



State of Ohio Environmental Protection Agency

P.O. Box 1049, 1800 WaterMark Dr.
Columbus, Ohio 43266-0149

Richard F. Celeste
Governor

Re: Permit to Install
MONROE County
Application No.17-609

CERTIFIED MAIL

NOVEMBER 16, 1988

ORMET CORP
JOHN REGGI
P.O. BOX 176
HANNIBAL, OHIO 43931

Dear Sir:

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions I urge you to read it carefully.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Board of Review pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Board of Review within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency and the Environmental Law Division of the Office of the Attorney General within three (3) days of filing with the Board. An appeal may be filed with the Environmental Board of Review at the following address:

Environmental Board of Review
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Thomas G. Rigo, Manager
Field Operations Section
Division of Air Pollution Control

TGR/gs

cc: US EPA
NORTH OHIO VALLEY AIR AUTHORITY
MONROE COUNTY HEALTH DEPARTMENT
SOUTHEAST DISTRICT OFFICE - AIR
SOUTHEAST DISTRICT OFFICE - WASTEWATER

Permit to Install Terms and Conditions

Application No. 17-609
APS Premise No. 1756000001
Permit Fee: \$780. AIR
\$200. WASTEWATER

Name of Facility: ORMET CORP

Person to Contact: JOHN REGGI

Address: P.O. BOX 176
HANNIBAL, OHIO 43931

Location of proposed source(s): ST RT 7
HANNIBAL TWP, OHIO

Description of proposed source(s): NEW AIR CONTAMINANT SOURCE & NEW
WASTEWATER TREATMENT WORKS -
DIRECT CHILL ALUMINUM BILLET &
SLAB CASTING PIT #3 & FORCE MAIN
MODIFICATIONS.

Date of Issuance: NOVEMBER 16, 1988

Effective Date: NOVEMBER 16, 1988

The above named entity is hereby granted a permit to install for the above described source(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described source(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Director

Substantial construction for installation must take place within eighteen months of the effective date of this permit. This deadline may be extended by up to twelve months, if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, examining records or reports pertaining to the construction, modification or installation of the above described source of environmental pollutants.

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

The specified permit fee must be remitted within 15 days of the effective date of this permit to install.

If the construction of the proposed source has already begun or has been completed prior to the date the Director of the Ohio Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for Ormet Corp. located in Monroe County. The sources listed below shall not exceed the emission limits/control requirements contained in the following table:

<u>Ohio EPA Source No.</u>	<u>Source Identification</u>	<u>BAT Determination</u>	<u>Applicable Ohio EPA rule</u>	<u>Allowable Emissions (lb/hr, lb/MMBTU, gr/DSCF, etc.)</u>
P233	Direct chill casting unit #3	Natural gas as fuel	3745-31-05 3745-17-07 3745-17-11 3745-18 3745-15-06	1.0 lb/hr part. .05 lb/hr SO ₂ .24 lb/hr OC ² 11.13 lb/hr NO _x 2.75 lb/hr CO ^x .33 mg/m ³ HCl

SUMMARY
 TOTAL NEW SOURCE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Particulate	3.0
Sulfur dioxide (SO ₂)	1.6
Organic compound (OC)	.84
Nitrogen dioxide (NO _x)	38.8
Carbon monoxide (CO) ^x	9.7
Hydrogen chloride (HCl)	.32

This condition in no way limits the applicability of any other state or federal regulation.

APPLICABILITY

This Permit to Install is applicable only to the air contaminant sources listed and does not include the installation or modification of wastewater disposal systems or solid waste disposal facilities. Separate application must be made to the Director for the installation or modification of any such wastewater disposal systems or solid waste disposal facilities.

PERFORMANCE TEST REQUIREMENTS

The permittee shall conduct, or have conducted, performance testing on the air contaminant source(s) in accordance with procedures approved by the Agency. Two copies of the written report shall be submitted and signed by the person responsible for the test, describing the test procedures followed and the results of such tests. The Director or an Ohio EPA representative shall be allowed to witness the tests, examine testing equipment and require the acquisition or submission of data and information necessary to assure that the source operation and testing procedures provide a valid characterization of the emissions from the source and/or the performance of the control equipment.

- A. A completed Intent to Test form shall be submitted to the appropriate Ohio EPA District Office or Local Air Pollution Control Agency where the original permit application was filed. This notice shall be made thirty (30) days in advance

and shall specify the source operating parameters, the proposed test procedures and the time, date, place and person(s) conducting such tests.

B. Two copies of the test results shall be submitted within thirty (30) days after the completion of the performance test.

C. Tests shall be performed for the following sources and pollutants:

Stack #1 - #5 melt furnace - particulate, NO₂, HCl
Stack #3 - #1 tilt furnace - particulate, NO₂, HCl

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport, and disposal of any waste material generated by the operation of the sources.

REPORTING

Any reports required by the Permit to Install shall be submitted to North Ohio Valley Air Authority, 814 Adams, Steubenville, Ohio 43952.

