

October 31, 1990

Mr. Allen L. Rupp, P.E.  
Unit Supervisor  
Division of Water Pollution Control  
Ohio Environmental Protection Agency  
Northwest District Office  
1035 Devlac Grove Drive  
Bowling Green, Ohio 43402-4598

Dear Mr. Rupp:

On behalf of CLEVITE-Elastomers, I wish to thank you for hosting the October 12, 1990 meeting which pertained to CLEVITE's compliance with the Director's March 8, 1990 Findings and Orders.

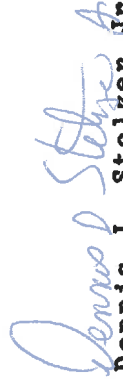
CLEVITE has pursued the alternative of an indirect discharge of treated industrial wastewater to the City of Napoleon's POTW. Please find enclosed four copies of a report entitled "Proposed Pretreatment Plan", CLEVITE-Elastomers, Napoleon, Ohio, which includes discussions of CLEVITE's current project status and a Permit To Install Application package for a sewer line and connection to the City's sewer system.

CLEVITE desires to proceed with the construction phase of the project in a timely manner. Contingent upon issuance of an Indirect Discharge Permit and the PTI approval, CLEVITE anticipates construction to be completed within 10 days. Your effort to expedite the permitting process is greatly appreciated.

Should you have any questions or if you need additional information, please call me.

Again, thank you for the direction.

Sincerely,

  
Dennis J. Stelzer Jr.  
Associate Chemist

cc: Paul G. Brock, P.E. - Unit Supervisor - OEPA NWDO  
NaaJy S. Abdullah - Pretreatment Coordinator - OEPA NWDO  
Patricia A. Pickrel - ESQ., The Pullman Company  
Martyn T. Brodnik - Attorney - Vorys, Sater, Seymour, Pease  
George J. Kehrberger, Ph.D, P.E.- First Environment  
Matt B. Tin, P.E. - R.D. Zande & Associates, Limited  
Marc S. Gerken, P.E. - City Engineer, City of Napoleon  
Roger L. Noblit - Director of Water & Wastewater - City of Napoleon

PROPOSED PRETREATMENT PLAN  
CLEVITE ELASTOMERS  
NAPOLEON, OHIO

Submitted to

OHIO ENVIRONMENTAL PROTECTION AGENCY  
BOWLING GREEN, OHIO

Prepared for

CLEVITE ELASTOMERS  
NAPOLEON, OHIO

Prepared By

FIRST ENVIRONMENT, INC.  
90 RIVERDALE ROAD  
RIVERDALE, NEW JERSEY

October, 1990

Project No. PUL092

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## INTRODUCTION

This report is being submitted to the Ohio Environmental Protection Agency (OEPA) as part of a submission of a complete application for a permit to install the necessary treatment plant improvements to ensure compliance with applicable final discharge surface waters limitations. A Director's Orders and Findings was issued on February 1990, requiring the Clevite facility to meet interim permit limits and to develop any required treatment plant improvements to meet effluent limitations. However, since July 1990, Clevite has been in contact with the City of Napoleon and OEPA concerning Clevite's intent to discharge the treated industrial wastewaters into the City's sewer system. Significant progress has been made on this plan including Clevite receiving a letter from the City of Napoleon approving the connection of the industrial discharge into the City's sewer system, and the review of Clevite's Indirect Discharge Permit Application by OEPA Central Office which has forwarded the application to the Northwest District Office.

At a recent meeting (October 12, 1990) with the OEPA Northwest Office, the OEPA indicated that the November 1, 1990 Submittal to the Northwest Office should include a report addressing the following:

1. Description of Clevite's decision to discharge to the City of Napoleon;
2. Discussion and documentation showing that the current treatment system is capable of complying with the EPA Pretreatment Standards for Metal Finishers, 40 CFR 433 and the Industrial Discharge Guidelines set by the City of Napoleon (see Table 4); and
3. Permit to Install (PTI) Application for the sewer line and connection to the City's sewer system.

The OEPA also indicated that, after reviewing the laboratory analysis on the pond sludge, on-site land application of the sludge is acceptable. Either wet or dry application would be acceptable at approximately 5 dry tons/acre/year, and that Clevite must submit a Sludge Management Plan to the Northwest office for approval.

This report presents Clevite's plan to discharge its treated industrial wastewaters into the City of Napoleon's (City) treatment system. Currently, Clevite treats its industrial wastewater in a combined physical- chemical/biological treatment system with tertiary treatment involving chemical treatment and pressure filtration prior to discharging to the Maumee River. Instead of discharging to the Maumee River, Clevite now plans to connect its treated industrial wastewater into the City's sewer system for additional treatment in the City's 2.5 MGD treatment plant. This report includes: a review of recent plant operations; a discussion of the existing industrial treatment system; a summary of Clevite's plan to land apply the pond sludges; and the required administrative and technical documents for a permit to install (PTI) a sewer line and connection into the City's sewer system.

## BACKGROUND INFORMATION

Clevite, located on Route 424 in Napoleon, manufactures automobile parts involving rubber to metal automotive assemblies. The manufacturing operations include metal cutting and forming, acid and alkaline cleaning, zinc phosphate coating, assembling the metal with rubber bushings, washing, water based dip coat painting, and autophoretic painting. The manufacturing operations result in the generation of zinc and phosphorus based wastewaters from the acid cleaning and zinc phosphating coating operations, and free product and emulsified oils wastewaters from the parts cleaning and assembling operations. These industrial wastewaters are presently treated in a series of treatment units involving oil-water separation, chemical addition for zinc and phosphorus removal in three ponds, followed by filtration prior to discharge to the Maumee River. The sanitary wastewaters are collected in a separate sewer system and discharged into the local sewer system for treatment at the City of Napoleon's treatment plant. Stormwater is discharged separately to the receiving stream.

