DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

N247448750

FACILITY: FINISHING SERVICES INC		**SRN / ID:** N2474
LOCATION: 877 ANN ST, YPSILANTI		**DISTRICT:** Jackson
CITY: YPSILANTI		**COUNTY:** WASHTENAW
CONTACT: Mitchell Marsh ,		**ACTIVITY DATE:** 05/02/2019
STAFF: Mike Kovalchick	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MINOR
SUBJECT: Unannounced compliance inspection of a small electroless plating facility.		
RESOLVED COMPLAINTS:		

Minor Source: Finishing Services, Inc.

Facility Contacts

Mitchell Marsh-Owner mitch.marsh@finishingservices.com ph: 734-483-2980

Donald Jones-Environmental Health and Safety Coordinator ph: 734-483-5767 x 230

Purpose

On May 2, 2019, I conducted an unannounced compliance inspection of Finishing Services, Inc. (Company) located in Ypsilanti, Michigan in Washtenaw County. The purpose of the inspection was to determine the facility's compliance status with the applicable federal and state air pollution regulations, particularly Michigan Act 451, Part 55, Air Pollution Control Act and administrative rules and Permit to Install (PTI) # 238-98A and PTI # 61-76.

Facility Location

The facility is located in a commercial park in Ypsilanti. Commercial businesses are only a few feet away from the facility and from which historically have complained about odors/smoke from the Company.

Facility Background

The facility was issued PTI 238-98A for an expanded nickel-plating process. The Company plates small metal automotive parts and has been in operation at the same location since the 1970's. It is owned by the same owner as nearby Marsh Plating.

Regulatory Applicability

PTI 238-98A covers 3 electroless nickel plating tanks.

PTI #61-76 covers an old phosphate coating line. The PTI has no special conditions.

40 CFR 63 Subpart WWWWWW. This federal standard applies to the 3 electroless nickel plating tanks and one chrome conversion tank. EPA has not delegated this Subpart to the State of Michigan.

Arrival & Facility Contact

Visible emissions or odors were not observed upon my approach to the Company's facility. I arrived at 8:30 am, proceeded to the facility office to request access for an inspection, provided my identification and spoke with Mitch March (MM) and Don Jones (DJ). I informed them of my intent to conduct a facility inspection and to review the various records as necessary.

Both men extended their full cooperation and fully addressed my questions.

Pre-Inspection Meeting

The Company has 15 full time employees and operates between 8 am and 5 pm 5 days a week plating small metal automotive part. Business is good. The new expanded nickel line began operation in January 2018.

MM discussed the various plating processes currently in operation at the facility. Attachment (1) are marked up flow diagrams of the facility that show which operations are still active.

Onsite Inspection

MM first gave me a tour of the roof which is easily accessed from a stair case inside the building. No odors or smoke was noted on the roof. We first observed the phosphate exhaust system on the roof. The exhaust stack from this process had been damaged by ice and the exhaust fan was very loud with an apparent bearing problem. MM noted the damaged stack and said that they would be making repairs to both the stack and fan shortly.

Next, we looked ata packed bed scrubber (8496 cfm, recirculation rate 38 gallons per minute, water make up rate of 1.9 gallon per minute.) manufactured by Midwest Air Products. This scrubber controls emissions from EUSYSTEM1. It was operating. No opacity or steam coming from the stack. No leaks and appeared to be in excellent condition. Water could be seen flowing through the transparent panels. See attached photo.

Next, we looked at another packed bed scrubber (19,850 cfm). This is the new one. This scrubber controls emission from EUSYSTEM2 and appears similar in appearance to the other one. It was operating. No opacity or steam coming from the stack. No leaks and appeared to be in excellent condition. Water could be seen flowing through the transparent panels. See attached photo.

Finally, we looked at the stack exhaust from a tin/zinc coating line. Nothing remarkable. See attached photo.

We then proceeded down the stairs to visit the plating lines. We started on the north side of the building and walked south.