PUBLIC DISCLOSURE

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source are subject to public disclosure in accordance with OAC Rule 3745-49-03.

MALFUNCTION/ABATEMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

In accordance with OAC Rule 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the North Ohio Valley Air Authority. Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment, that requires the shutdown or bypassing of said equipment, must be accompanied by the shutdown of the associated air pollution sources.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

1. Ormet Corp. shall employ natural gas as the fuel for all burners associated with the #3 direct chill casting pit system.
2. The actual pollutant emission rates shall not exceed the allowable rates provided below:

Particulate matter - 1.0 lb/hr
Sulfur dioxide - .05 lb/hr
Organic compound - .24 lb/hr
Nitrogen dioxide - 11.13 lb/hr
Carbon monoxide - 2.75 lb/hr₃
Hydrogen chloride - .33 mg/m³ at MAGLC

3. Ormet Corp shall maintain daily production records indicating the actual hourly production rate of aluminum passing through the direct chill casting unit system #3.

Ormet Corp. shall submit quarterly reports to the Ohio EPA field office which summarize the following information:

- 1) average hourly production rate for each day
- 2) the maximum hourly production rate for each day.

These reports shall be submitted by February 15, May 15, August 15, and November 15.

WASTEWATER SPECIAL TERMS AND CONDITIONS

1. This permit applies to a wastewater disposal system designed to serve an average daily hydraulic flow of no more than 35,000 gallons.
2. No liquids, sludges, or toxic or hazardous substances other than those set forth in the approved permit shall be accepted for disposal without the prior written approval of the Ohio Environmental Protection Agency.
3. Sewer and manhole construction joints shall conform to standards of the Ohio Environmental Protection Agency.
4. The owner shall be responsible for the proper operation and maintenance of the wastewater disposal system.

OTHER SPECIAL CONDITIONS - SEE REPORT

REPORT ON PERMIT TO INSTALL (PTI) APPLICATION NO. 17-609 AND
DETAIL PLANS FOR WASTEWATER TREATMENT MODIFICATIONS TO SERVE
THE ORMET CORPORATION, MONROE COUNTY.

Logan, Ohio, September 13, 1988.

Introduction:

PTI No. 17-609 and detail plans for force main modifications to serve the Ormet Corporation's Hannibal plant were received in the Southeast District Office of Ohio EPA on July 27, 1988, from Al Yablonsky of Ormet. Revisions were requested on August 16, 1988 and received on August 19, 1988. Final revisions were requested on August 25, 1988 and received on September 1, 1988. Ormet is a primary aluminum reduction facility, producing aluminum from alumina through electrolytic reduction. The wastewater treatment modifications are part of a process replacement of Ormet's direct chill casting furnaces and pits. In direct chill casting, molten aluminum and alloys are poured as billets and sows into water-filled pits which provide contact cooling.

Summary of Existing and New Facilities:

Please refer to Figure 1, which is a block diagram of the direct chill casting pit water system loop. Ormet is in the process of replacing the direct chill (DC) casting unit No. 3, consisting of two homogenizing furnaces, two melting furnaces, one holding furnace, a DC casting pit, related piping and controls. The replacement furnaces do not have non-contact water

cooled doors as did the previous ones. The DC casting pit has been deepened by 10' in order to accommodate longer billets.

New 8" mild steel pipe and fittings are used to mate the pit pumps to the existing 8" sewer. Both pump outlets are equipped with checkvalves to prevent backflow under independent pump operations.

Wastewaters generated by the operation consist chiefly of filter backwashes discharged to Outfall 601. On an occasional (every 2 - 3 years) basis, cooling tower bottoms (approximately 70,000 gallons) must be removed to clean the cooling tower sumps. Ormet has proposed to use a portable pump to route these sump bottoms to Outfall 601 so that the discharge will be metered and sampled prior to release to the storm sewer. Ormet's past practice has been to release cooling tower bottoms to the storm sewer without monitoring. Ormet has stated that these occasional discharges will not violate the NPDES effluent limitations for Outfall 601.

Solids will be removed from the cooling tower sumps and/or the cold well by use of a super-sucker, and mixed with floor sweepings to form a solid waste. This solid waste will be disposed of off-site at an approved landfill.