The OEPA issued a Director's Final Findings and Orders in February 1990 requiring the Napoleon facility to meet interim permit limits and to develop any required treatment plant improvements to meet all effluent limitations. Extensive improvements to the existing treatment plant have been implemented by Clevite since January 1990. Treatment unit improvements were directed towards the ponds, pressure filters, chemical feed systems, and a more definitive program of wastewater monitoring and recordkeeping as well as other capital improvements. These improvements have resulted in a significant reduction in residual zinc and phosphorus levels in the final effluent. With the improvements, the facility is meeting the interim effluent limits defined in the OEPA Findings and Orders.

However, additional treatment improvements could further ensure the capabilities of the existing treatment system to meet the proposed final permit limits for a discharge to the Maumee River. It was during the period of upgrading the existing treatment facility in early 1990 that Clevite considered the possibility of connecting into the City of Napoleon's treatment system. The City's treatment system is a larger plant with a design capacity of 2.5 MGD with excess capacity to handle Clevite's projected industrial average wastewater flow of 0.20 MGD after proper pretreatment. Clevite has received approval from the City to discharge its treated industrial wastewater (See Approval Letter in PTI Section) into the City's treatment system and has received preliminary approval from OEPA to discharge its treated industrial wastewater into City's sewer system.

## PROPOSED PRETREATMENT SYSTEM

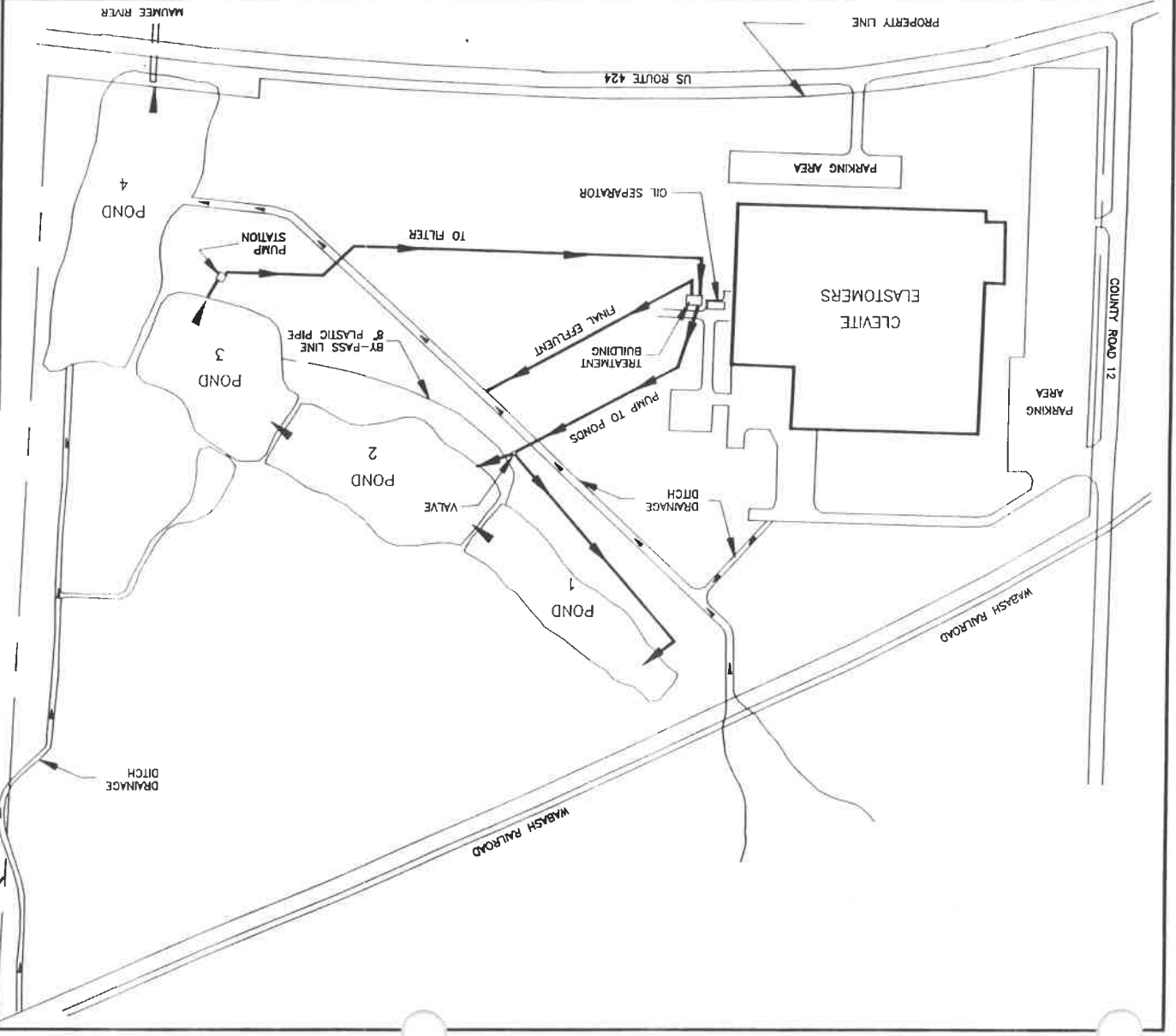
The existing treatment system was designed in 1974 to treat the industrial process wastewaters generated during the manufacturing operations to meet the OEPA direct discharge permit limits. The treatment system has continued to operate as a direct discharge facility up to the present time. This recently upgraded treatment facility will be used as the pretreatment system for the industrial wastewaters prior to discharging into the City's sewer system.

