



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

Date: *Dated as shown on electronic signature(s)*

Subj: Inspection Report
Clean Water Act
Hutchinson Sealing Systems

From: John (Jack) Melcher, Enforcement Officer

JOHN MELCHER Digitally signed by JOHN MELCHER
Date: 2023.11.01 11:36:36 -04'00'

Thru: Damian Bednarz, Enforcement Officer

DAMIAN BEDNARZ Digitally signed by DAMIAN
BEDNARZ
Date: 2023.11.01 11:41:26 -04'00'

To: File

Appendices: Appendix A - Schematic Process Diagram
Appendix B - Photographs
Appendix C - Email with Production Levels

I. Facility Information

- A. *Facility Name:* Hutchinson Sealing Systems
- B. *Facility Location:* 171 Exeter Rd #169
Newfields, NH 03856
- C. *Facility Contacts:* Gary Smart, Health, Safety & Environmental Manager
603-775-2448, gary.smart@hutchinsonna.com

Eric Gallant, Chemical Technician
603-702-2607
- D. *NPDES ID No(s):* NHPIU0015 (pretreatment)
NHNOE3024 (stormwater)

II. Background Information

- A. *Date(s) of inspection:* September 19, 2023

B. Weather Conditions: Clear, mild

Heavy rain on September 18

C. US EPA Representative(s):

John (Jack) Melcher, Enforcement and Compliance Assurance Division
("ECAD")

Damian Bednarz, ECAD

Shannon Shea, Laboratory Services and Applied Science Division ("LSASD")

Nafisah Ali, LSASD

D. State/Local Representative(s):

Zachary Lorch, Industrial Pretreatment Program Coordinator, New Hampshire
Department of Environmental Services ("NH DES")

Paula Boyle, Pretreatment Consultant to Town of Newfields, Hoyle Tanner

Josh Scotton, Wastewater Treatment Facility Contract Operator for the Town
of Newfields, RCM Systems

E. Federally Enforceable Requirements Covered During the Inspection:

40 C.F.R. Part 403 – General Pretreatment Regulations for Existing and New
Sources of Pollution¹

40 C.F.R. Part 428 – Rubber Manufacturing Point Source Category²

40 C.F.R. § 122.26 – National Pollutant Discharge Elimination System
("NPDES") regulation for the discharge of stormwater³

F. Previous Enforcement Actions:

No previous Clean Water Act enforcement actions are in EPA's files.

III. Type and Purpose of Inspection

EPA conducted a routine Industrial User ("IU") Evaluation Inspection to evaluate compliance with the General Pretreatment Regulations at 40 C.F.R. Part 403 and the Rubber Manufacturing Point Source Category at 40 C.F.R. Part 428.

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

IV. Facility Description

Hutchinson Sealing Systems operates a manufacturing facility in Newfields, New Hampshire (the "Facility" or "Hutchinson").

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-428?toc=1>

³ Available at: <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-122/subpart-B/section-122.26>

EPA's Enforcement Compliance History Online ("ECHO") website provides general environmental compliance data for Hutchinson.⁴

EPA's previous on-site inspection to evaluate Clean Water Act compliance was on August 8, 2008.

A. Wastewater Pretreatment

Hutchinson discharges to the Town of Newfields ("Town") Publicly Owned Treatment Works ("POTW"; NPDES Permit No. NHG580011). The Town's wastewater treatment facility uses aerated lagoons and has a design flow of 0.117 million gallons per day. The POTW NPDES Permit does not require the Town to implement a federally-approved industrial pretreatment program. Therefore, EPA Region 1 is the pretreatment "Control Authority" for Hutchinson.

On November 18, 2008, Hutchinson provided EPA with a Baseline Monitoring Report providing that the Facility discharged wastewater from a Large Sized General Molded, Extruded, and Fabricated Rubber Parts, as described in 40 C.F.R. Part 428, Subpart G, and its discharges to the Town of Newfields' POTW were subject to the pretreatment standards for new sources at 40 C.F.R. § 428.76. The standards at 40 C.F.R. § 428.76 provide a daily maximum limit of 100 milligrams per liter of oil and grease.

The Baseline Monitoring Report indicates that the Facility has an "Abcor" ultrafiltration system used to treat some of its wastewaters, but not its rubber manufacturing wastewaters.