Phosphate Line. It was active. It has phosphate and HCL tanks with slotted vent style ventilation located on the side of the tanks. Much of the steam raising from the tanks was not going into the ventilation system but simply going up in the roof area. The faulty fan on the roof is likely cause. The HCL tanks were at 25 % concentration.

Tin plating process. It was active. This line was installed in 1988 under permit exemption Rule 284 as written in 1980. Same type of ventilation system as the phosphate line although it appeared to be operating properly. Contained (1) 175-gallon chrome conversion tank with 1% concentration tri-valent chrome.

EUSYSTEM1. It was active. Noted some ammonia smell adjacent to a 1% concentration ammonia tank. Noted the pressure drop of the associated packed bed scrubber was reading 0.7" of water. The recirculation water was a little foamy. See attached photo.

EUSYSTEM2. It was idle but tanks were full. No odors. Noted the pressure drop of the associated packed bed scrubber was reading 0.6" of water. The recirculation water was very foamy; so much so that it was spilled out the tank. See attached photo.

Recordkeeping/Permit Requirements Review

Attachment (2) is the required Malfunction Abatement Plan (MAP) being used for both scrubbers.

Review of the MAP showed that it is satisfactory. Acceptable pressure drop readings are below 4" for the scrubbers.

Attachment (3) are scrubber inspection records and required weekly pressure drop readings for 2019.

Review of these records showed that they are acceptable. Regular inspections of the scrubbers are being conducted and the pressure drop readings haven't been higher than 1.5" in 2019.

The active PTI permits had no other substantive permit conditions to review.

Subpart WWWWWW compliance was not reviewed as this regulatory program has not been delegated to the State of Michigan. However, the Company did submit the required initial notification forms on August 30, 2008.

Post-Inspection Meeting

I held a brief post-inspection meeting with MM and DJ. I requested some records which MM promoised to email later in the day. I brought up the topic of PFAS. MM indicated that the wastewater discharge had been tested. It contained 3 to 4 parts per trillion suggesting possible low levels of historical PFAs usage. I had no findings. I thanked the 2 gentlemen for their time and cooperation, and I departed the facility at approximately 10:00 am.

Compliance Summary

The Company is in compliance.