Cost and Construction Schedule:

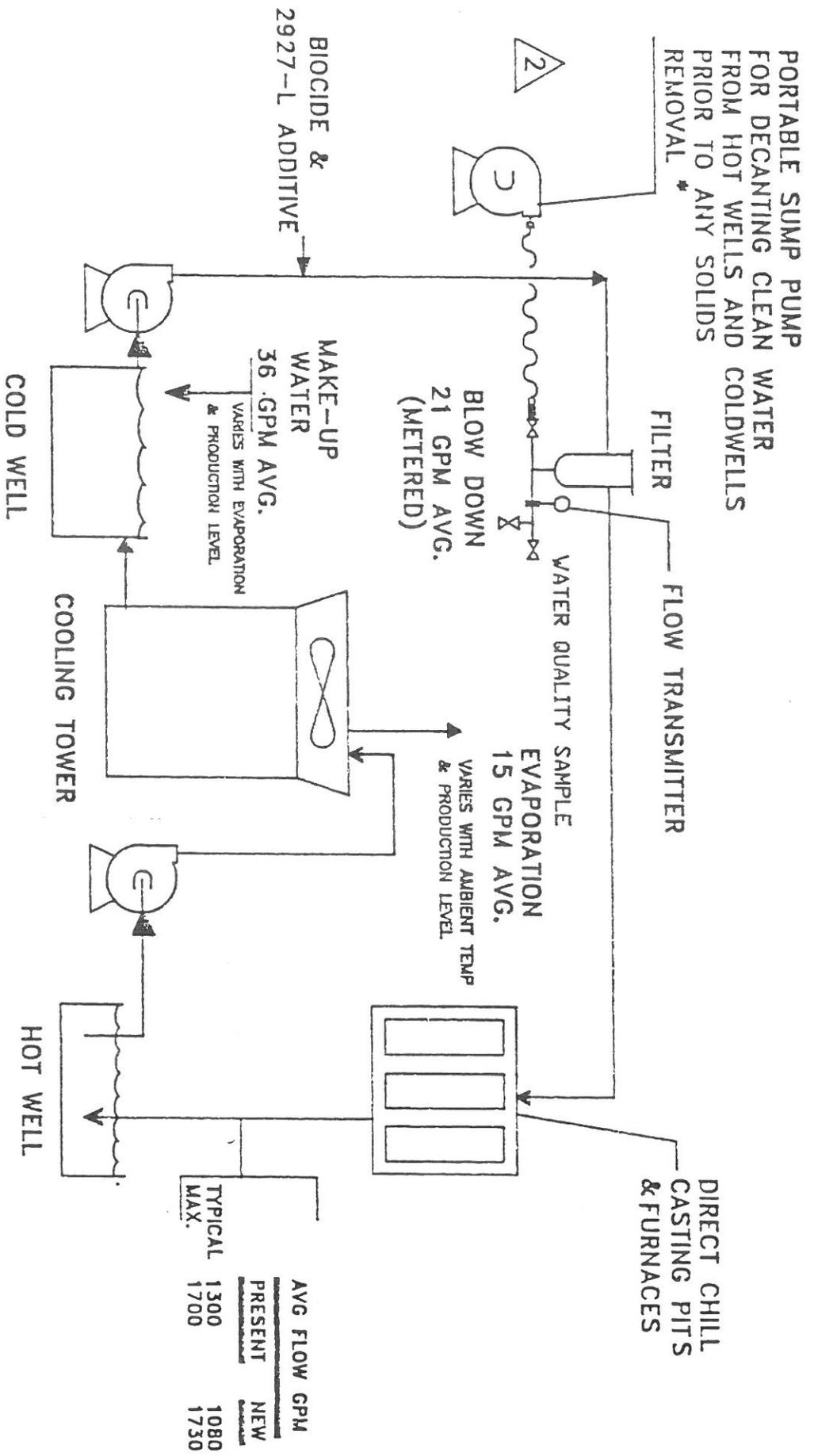
The projected cost of the water treatment modifications is \$10,000. Construction is expected to be completed by November 30, 1988.

Recommendations:

PTI No. 17-609 and associated plans for wastewater treatment modifications have been reviewed and are recommended for approval subject to the following special conditions:

1. Ormet shall obtain approval from Ohio EPA for all cooling water treatment additives.
2. Ormet shall discharge cooling water tower bottoms through Outfall 601 in accordance with the following procedure:
 - A. Ormet shall notify the Southeast District Office of Ohio EPA in writing at least two weeks prior to the discharge of cooling water tower bottoms.
 - B. Ormet shall analyze the tower bottoms for total suspended solids, benzo-a-pyrene, total fluoride, total antimony, total nickel, total aluminum, total cyanide and pH by representative grab sample prior to discharge. Should the analysis show that the effluent limitations required by NPDES permit No. OIE00005*BD for Outfall 601 and/or Outfall 001 will be violated, Ormet shall remove the tower bottoms for off-site treatment and disposal by an Ohio EPA-authorized industrial wastewater treatment facility.
 - C. Ormet shall report in writing the sampling results described in B, along with the volume disposed, to the Southeast District Office of Ohio EPA within 20 days of the date of disposal.


Steve Lind
District Representative
Industrial Wastewater.



* SOLIDS REMOVED BY VACUUM FOR OFFSITE DISPOSAL

FIGURE 1, 9-13-88

ORMET CORPORATION ALUMINUM REDUCTION DIVISION		TITLE: D.C. CASTING PIT WATER SYSTEM LOOP	
DR. _____ PROJ. NO. _____	DATE: _____ SCALE: _____	APP. _____ SCALE: _____	REV. _____ 2

AJT/7/5/88