EPA's review of the Facility's Periodic Reports on Continued Compliance since January 1, 2018, found no exceedances of the oil and grease standard in 40 C.F.R. § 428.76 or the general prohibition on low-pH discharges at 40 C.F.R. § 403.5(b)(2).

EPA's review of flow information from the Facility's Periodic Reports on Continued Compliance indicated a total average daily flow (for all industrial wastewaters from the Facility) of approximately 800 gallons per day and maximum daily wastewater flows are approximately 2,500 gallons per day. The Facility reports no discharge of rubber manufacturing wastewaters since the six-month reporting period ending on May 31, 2021.

B. Stormwater

Hutchinson submitted a No Exposure Certification for exclusion from EPA's Multi-Sector General Permit for stormwater discharges associated with industrial activity, dated October 20, 2020, stating that the Facility's primary Standard Industrial Code ("SIC") Code is 3069 (Fabricated Rubber Products, Not Elsewhere Classified). The No Exposure Certification includes an exposure checklist, where the Facility stated that none of the

⁴ Available at: <https://echo.epa.gov/detailed-facility-report?fid=110000314080>

listed materials or activities were exposed to precipitation. The No Exposure Certification expires on October 20, 2025.

V. Inspection

I announced the inspection to the Facility on September 12, 2023.

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 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.

The EPA inspectors, Mr. Lorch, Ms. Boyle, and Mr. Scotton arrived at approximately 09:00.

A. Opening Conference

At approximately 09:10, the EPA inspectors, Mr. Lorch, Ms. Boyle, and Mr. Scotton met with Mr. Smart and Mr. Gallant.

Ms. Shea, Mr. Bednarz, and I presented our Clean Water Act inspector credentials and I explained the purpose of the inspection.

Mr. Smart said that the Facility was constructed in 1978 and its primary business was manufacturing weatherstripping for automotive industry Original Equipment Manufacturers. As a secondary business, the Facility manufactures other products, such as seals for incubators. Automotive parts are made from ethylene propylene diene monomer ("EPDM") rubber, plastic, and metal (including steel, stainless steel, and aluminum). Other products are made from EPDM rubber, plastic, and silicon.

Mr. Smart said that Hutchinson is an international company based in Paris, France. The North American Division of Hutchinson includes three facilities in the United States and one in Mexico. Later in the inspection, Mr. Smart said that there were approximately 300 employees at the Facility, working three shifts, six days per week.

Mr. Smart said that the "strategic direction" (i.e., the expected future focus area) for the Facility was plastic extrusion. Rubber extrusion production has decreased over the years; in the mid-1990's the Facility had seven rubber extrusion lines, but currently has two rubber extrusion lines in operation.

I described schematic process diagram included in the Facility's 2008 Baseline Monitoring Report. The diagram is included as Appendix A of this report.

Mr. Smart said that the Facility performs rubber extrusion by squeezing rubber through a die onto a metal carrier. Parts are subsequently cured in a hot air oven and then cooled in

water. The cooling water is the wastestream subject to the Rubber Manufacturing Point Source Category at 40 C.F.R. Part 428.

Mr. Smart said that the Facility has an ultrafiltration unit (“the Abcor unit”) that is used to clean some wastewaters, but not the rubber extrusion wastewaters. All cleaning waters (including metal cleaning and floor cleaning) and compressor blowdown wastewaters are directed to the Abcor unit.

I said that the 2008 Baseline Monitoring Report states that the Facility is subject to the Large Sized General Molded, Extruded, and Fabricated Rubber Plants Subcategory in 40 C.F.R. Part 428 Subpart G, while the Town’s permit, effective on January 1, 2021, states that the Facility is subject to the Small Sized General Molded, Extruded, and Fabricated Rubber Plants Subcategory in 40 C.F.R. Part 428 Subpart E.

Ms. Boyle said that, because the Town’s POTW discharges are upstream of Great Bay, the POTW NPDES permit includes stringent limits for nitrogen. Mr. Gallant said that the Facility performed a review of chemicals discharged to the POTW and found that some cleaning chemicals contain nitrogen as ammonia. The Facility has made process changes to reduce discharges of these cleaners and provides the Town with semi-annual reports on the amounts discharged.

Mr. Scotton said that the POTW has not removed sludge from its lagoons for 30 years, but they have applied for State Revolving Fund money to do so.

Mr. Scotton said that the POTW has about 220 customers in total.

Mr. Smart said that wastewater was pumped to the Town’s POTW through a force main that runs parallel to the railroad tracks to the east of the building.

