

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection**

A038068286

FACILITY: NEW PRODUCTS CORP		SRN / ID: A0380
LOCATION: 448 NORTH SHORE, BENTON HARBOR		DISTRICT: Kalamazoo
CITY: BENTON HARBOR		COUNTY: BERRIEN
CONTACT: Eric Larson , Chief Engineer		ACTIVITY DATE: 06/27/2023
STAFF: Rachel Benaway	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: On-site inspection to verify compliance with PTI #22-01 and all applicable state and federal air use regulations.		
RESOLVED COMPLAINTS:		

AQD staff (Rachel Benaway) completed an unannounced air quality inspection of New Products Corporation (A0380), an aluminum die-casting facility located in Benton Harbor, MI, on 6/27/2022. The purpose of this inspection was to verify New Products Corporation (NPC) is in compliance with their Permit to Install (PTI) #22-01 and all state and federal air use regulations. NPC is considered a minor source of hazardous air pollutants (HAPs), nitrogen oxides (NOx), sulfur oxides (SOx), carbon monoxide, (CO), lead (Pb), volatile organic compounds (VOCs), and particulate matter (PM). The facility is not subject to any New Source Performance Standards (NSPS) nor National Emission Standards for Hazardous Air Pollutants (NESHAP). The last inspection was completed at the facility on 1/27/2010. Eric Larson (Chief Engineer/Sales) is responsible for submitting requested records and was present for the on-site inspection. Personal protection equipment includes safety glasses and safety shoes. NPC produces aluminum parts for the automotive, industrial, and agricultural industries. The facility operates 2 shifts per day for 5 days out of the week, however, the furnaces are always operating to maintain melt consistency. NPC employs approximately 20 people.

#	Equipment at Facility
3	Stiko MH 1500/1000 furnaces (EUFURNACES)
1	Zinc melt (grandfathered)
6	Zinc die-casting machines (EXEMPT RULE 285(2)(l)(ii))
1	Cold cleaner (EXEMPT RULE 281(2)(h))
9	Aluminum die-cast machines (EXEMPT RULE 285(2)(l)(ii))
1	Johnston boiler (EXEMPT RULE 282(2)(b)(i))
	Tool and die area: CNC lathes, milling / drilling machines (EXEMPT RULE 285(2)(l)(vi)(B))

The following is a summary of information obtained from the on-site inspection and the submittal of requested records. Where applicable, compliance determinations are indicated for each special condition established in the PTI, organized by emission unit or flexible group.

EUFURNACES

Three Striko melting furnaces with no additional pollution controls.

Special Condition		Compliant?
1.	Shall charge only clean feedstock in aluminum melting process -aluminum ingots, t-bars, sows, molten aluminum, aluminum scrap free of paint, coatings, oils, grease, lubricants, etc.	YES
2.	Shall not process more than 22,000 lb of OR1 flux per year, based on 12-month rolling time period	YES
3.	Exhaust gases from furnaces shall be discharged unobstructed vertically from 3 stacks, each w/ max diameter of 20", exit point no less than 46 ft above ground	YES

Monitoring/Recordkeeping

2.	-Monthly tonnage of aluminum melted -Monthly amount of fluxes processed in lb/ton of aluminum melted	YES NO
----	---	-----------

PTI #22-01 has an additional process restriction on EUFURNACES that only 2 furnaces may operate at a time and the facility reported that only two furnaces are actually functional right now. The third furnace is currently offline but will remain permitted for potential future use. The zinc melt furnace (grandfathered from permitting) is also offline as was noted in the previous inspection report from 2010. Previously, the facility had 6 zinc die-casting machines, but the facility reported that only one is functional and the others have been decommissioned.

The facility reported that the feedstock used in the furnaces comes from local companies and although it is noted as being 75% recycled material, each delivery of metal used in their melting process is accompanied by a certification of analysis stating the chemical composition, sludge factor, and radiation-free status. Staff requested and received a copy of this certification.

The facility submitted a statement that in the past two years, NPC has purchased 5,100 lbs of flux. Averaging that amount of flux per month over the past two years results in approximately 215 lbs of flux used per month. The facility submitted a purchase record file to verify this, demonstrating flux purchases from July 2021 to May 2023. This flux use rate is well below the permit limit of 22,000 lbs of flux in a year. The facility was not keeping track of flux use on a monthly or 12-month rolling time manner. Since there is no potential for permit limit exceedance as far as flux use is concerned, Staff requested that from now on records be kept according to the permit stipulations.

The facility submitted records of monthly melt consumption for June 2021 through June of 2023. The records included the monthly tonnage of aluminum melted in pounds and the monthly tonnage of scrap which is remelted. Over the past two years, the most aluminum melted in a month was in March of 2022 at 197,333 lbs. The facility reported that the ratio of flux pounds processed per pound of aluminum melted is approximately 1:1500 but this figure is based on sample data points. If the facility were tracking the amount of flux used per month, they would be able to report the ratio of flux more accurately to aluminum melted on a monthly basis.

Staff observed that the extensive tool and die equipment area appears to be exempt from permitting according to Rule 285(2)(l)(vi)(B) as all particulate matter emissions are released to the in-plant environment only.

Staff recommended some changes to the method of recordkeeping for flux use at the facility but otherwise, the facility appears to be in compliance with all permit conditions and air use regulations at this time.

NAME Rachel Benaway

DATE 7/27/23

SUPERVISOR Monika