Figure 1 is a general site map showing the Clevite manufacturing plant and the industrial treatment system. All process wastewaters are collected at the east end of the plant for treatment. Process wastewaters are first treated in a 5,000-gallon oil water separator to remove free oil before flowing by gravity to the low pressure sump pit. The chemically treated wastewaters are then pumped to the three ponds.

Figure 2 is a schematic flow diagram of the industrial wastewaters. Before pumping to the ponds, the wastewaters are pH adjusted on the sump with caustic. Lime is also added to the sump for flocculating the zinc and phosphorus for removal in the ponds. The chemicals are added to the low pressure pump station which is located in the treatment building. The chemically treated wastewater is pumped either to Pond 1 or Pond 2 (See Figure 1). Normally, the wastewaters are pumped to Pond 1 where most of the zinc and phosphorus is removed. The three ponds operate in series and have a total surface area of 5.9 acres with a total volume of 19.9 million gallons based on a water depth of 10 feet. The ponds provide sufficient residence time for settling out the residual zinc and phosphorus, for biological oxidation of residual organic matter (BOD removal), additional phosphorus removal through eutrophic activity (algal growth and respiration), and for the accumulation of residual free and emulsified oils in Pond 1.

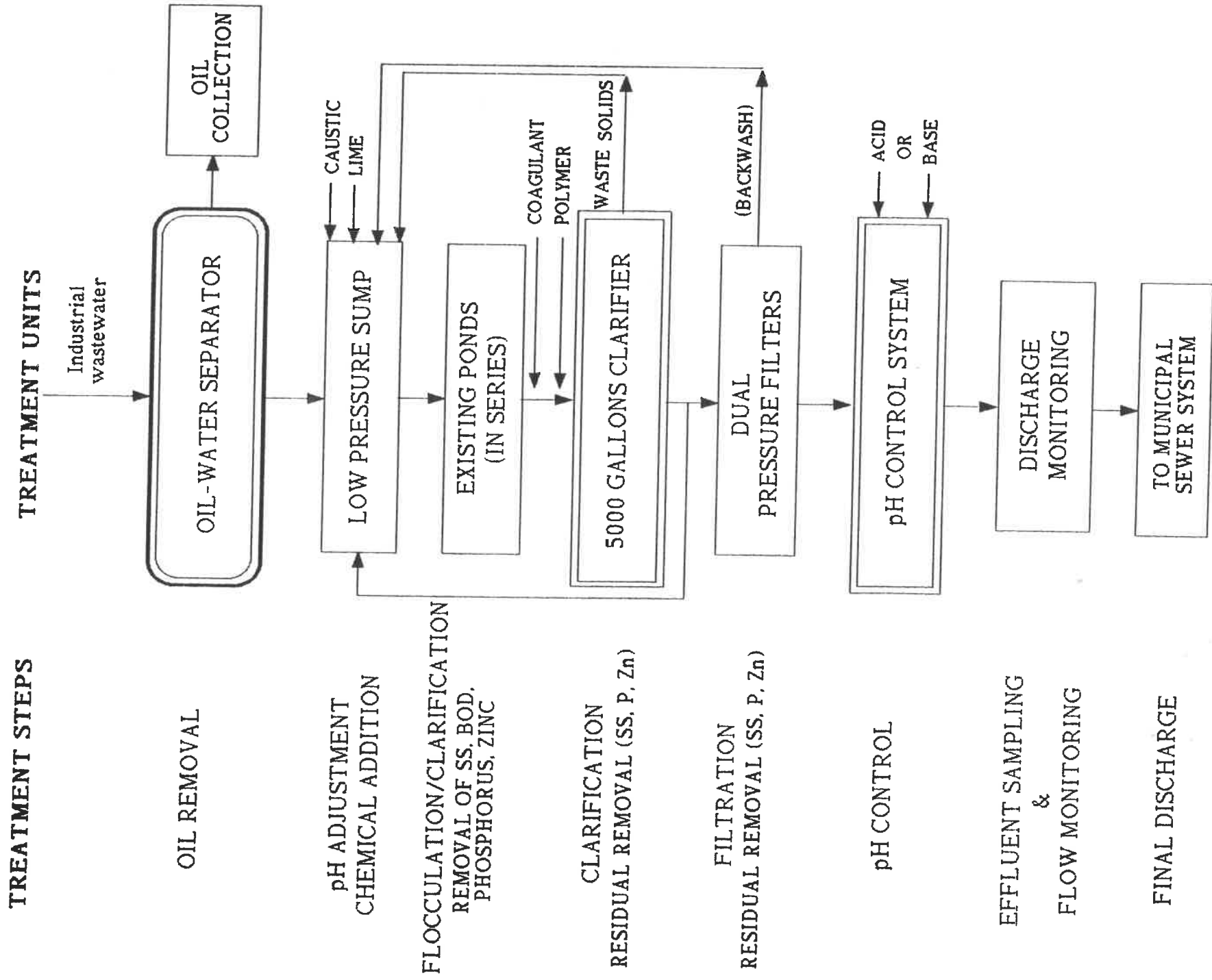


NEW JERSEY RIVERDALE  
**FIRST ENVIRONMENT**  
 DATE 7/19/90  
 SCALE NTS  
 DRAWN RG  
 FIGURE 1  
 SITE MAP  
 NAPOLEON OHIO  
 CLEVITE ELASTOMERS



PROPERTY LINE

FIGURE 2  
 SCHEMATIC FLOW DIAGRAM  
 PRETREATMENT SYSTEM



The treated effluent from Pond 3 is pumped to the treatment building for tertiary treatment involving chemical treatment and pressure filtration. Four chemical feed ports provide the option of chemical treatment using alum, sodium hydroxide, lime, polymer, or other chemicals as needed. A 5,000-gallon detention tank provides reaction time and acts as clarifier. Solids can be bled off the bottom of each compartment in the tank and fed back to the low pressure sump. The treated water may be routed through the pressure filters, or back to the low pressure sump for recycling.