Mr. Lorch said that NH DES’s records did not reflect that an Indirect Discharge Request (“IDR”) had been approved by the State. The IDR can be submitted when the Town permit is re-issued. The current Town permit expires on December 31, 2024.

Mr. Smart said that the Facility has a machine shop but did not perform metal finishing.

Selected photographs from the inspection are provided in Appendix B of this report. Photograph 1 shows examples of the Facility’s products. The Facility manufactures weatherstripping for automobile doors and windows. Mr. Smart says that, in 2008, the Facility pioneered “in-line” production of these parts.

B. Facility Tour

1. Line 13 – Rubber Extrusion Line

At approximately 10:15, the EPA inspectors, Mr. Lorch, Ms. Boyle, Mr. Scotton, Mr. Smart, and Mr. Gallant visited “Line 13,” a rubber extrusion line.

At the start of the line, I observed the metal carrier being unspooled into the line. Mr. Smart said that the metal carrier was aluminum for the current part, but steel and stainless steel are used as well. The metal was fed into a “former” which applied the desired shape. The metal was heated and then passed through a die and two types of extruded rubber were applied to it.

Photo 2 shows pelletized rubber used in one of the extruders. Mr. Smart said that the rubber is manufactured at a Hutchinson facility in Virginia.

Mr. Smart said that the part being produced was the weatherstripping used to seal an automobile window.

An adhesive was applied to the part and then it passed through a “flocker,” in which rubber fibers were applied to the part. Mr. Smart said that the fibers are difficult to contain, creating maintenance challenges, and the adhesives require air permitting. It is the goal of the facility to switch to applying flock tape rather than loose flocking onto an adhesive.

Following flocking, parts are heated to vulcanize the rubber in an approximately 300-foot-long curing oven.

Mr. Smart said that some parts are cooled following the curing oven. I observed a water bath following the curing oven (“water bath 1”). Water bath 1 was not being used on the part currently in production due to the need for additional hot processes on the part. Photo 3 shows a recirculation tank under water bath 1.

Mr. Smart said that sampling of rubber extruding wastewaters occurs in either water bath 1 or water bath 2, a second cooling bath present on Line 13. Typically, sampling is initiated by the sampling contractor and is performed at whichever bath happens to be operating when the sampling contractor arrives. Either one bath or the other is used for a given part – never both baths simultaneously. Use of water bath 2 is most common.

Mr. Smart said that rubber extrusion for the automotive industry is performed on Line 13 and the adjacent Line 12. On the floor above, Line 15 is used to extrude rubber and silicon for a variety of applications. Wastewater from Line 15 flows to the Abcor unit, whereas Line 12 and Line 13 flow to the POTW untreated.

Mr. Smart said that the part in production in Line 13 at the time of the inspection required a water-based polyurethane coating to reduce friction during operation. Following the application of the coating, the part was cooled in water bath 2. Photo 4 shows the spray nozzles of water bath 2. Photo 5 shows the recirculation tank of water bath 2.

Mr. Gallant said that a flow meter is present on the discharge line from Line 12 and Line 13. On his phone, Mr. Gallant showed data from the meter indicating that the last flow through the meter was approximately 23 gallons on June 23, 2023. Mr. Gallant said that this flow was only discharged to test the flow meter.

2. Fabrication Shop

At approximately 11:00, the EPA inspectors, Mr. Lorch, Ms. Boyle, Mr. Scotton, Mr. Smart, and Mr. Gallant visited the Fabrication Shop (“Fab Shop”).

Mr. Smart said that the room was used for cleaning equipment. Wastewaters generated in the Fab Shop are directed to an outdoor, underground, 35,000-gallon tank, treated in the Abcor unit, and discharged to the POTW. Coarse solids collect in the bottom of the 35,000-gallon tank – the intake to the effluent pump is approximately 18 inches above the bottom of the tank. The tank was last cleaned in 2019.

One type of equipment cleaned in the Fab Shop is 3D printer parts. 3D printers are used to fabricate grippers for robots used in production. A caustic cleaner is used on the printer parts and the wastewater is neutralized with malic acid prior to discharge to the 35,000-gallon tank.

Another type of equipment cleaned in the Fab Shop is electrostatic precipitators (“smog hog cells”). Smog hog cells are used to removed fine particulates from air emissions. Smog hog cells are also cleaned with a caustic cleaner.