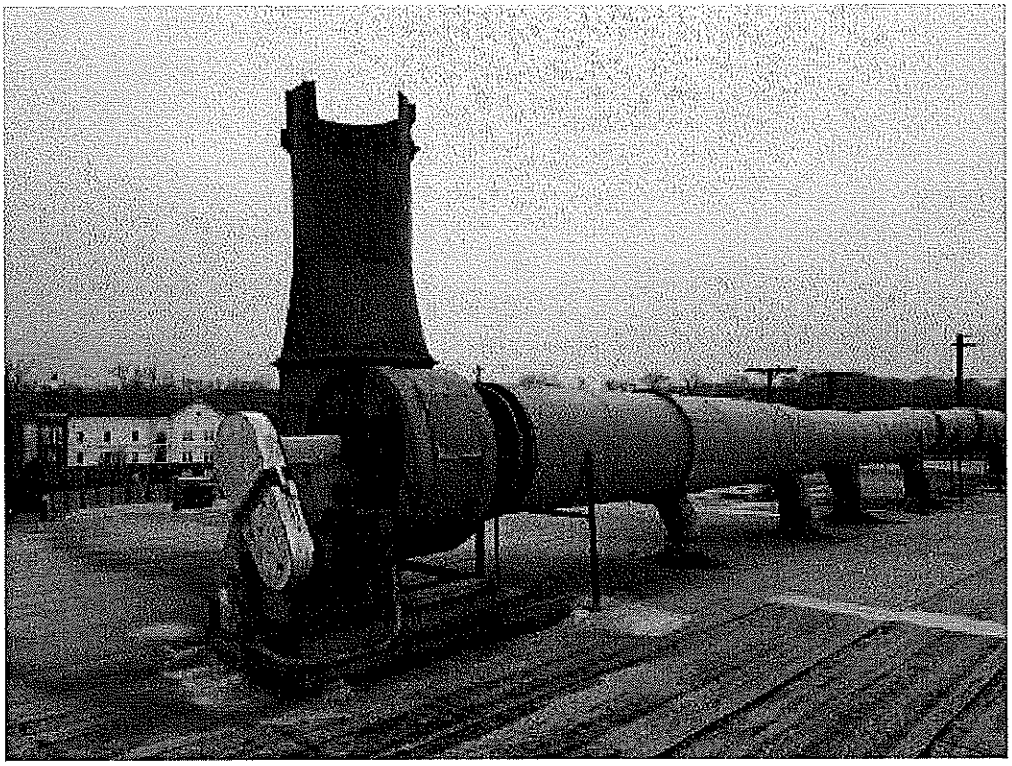


Image 1(Phosphate) : Phosphate line exhaust stack and fan. Note damaged stack. Fan in very poor condition.

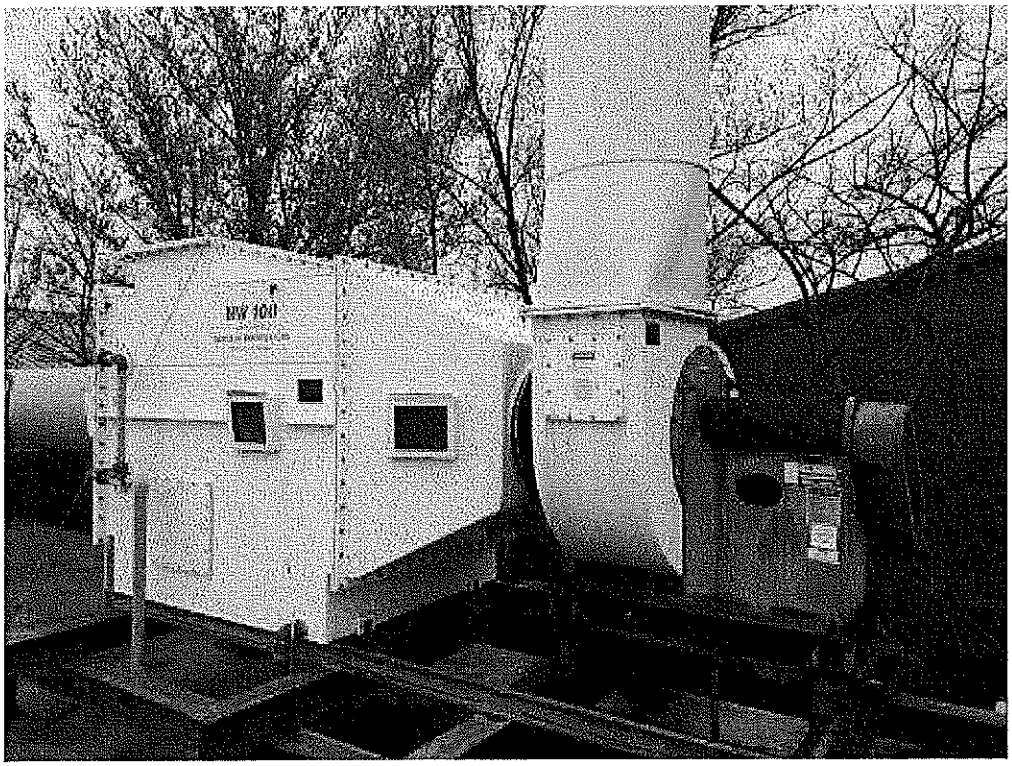


Image 2(Number 1 Scrubber) : Number 1 Scrubber. (Older)