Wastewater is then passed through a depth filtration system for final solids removal. The system is a dual depth filter with multi-media beds and an automated control valve assembly. An automated and programmable regeneration sequence of purge, scrub, backwash, and rinse is employed to maintain filter efficiency. Backwash water and solids are discharged into the low pressure sump pit for recycling. The filtrate is pH adjusted and can be routed through the Badger flow meter for discharge to outfall 001, or back to the low pressure sump for recycling.

#### RECENT TREATMENT PLANT OPERATING DATA

Since the existing treatment system was upgraded in the early months of 1990, significant improvements in the operations and performance of the treatment system has occurred. The facility is meeting both the OEPA interim effluent limits and the final concentration limits issued in July 1990 by OEPA. This is the result of the improvements and new inplant controls implemented by Clevite during the first four months of 1990. The following review is based on plant operations from May through September 1990 which represent actual treatment capabilities of the existing system to effectively operate as a pretreatment system.

## WASTEWATER FLOW

Table 1 is a summary of the average daily discharge flow rate from the treatment system. Wastewater flow has averaged 136,000 gpd with a peak daily flow of 243,000 gpd. Pond 3 serves as the reservoir for the pumping station (See Figure 1) that transfers the wastewater through the tertiary treatment steps (chemical treatment and pressure filtration) in the treatment building prior to discharge to the City's sewer system. Hydraulic and waste load variations in the manufacturing plant's discharge are equalized in the series operated pond system (see Figure 1) thus eliminating hydraulic and waste load surges in the pretreatment facility's discharge.

## FINAL EFFLUENT CHARACTERISTICS

Table 2 presents a summary of the laboratory analysis of grab samples collected in the final discharge (001). These data are from the Monthly Operating Reports submitted to OEPA. Daily values are presented for each parameter required in the discharge to surface water permit along with a range (high and low) for each parameter. Table 3 presents the monthly average value for each monitor listed in Table 2. The data in Tables 2 and 3 show that the treatment plant provides a very high level of treatment such that the discharge is meeting OEPA final discharge limits. The City and EPA pretreatment standards are also presented on Table 2. The data show that the present treatment plant discharge is meeting the pretreatment requirements for the City and EPA for the parameters now being analyzed by Clevite. The data also show that the existing treatment system is a highly efficient operation, capable of providing the necessary treatment steps to meet the City of Napoleon's discharge requirements and USEPA pretreatment standards for existing sources under metal finishing point source category (40 CFR 433) (see Table 4).

TABLE 1

INDUSTRIAL TREATMENT PLANT  
 1990 AVERAGE DAILY DISCHARGE RATES

<u>MONTH</u>	<u>FLOW RATE</u> <u>GPD)</u>
MAY	103,400
JUNE	182,400
JULY	119,000
AUGUST	146,600
SEPTEMBER	128,000
AVERAGE DAILY	136,000
PEAK DAILY	243,000 (169 GPM)

TABLE 2

INDUSTRIAL TREATMENT PLANT  
FINAL EFFLUENT DATA  
(MAY 1990 - SEPTEMBER 1990)

<u>DATE</u>	<u>BOD</u> mg/l	<u>TSS</u> mg/l	<u>OIL GREASE</u> mg/l	<u>P(T)</u> mg/l	<u>Zn(T)</u> mg/l	<u>Pb(T)</u> mg/l
May 15	8	48	3	1.3	0.298	<0.05
May 24	13	68	2	2.6	0.086	<0.05
June 5	9	13	9	0.8	0.040	<0.05
June 21	5	14	7	0.3	0.044	<0.05
June 28	4	12	6	1.3	0.060	<0.05
July 2	7	58	5	1.4	0.146	<0.05
July 11	3	37	3	1.2	0.092	<0.05
July 17	4	81	3	2.2	0.110	0.052
July 25	3	29	6	1.6	0.112	<0.05
July 30	2	38	5	2.6	0.168	<0.05
Aug 6	9	8	8	1.8	0.178	<0.05
Aug 13	14	30	8	1.2	0.096	<0.05
Aug 20	8	39	6	1.7	0.080	<0.05
Aug 27	13	44	6	1.4	0.046	<0.05
Sept 17	8	16	5	1.3	0.016	<0.05
Sept 24	6	39	10	1.6	0.044	<0.05

RANGE

Low

2

8

2

0.3

0.016

&lt;0.05

High

14

68

10

2.6

0.298

0.052

City's

Discharge

200

250

50

7.0

2.00

0.02

EPA

Pretreatment

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2.61

0.69

TABLE 3

INDUSTRIAL TREATMENT SYSTEM  
 AVERAGE EFFLUENT DATA  
 (MAY 1990 - SEPTEMBER 1990)

	TOTAL P (mg/l)	TOTAL Zn (ug/l)	TOTAL Pb (ug/l)	BOD (mg/l)	TOTAL O&G (mg/l)	NONFILTERABLE Residue Tot. (mg/l)
May 1990	2.0	192	<50	11	3	58
June 1990	0.8	48	<50	6	7	13
July 1990	1.8	126	<50	4	4	43
Aug 1990	1.5	100	<50	11	7	30
Sept 1990	1.5	25	<50	7	8	23

