPA New England Regional Laboratory in North Chelmsford, MA to be analyzed.

The table below provides a summary of the laboratory analytical results and field parameters collected during the inspection. The sample "Timken-G" refers to the grab samples collected and the sample "Timken-C refers to the composite sample collected. For a full list of compounds analyzed for each parameter and their results, refer to laboratory reports that are attached to this inspection report.

Table 1: Summary of Timken Aerospace 09/20/22 Inspection

Sample #	**Sample Date and Time**	**Sample Type**	**pH (S.U.)**	**TRC (mg/L)**	**Analytical Results (mg/L unless otherwise noted)**		**Pretreatment Standards for 40 CFR 433.17**	
							Daily Maximum (mg/L)	**Monthly Average (mg/L)**
Timken-G	9/21/22 12:03 HRS	Grab	8.03	0.00	**VOAs[1,2]** Chloroform	0.0064	2.13	N/A
					BNAs[1,4]	See report	2.13	N/A
					Total Cyanide	ND	1.20	0.65
					Pest/PCBs[1]	See report	2.13	N/A
Timken-C	9/20/22 - 9/21/22 12:00-~08:00 HRS	Composite	N/A	N/A	**Total Metals[3,4]**			
					Cadmium	ND	0.11	0.07
					Chromium	ND	2.77	1.71
					Copper	0.082	3.38	2.07
					Lead	ND	0.69	0.43
					Nickel	ND	3.98	2.38
					Silver	ND	0.43	0.24
					Zinc	ND	2.61	1.48

Notes:

1: Compounds that were analyzed but not listed in this table are Not Detected above Reporting Limit (ND).

2. Compounds listed are detected Total Toxic Organics (TTO) subject to the Metal Finishing Point Source standards under 433.17.

3: Metals within the pollutants of concern under the Metal Finishing Point Source Category under 40 CFR 433.17.

4. Additional compounds not subject to the standard were detected but are not listed in this table.