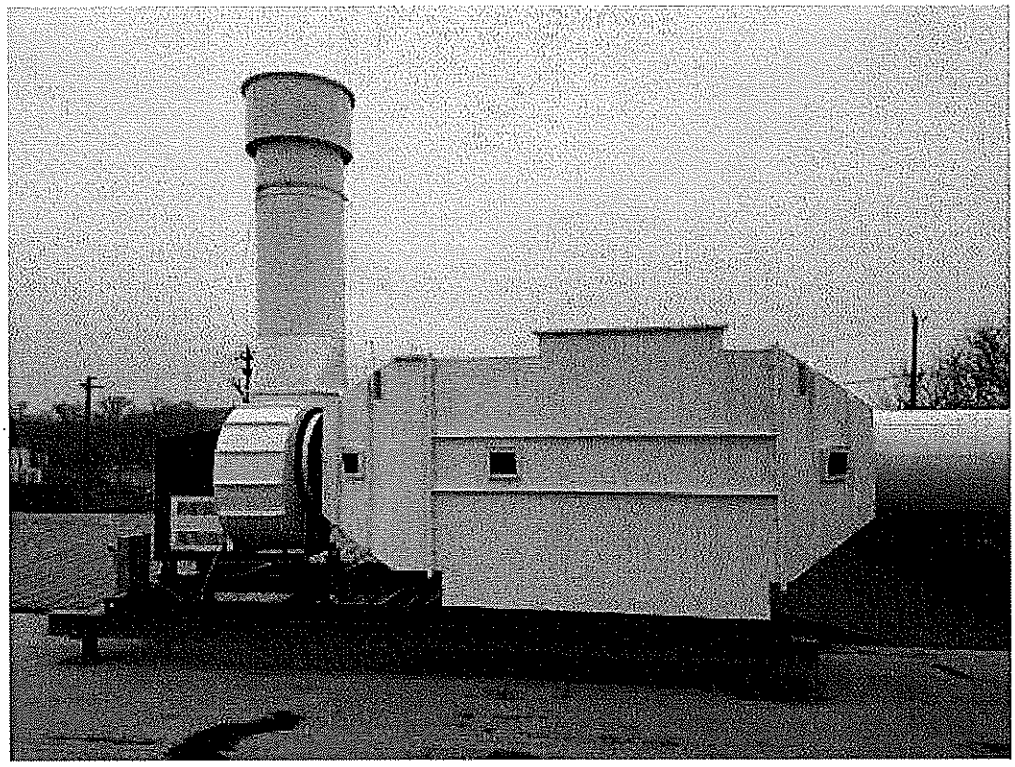


Image 3(Number 2 Scrubber) : Number 2 Scrubber. (Newer)