TABLE 4

CLEVITE ELASTOMERS, NAPOLEON PLANT  
INDUSTRIAL WASTEWATER DISCHARGE LIMITS  
(PRETREATMENT LIMITS)

<u>PARAMETER</u> <sup>1</sup>	<u>CITY</u> <u>LIMIT</u> <sup>2</sup> (Daily Max)	<u>EPA STANDARDS</u> <sup>3,4</sup> ( <u>MAXIMUM</u> )	
		<u>DAILY</u>	<u>MONTHLY</u> <u>AVERAGE</u>
pH	6.5 - 9	--	--
Cyanide	0.02	1.20	0.65
Chromium VI	1.0	2.77	1.71
Chromium III	0.5	--	--
Nickel	5.0	3.98	2.38
Zinc	2.0	2.61	1.48
Copper	0.5	3.38	2.07
Cadmium	0.01	0.69	0.26
Mercury	0.0003	--	--
Lead	0.02	0.69	0.43
Silver	--	0.43	0.24
Phosphorus	7.0	--	--
Suspended Solids	250.	--	--
BOD	200.	--	--
Chloroform Extractable	50.	--	--
Total Toxic Organics (TTO)	--	2.13	--

- (1) Except for pH, units for all parameters are ppm. pH units are standard value.
- (2) Limit implies equal to or less than, except for pH which is a range between 6.5 and 9.
- (3) USEPA Pretreatment Standards for Metal Finishers (40CRF433)
- (4) OEPA Pretreatment Requirements are 90% of the EPA Pretreatment Standards based on material balance conducted by OEPA.



Clevite will be sampling the final discharge for all parameters listed in Table 4. Based on current manufacturing operations and treatment performance, the Clevite pretreatment system should have no problem meeting the pretreatment requirements either at current wastewater flows (136,100 gpd) or at projected future flow of 200,000 gpd.

#### LAND APPLICATION OF POND SLUDGES

Recent discussions with the OEPA have indicated that land application of the pond sludges on Clevite's property is a viable sludge disposal alternative. Clevite is in the process now of collecting required information on the pond sludge and surrounding area.

After this information is obtained, a sludge management plan will be prepared for submittal to the OEPA for land application of the pond sludges on the Clevite property. The plan will follow OEPA guidance manual "Land Application of Sludge" (August 1985). Five (5) complete sets of the land application plan and data sheets will be submitted to the Northwest Office of the Ohio EPA.

PERMIT TO INSTALL APPLICATION

In accordance to the OEPA's POLICY FOR PRETREATMENT SUBMITTALS, Clevite-Elastomers is submitting a permit to install application for a sewer line to carry treated industrial wastewater and for a connection into the City of Napoleon's sewer line to enable discharge of the industrial wastewater.

The following items have been included in this section:

1. Check from Clevite covering the Appropriate Fees.
2. Application for Permit to Install, (Sewer Line and Connection).
3. Letter of Approval from the Sewer Authority, (City of Napoleon, Ohio).
4. Detail Plans:
  - A. Detail Construction Drawings
  - B. Site Plan
  - C. Vicinity Map
  - D. Construction Specifications
5. Sanitary Sewer Data Sheet

OHIO ENVIRONMENTAL PROTECTION AGENCY  
Division of Water Pollution Control

Application for Permit to Install or Plan Approval

     Treatment Works (Includes Septic Systems)

     New Source (1)

     Modification (1) and (2)

Pretreatment Only

     Sludge or Waste Management Plan Approval

     Other (Sewers, Pump Stations, Fly Ash  
or Bottom Ash Disposal Site, etc.) (2)

For Office Use Only
Application No. _____
Date Received _____
PAID
Amount _____ Date _____
Check # _____ Date _____

1. a) Owner CLEVITE-Elastomers

b) Applicant (per OAC 3745-1-04, See General Instructions).

Responsible Official Greg Finch

Title Director, Manufacturing

Firm CLEVITE-Elastomers

Telephone (419) 499-2541

Mailing Address 33 Lockwood Road Milan, Ohio 44846

c) Name of Project/Facility Installation of sewer line for industrial wastewater

Location (List street/road address, township and county, or latitude and longitude  
if possible. Otherwise provide legal description) CLEVITE-Elastomers

Route 424 East Napoleon, Ohio 43545

Henry County

d) Receiving Stream or Treatment Works to Receive Wastewaters City of Napoleon POTW

e) Person to Contact (Person most familiar with the technical aspects of the project.)

Name Donald Engel

Title Plant Engineer

Organization CLEVITE-Elastomers Napoleon

Telephone (419) 592-2055

f) Operator of facility CLEVITE-Elastomers

2. a) Reason for project: Installation of sewer line to allow discharge of pretreated  
industrial wastewaters to the City of Napoleon's POTW.

b) Is this facility regulated under an effective NPDES Permit?  Y  N Permit # 21C00002

c) Is this application filed in compliance with  Y  N  
Ohio EPA Findings and Orders or a Consent Order\*  Y  N Date: 3/8/90  
\*If the answer is yes, fill in the effective date of the Finding and Orders.

(1) If the treatment works or modification of treatment works involves the construction of  
any type of lagoon (non-concrete lined) other than a flow equalization lagoon, then a  
hydrogeologic site investigation report, meeting the requirements given in Detailed  
Information, Item 13. m, page 5, must be submitted with this application.

(2) For modifications, additions, or replacement of existing works.