Floor wash waters are dumped in the Fab Shop and directed to the 35,000-gallon tank.

Mr. Smart said that the Facility has a list of all cleaning products and Safety Data Sheets for each, available upon request.

3. Plastic Extrusion Line

At approximately 11:10, the EPA inspectors, Mr. Lorch, Ms. Boyle, Mr. Scotton, Mr. Smart, and Mr. Gallant visited a plastic extrusion line.

Mr. Smart said that a water-based metal-working coolant was added to the metal carrier. Following shaping, the metal carrier was washed. Thermoplastics are extruded onto the metal, flocking tape is applied, and parts are cooled in a water bath. Similar to rubber extrusion wastewaters, plastic extrusion wastewaters are discharged to the POTW without flowing through the Abcor unit.

4. Abcor Room

At approximately 11:20, the EPA inspectors, Mr. Lorch, Ms. Boyle, Mr. Scotton, Mr. Smart, and Mr. Gallant visited the Abcor room.

Mr. Smart said that the Abcor ultrafiltration unit works by pumping wastewater through piping at a high pressure, with filtrate flowing to the POTW and residue is passed back to the 35,000-gallon tank. The 35,000-gallon tank is cleaned when Abcor tubes start clogging prematurely.

5. Line 12 and Line 13 Common Monitoring Point

At approximately 11:25, the EPA inspectors, Mr. Lorch, Ms. Boyle, Mr. Scotton, Mr. Smart, and Mr. Gallant viewed the common monitoring point for Line 12 and Line 13.

Mr. Smart pointed out an ultrasonic meter on the overhead piping. I observed a sample port; Mr. Smart said that it was not used for compliance sampling. The piping flowed into the floor.

6. Outdoor Site Tour

At approximately 11:30, the EPA inspectors, Mr. Lorch, Ms. Boyle, Mr. Scotton, Mr. Smart, and Mr. Gallant viewed outdoor areas at the Facility.

The group left the building from a door on the southern side and walked counter-clockwise around the building. No baghouses were observed. All dumpsters observed were covered. The underground 35,000-gallon tank, the sewer pump station, a pallet storage area, and a chemical storage building were located to the north of the building. Water was flowing from a stormwater outfall on the northern side of the building; the water was clear and no oil sheen was observed.

C. Closing Conference

At approximately 12:00, the EPA inspectors, Mr. Lorch, Ms. Boyle, Mr. Smart, and Mr. Gallant held a closing conference.

The group discussed the method, timing, and location for sampling of the rubber extrusion wastewaters.

Ms. Shea said that she had been told by the Facility representatives that the Facility's contractor performed sampling by dipping a bottle into a cooling water tank. EPA collected its sample from the discharge from the cooling bath into cooling water tank 2. Mr. Smart said that the same pump is used to send cooling water from the cooling bath to the cooling tank and from the cooling tank to the POTW.

I said that it would be more representative to sample on the day on which a discharge occurs, rather than sampling on a date that is convenient for the contractor but potentially months from the discharge date, as is the current practice.

I said that the Facility's semi-annual reports did not specify which sampling point (water bath 1 or water bath 2) was utilized for a given sampling event.

I said that utilizing the Line 12 and Line 13 common monitoring point to sample during a discharge would provide more assurances that monitoring was representative.

I said that the Facility's reports indicate that there had been no discharge of rubber extrusion wastewaters since the June 2021 report. Mr. Smart said that the reports were

correct and there had been no discharge of rubber extrusion cooling water since the first half of 2021.

I said that if the Facility were able to eliminate its discharge of rubber extrusion cooling wastewater, perhaps by shipping the wastewater offsite as a waste, the Facility would no longer be subject to any federal Categorical Standards.

I requested that the Facility provide rubber manufacturing production levels, so that I could update EPA's records with the appropriate categorization for the Facility under 40 C.F.R. Part 438. Following the inspection, Mr. Smart provided a table of production levels since the Facility's Fiscal Year 2019. The five-year average reported is 7,263 pounds per day. Forty C.F.R. § 428.51(d) provides that the term "small-sized plants" (and therefore 40 C.F.R. Part 428, Subpart E), means plants which process less than 8,200 pounds per day of raw materials.

I said that Ms. Shea and I would provide inspection reports within 70 days. I said it was possible that I would ask for changes in sampling procedures in a cover letter.

The EPA inspectors departed at approximately 12:45.