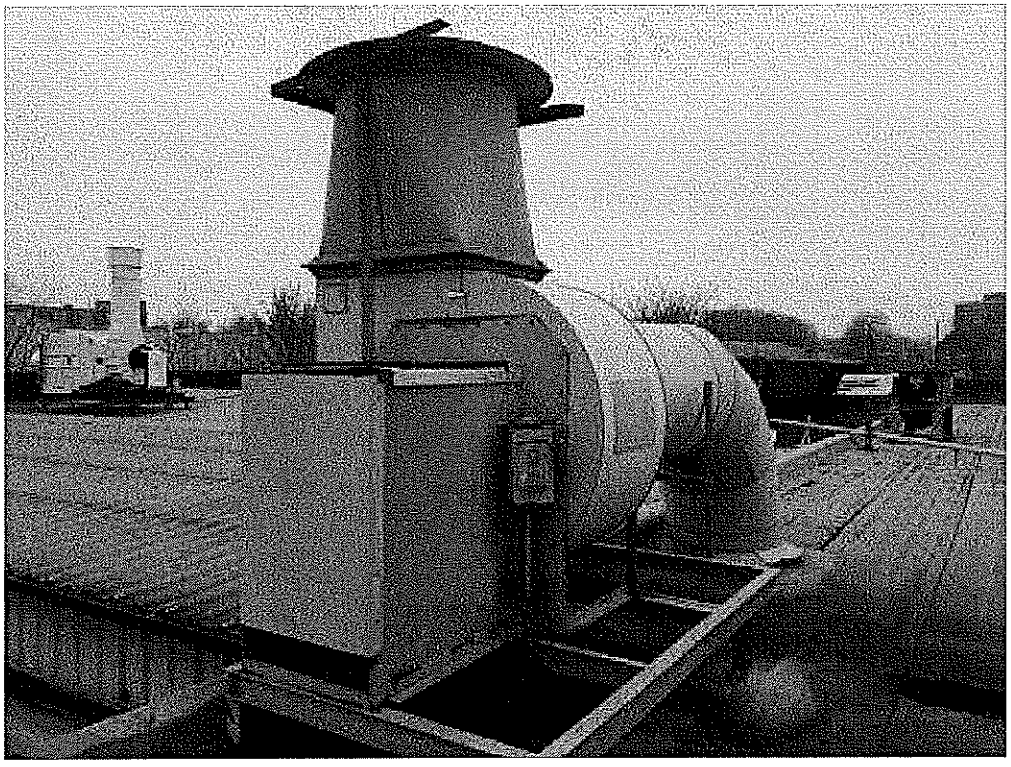


Image 4(Tin Plating Exhaust) : Tin plating line exhaust.

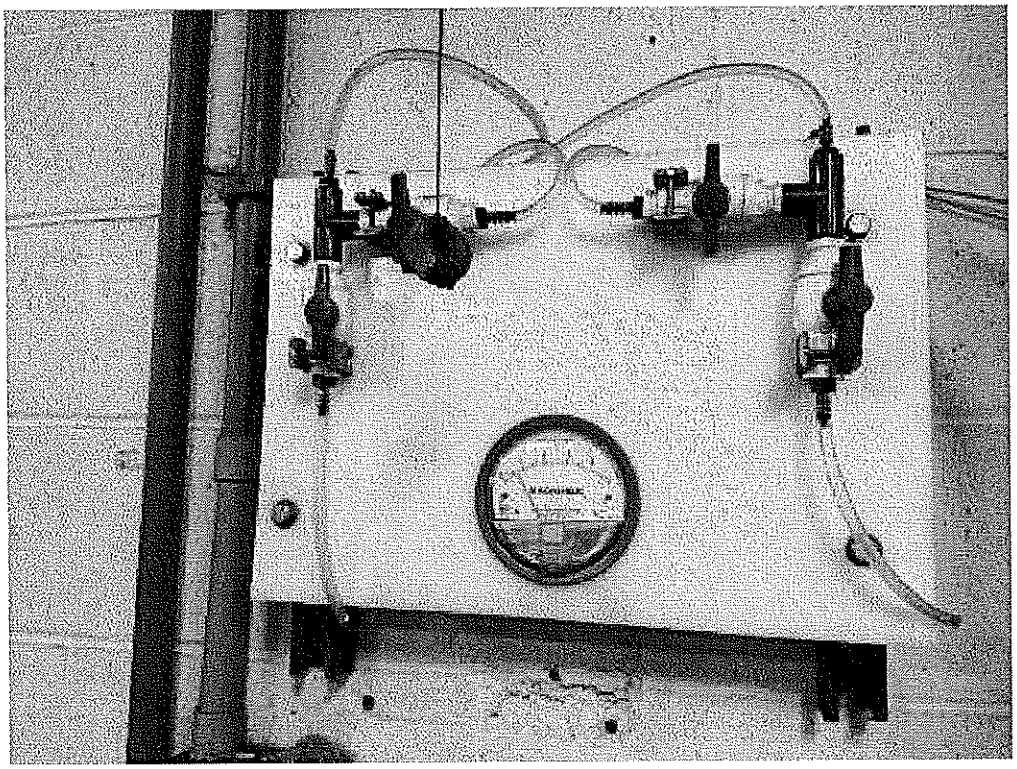


Image 5(Pressure Drop 1) : Pressure drop for the scrubber controlling line 1 nickel.