3. a) Designed by: CLEVITE-Elastomers  
 b) Address: Route 424 East Napoleon, Ohio 43545 Phone: (419)592-2055  
 c) Inspection Responsibility: Napoleon Engineering & Surveying  
 d) Address: P.O. Box 671 Napoleon, Ohio 43545 Phone: (419)592-9661  
 4. Project Costs: \$ 13,000 (        estimated X bid        invoiced )  
 (Amount) (Check one)

5. Estimated schedule  
 a) Construction: begin Immediately on EPA Approv. complete 10 Days after begin  
 b) Operation: start 5 days after completion compliance At Start

6. a) This new system has been designed for 0.200 MGD average flow.  
 b) This existing system has been modified for additional N/A MGD average flow.  
 c) This existing system has been modified to comply with effluent limits in Item 7.

7. Design performance criteria (use attachment if necessary)

Parameter	Units	30 Day Average	7 Day Average	Maximum
<u>N/A</u>	<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>
<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>
<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>
<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>
<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>
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<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>	<u>      </u>

8. Facility type:        new X modify        replace

a) X Pretreatment(\*)  
 b)        Industrial Direct Discharger(\*)  
 c)        Livestock Management Plan  
 d)        Public  
       Treatment Works(\*)  
X Sanitary Sewers  
       Pump Station  
       Land Application of Sludge (Plan Approval Only)  
 e)        Semi-Public, Private or Commercial(\*)  
 (\*) Part 9d. must be completed

9. Plan Submitted should include (to be attached to the application)

a) X Detail Plans (4 sets; consult with the appropriate District Office)  
X Construction Drawings  
X Specifications  
X Site Plan  
X Vicinity Map  
N/A Schematic diagrams  
 b) X Data Sheets (as appropriate)  
X Sanitary Sewer Data Sheet (sanitary sewers only)  
N/A Pump Station Data Sheet (pump stations)  
N/A Appendix G (long or short as appropriate)  
N/A Wastewater Treatment Works-General Information (EPA Form 8003)

9. (Continued)

- c) Special submittals (as appropriate)
  - X Approval letter from municipality (pretreatment only)
  - N/A NPDES Application (direct discharges)
  - N/A PUCO certification (Facilities Subject to Regulation by the Public Utilities Commission)
  - N/A Soil Analysis
  - N/A Groundwater Geologic Evaluation
  - N/A Livestock Waste Management Plan
  - N/A Certificate of Supervision for Installation, and operation of Package Sewage Treatment Plant
  - N/A Engineering Report
  - N/A Other:

d) Operation and Maintenance Costs

Please provide the best possible estimate of the annual operation and maintenance cost of the new or modified facility. For modified facilities the operation and maintenance costs for the entire facility, not for just the modified portions are required. For publicly owned wastewater treatment facilities include the operation and maintenance costs of the sewer system. Provide as much detail as possible. Assume that the facility/system is operating at design flow/loading.

N/A

- 10. Under OAC 3745-31-04, these signatures shall constitute personal affirmation that all statements or assertions of fact made in the application and attachments thereto are true and complete, comply fully with applicable state requirements, and shall subject the signatory to liability under applicable state laws forbidding false or misleading statements.

*Greg Funch* 10/31/90  
Authorized Signature (of facility) \* \*\* Date  
Director, Manufacturing CLEVITE-Elastomers  
Title  
33 Lockwood Road Milan, Ohio 44846  
Address

For Wastewater Treatment Plants:

Signature of Engineer preparing plans.\* Date

Company

Address

\* Photostatic copies of signatures are not acceptable.  
\*\* Signature of owner or responsible official of applying company required. (See OAC 3745-31-04)



13. Detailed Information Continued

- f) State the anticipated quality (concentration and loads) of all types of pollutants to be discharged by the facility.
- g) State in detail the method for disposal for any wastewater or sludge listed in the question above. A complete description of any control system to be employed should be included.
- h) If wastewater is to be discharged to a surface water, state the anticipated concentration (mg/l) and loading (lbs/day) of pollutants in the discharge, and the effect this discharge will have on the surface water under critical conditions. List any NPDES permits or indicate if an application has been filed.
- i) If wastewater is to be discharged by injection into the groundwater, you must apply for a (UIC) underground injection control permit pursuant to OAC 3745-34. List any UIC permits or indicate if an application has been filed.
- j) If wastewater is to be discharged to a sewerage system, what will be the effect on the sewerage system and wastewater treatment system.
- k) Describe any monitoring equipment to be installed at the facility.
- l) Will the proposed source conform with area-wide waste management plans for wastewater treatment?
- m) Hydrogeologic site investigation report required for construction or modification of any type of a lagoon other than a concrete lined lagoon or a flow equalization lagoon which shall contain as a minimum:
  - 1) Well logs and material characteristics.
  - 2) Define the uppermost aquifer.
  - 3) Definition of geology/hydrogeology, and major aquifer(s) for water supply in the area of the proposed facility.
  - 4) Definition of depth to bedrock.
  - 5) Definition of saturated zone ("High Seasonal Water Table", perched zones etc.), includes interconnections and relationships between zones and with surface dischargers (streams, springs and seeps, etc.)
  - 6) Data characterizing soil materials to be utilized in construction. (If applicable.
  - 7) Note all sources of drinking water, including wells and springs, within 1,000 feet of the limits of waste placement.

For more details contact the district representative.

PERMIT TO INSTALL  
 DETAILED INFORMATION SHEET  
 CLEVITE-Elastomers Napoleon, Ohio

Item 13a

CLEVITE-Elastomers manufactures vibration isolators and suspension components. The primary products are rubber/metal bushings for the automotive industry. Manufacturing operations at the Napoleon facility include metal cutting, forming, heat treating, zinc phosphate conversion coating, dip painting, part cleaning, and assembly.

The proposed modification to the treatment facility is the installation of a sewer line and connection to the City of Napoleon's sewer system.

Item 13b

The following is a list of chemicals and chemical products that are used at the CLEVITE facility. A brief description is provided to categorize the chemical products used by CELVITE.