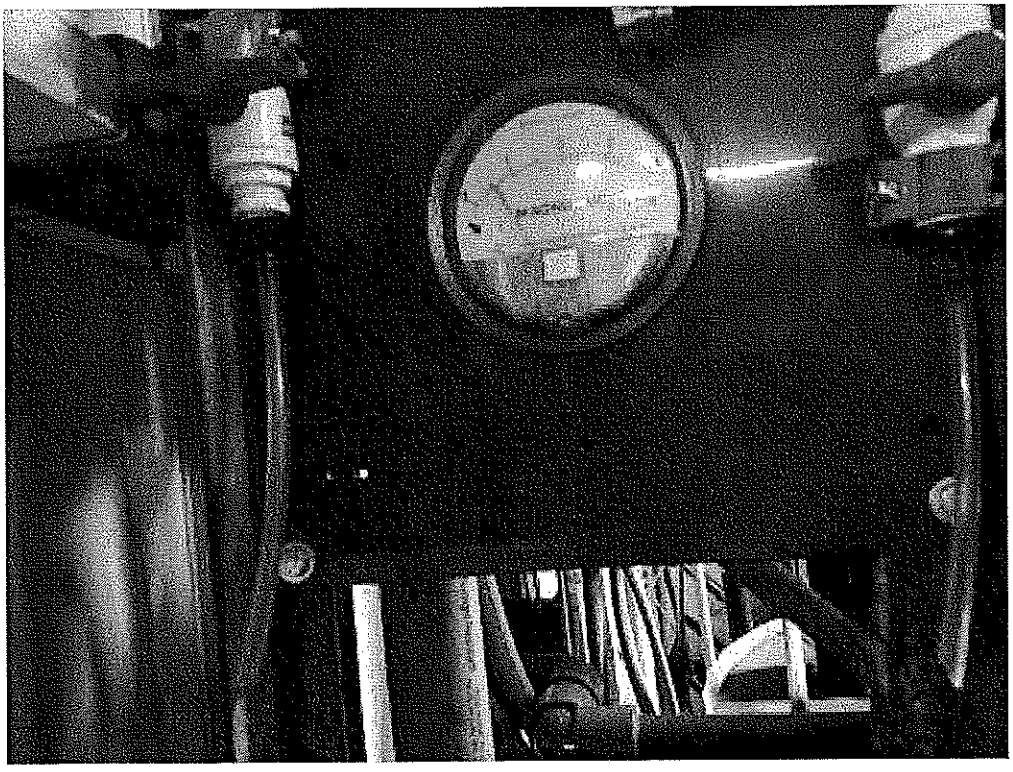


Image 6(Pressure Drop 2) : Pressure drop for scrubber controlling the new nickel plating line.

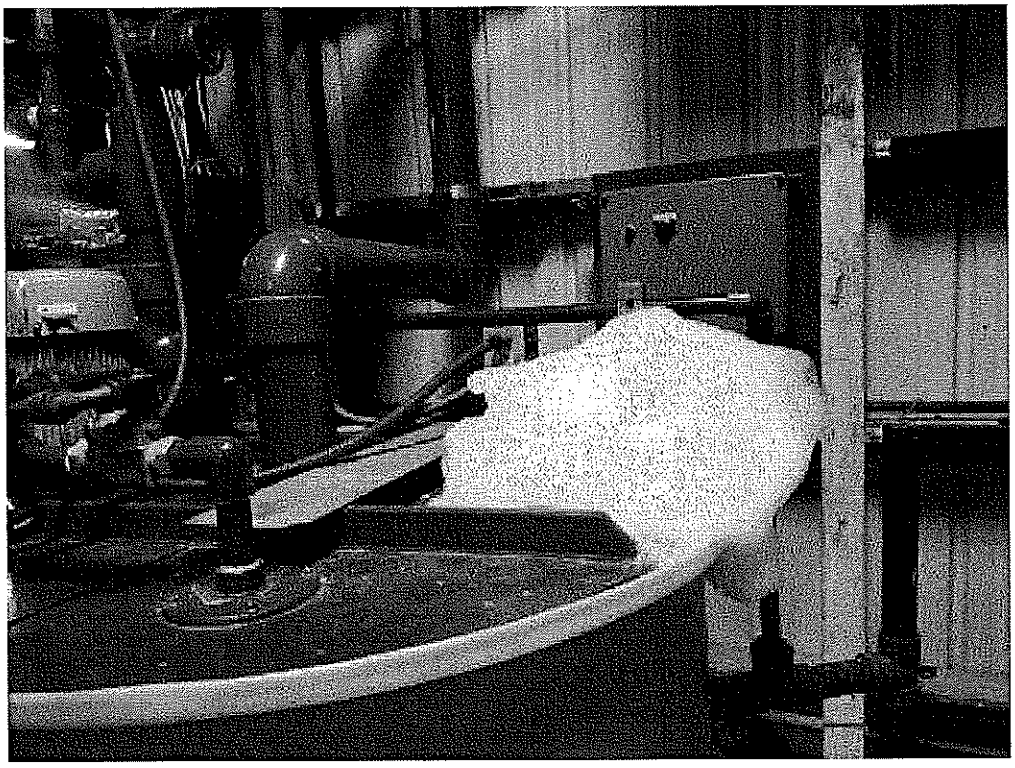
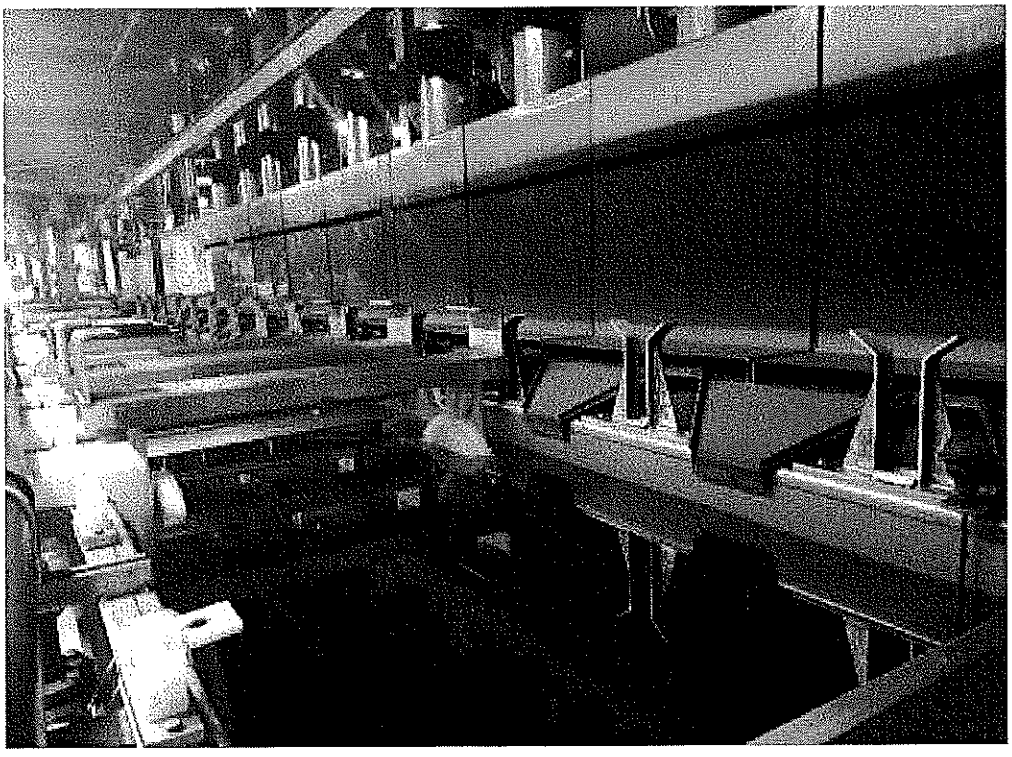


Image 7(Foam recirculation) : Foam coming from the scrubber water recirculation tank for the newer nickel line.



NAME M. Kovalchuk DATE 5/6/2019 SUPERVISOR