CHEMICAL OR PRODUCT NAME:	ESTIMATED USAGE		DESCRIPTION:
	UNITS/YEAR		
<b>ASSEMBLY, FABRICATION, &amp; MISC. PRODUCTION:</b>			
1. Polar Type M (18)	5,000 gal.		Assembly Oil
2. Polar Type 0	4,800 gal.		Assembly Oil
3. Sunthene 415	9,500 gal.		Assembly Oil
4. Super Quench	2,600 gal.		Cooling Oil
5. Sunthene 4240	1,500 gal.		Assembly Oil
6. Sunprint HP 2400	100 gal.		Assembly Oil
7. Detrex 75 LC	360 gal.		Alkaline Cleaner
8. Light Duty Cutting Oil	100 gal.		Cutting Fluid
9. Mac Draw 137-DF-41	420 gal.		Drawing Fluid
10. Macco Poly Draw 3	110 gal.		Drawing Fluid
11. Extrudoil 51-DO	4,400 gal.		Drawing Fluid
12. Stoddard Solvent	45,000 gal.		Drawing Fluid
13. Ammonium Hydroxide 26 BE	160 lbs.		
14. Anhydrous Ammonia	78,000 lbs.		
15. Steel (Coiled)	6,000 ton		
16. Steel Tubing	1,500 ton		
17. Rubber suspension bushings	6,000 ton		
18. Prod. Lacquer Light Yellow	25 lbs.		Paint
19. Macco-473-AC-1	3,900 gal.		Drawing Fluid
20. Methanol	10 gal.		
21. Silicone Grease	150 gal.		Lubricant
22. Viscom-60M	800 gal.		Lubricant
23. 4501 Series Ind. Enamel	10 gal.		Paint
24. 96-911 Acrylic Black Enamel	10 gal.		Paint
25. Lubriplate Mist Oil	150 gal.		Lubricant
26. Buckeye #800 M.C.	1,000 gal.		Lubricant
27. Buckeye #17NNA-KY	1,300 gal.		Lubricant



Item 13b (continued):

The following is a list of chemicals and chemical products that are used at the CLEVITE facility. A brief description is provided to categorize the chemical products use by CLEVITE:

<u>CHEMICAL OR PRODUCT NAME:</u>	<u>ESTIMATED USAGE</u>	<u>UNITS/YEAR</u>	<u>DESCRIPTION:</u>
<b>AUTOPHORETIC PAINT LINE:</b>			
1. Water Reducible Black Enamel	48,000 lbs.		Paint
2. Autophoretic 23 Activator	150 gal.		Acid
3. Autophoretic 24 Oxidizer	100 gal.		Oxidizer
4. Autophoretic 219 Starter	100 gal.		Acid
5. Autophoretic 861	2,300 gal.		Paint
6. Autophoretic 1729 Cleaner	800 gal.		Alkaline Cleaner
7. Autophoretic 2732 Cleaner	1,400 gal.		Alkaline Cleaner
8. Autophoretic 2150 Reaction Rinse	150 gal.		Activator
9. Deoxidine 7006	1,600 gal.		Acid
10. Hydrochloric Acid 20 BE	1,400 gal.		
11. 50% Sodium Hydroxide rayon grade	900 gal.		
12. Laboratory Testing Chemicals:			
1. Amchem Aux. Test Solution 1	Minimal		Sulfuric Acid
2. Amchem Aux. Test Solution 11	Minimal		Sodium Hydroxide
3. Amchem Aux. Test Solution 21	Minimal		Mercuric Chloride
4. Amchem Aux. Test Solution 32	Minimal		Hydrochloric Acid
5. Amchem Aux. Test Solution 33	Minimal		Acid
6. Amchem Aux. Test Solution 34	Minimal		Acid
7. Amchem Aux. Test Solution 142	Minimal		Sodium Hydroxide
8. Amchem Titration Solution 61	Minimal		Hydrochloric Acid

**PHOSPHATING OPERATIONS:**

1. Detrex 16 GN	15,300 gal.		Phosphating Soln.
2. Detrex 502 MRCL	7,600 gal.		Phosphating Soln.
3. Detrex 75-LR	6,000 gal.		Alkaline Cleaner
4. Detrex HT-75-LC	4,200 gal.		Alkaline Cleaner
5. Soak 100	42,000 lbs.		Alkaline Cleaner
6. Detrex 803	3,100 lbs.		Acid Pickle Bath
7. Detrex Perm Oil SN	200 gal.		Rust Prevent Coat
8. K-200 VI-PANN	29,800 lbs.		Alkaline Cleaner
9. Laboratory Testing Chemicals:			
1. Sodium Hydroxide	Minimal		
2. Hydrochloric Acid	Minimal		
3. Sulfuric Acid	Minimal		
4. Phenolphthalein Indicator	Minimal		
5. Methyl Orange Indicator	Minimal		
6. Bromophenol Blue Indicator	Minimal		
7. Potassium Permanganate	Minimal		

Item 13b (continued)

The following is a list of chemicals and chemical products that are used at the CLEVITE facility. A brief description is provided to categorize the chemical products used by CLEVITE:

<u>CHEMICAL OR PRODUCT NAME:</u>	<u>ESTIMATED USAGE UNITS/YEAR</u>	<u>DESCRIPTION:</u>
<b>WASTEWATER TREATMENT FACILITY:</b>		
1. Aluminum Sulfate Solution	10,000 gal.	
2. 50% Sodium Hydroxide	1,200 gal.	
3. 25% Sulfuric Acid	4,000 gal.	
4. Hydrated Lime	60,000 lbs.	
5. Calgon Coagulant Aid 243	20 lbs.	Polymer
6. Calgon WT-2466-I	55 gal.	Polymer
7. Laboratory Testing Chemicals:		
1. Nitric Acid	Minimal	
2. Sulfuric Acid	Minimal	
3. Phosphoric Acid	Minimal	
4. Sodium Hydroxide	Minimal	
5. Potassium Persulfate	Minimal	
6. Cyclohexanone	Minimal	
7. Zinc Standard Solution	Minimal	
8. Phosphate Standard Solution	Minimal	
9. PhosVer 3 Phosphate Reagent	Minimal	
10. ZincoVer 5 Zinc Reagent	Minimal	
11. Zincon Reagent	Minimal	

<b>BOILER ROOM (Boilers, Cooling Towers):</b>		
1. Mogul EG-5301	1,500 lbs.	Boiler Chemical
2. Mogul AG-480	24 gal.	Boiler Chemical
3. Mogul EG-54671	100 gal.	Boiler Chemical
4. Mogul EG-5350	80 gal.	Boiler Chemical
5. 50% Sodium Hydroxide	100 gal.	
6. Mogul WS-162	150 gal.	Cooling Twr Chem
7. Laboratory Testing Chemicals:		
1. Hardness H	Minimal	
2. Hardness I	Minimal	
3. Hardness J	Minimal	
4. Sulfite O	Minimal	
5. Sulfite P	Minimal	
6. Sulfite Q	Minimal	
7. pH Indicator	Minimal	
8. Alkalinity C	Minimal	
9. Alkalinity D	Minimal	
10. Alkalinity E	Minimal	
11. Chloride F	Minimal	
12. Chloride G	Minimal	
13. Triguard A	Minimal	
14. Triguard B	Minimal	
15. Triguard C	Minimal	

Item 13b (continued):

The following is a list of chemicals and chemical products that are used at the CLEVITE facility. A brief description is provided to categorize the chemical products used by CLEVITE:

<u>CHEMICAL OR PRODUCT NAME:</u>	<u>ESTIMATED USAGE</u>	<u>UNITS/YEAR</u>	<u>DESCRIPTION:</u>
<b>BOILER ROOM (continued):</b>			
16. Triguard D	Minimal		
17. Triguard E	Minimal		
<b>MAINTENANCE DEPARTMENT:</b>			
1. Oatey all purpose cement	< 100 lbs.		PVC Cement
2. WD-40	< 50 lbs.		Lubricant
3. Lubriplate Low Temperature	< 50 lbs.		Lubricant
4. Accu-Lube LB-1	< 50 lbs.		Lubricant
5. Star Cleaning #50G	< 50 lbs.		Cleaning Fluid
6. Anti-Seiz Lubricant	< 50 lbs.		Lubricant
7. Moly 29	< 50 lbs.		Lubricant
8. Lubriplate 630 Series	< 50 lbs.		Lubricant
9. Lubriplate Gear Shield	< 50 lbs.		Lubricant
10. N-001 Nyco Calci-Solve	100 lbs.		Acid Cleaner
11. High Tack Adhesive/Sealant	< 50 lbs.		Polymer Sealant
12. Tapmatic #1 Cutting Fluid	100 lbs.		Cutting fluid
<b>BLAKESLEE PARTS WASHER:</b>			
1. Detrex 37-BD	1,200 gal.		Alkaline Cleaner
<b>FLOOR SCRUBBERS:</b>			
1. J-Shop 500	4,000 gal.		Cleaning soln.
<b>MISCELLANEOUS:</b>			
1. Gasoline-Leaded	41,000 lbs.		
2. Gasoline-unleaded	1,500 lbs.		
3. PAX-Lano Sav	30 lbs.		Hand Soap
4. PAC Lotion	10 lbs.		Hand Soap
5. L.P. Gas	27,560 gal.		

Item 13c

This PTI covers a modification to an existing treatment facility operated by CLEVITE-Elastomers. The modifications will be to install a new sewer line and make a connection with the City of Napoleon's sanitary sewer line. This modification will allow CLEVITE to discharge their treated industrial wastewaters to the City's POTW.

Item 13d  
No.

Item 13e

Yes.

Item 13f

It is anticipated that the discharged Industrial wastewaters will be of the following quality:

PARAMETER	ANTICIPATED AVERAGE CONCENTRATION	PARAMETERS OF DISCHARGES:	AVERAGE LOADING
FLOW:	140,000 GPD		
PH:	6.5-9.0		
BOD:	7 mg/l		3.7 kg/day
TSS:	40 mg/l		21.2 kg/day
Phosphorus:	3 mg/l		1.6 kg/day
Zinc:	0.4 mg/l		0.2 kg/day
Oil & Grease	6 mg/l		3.2 kg/day
Cyanide	< 0.02 mg/l		< 0.01 kg/day
Cr (6+)	< 1.0 mg/l		< 0.5 kg/day
Cr (3+)	< 0.5 mg/l		< 0.3 kg/day
Ni	< 2.14 mg/l		< 1.1 kg/day
Cu	< 0.50 mg/l		< 0.3 kg/day
Cd	< 0.01 mg/l		< 0.01 kg/day
Hg	< 0.3 ug/l		< 0.2 kg/day
Pb	< 0.02 mg/l		< 0.01 kg/day
Ag	< 0.22 mg/l		< 0.1 kg/day
TTO	< 1.92 mg/l		< 1.0 kg/day

Item 13g

The wastewater will be discharged for treatment by the City of Napoleon's POTW.

The sludge generated by the CLEVITE pretreatment facility is currently stored in Stabilization Lagoon #1. CLEVITE intends to land apply the sludge on their own property according to an approved management plan. A Sludge Management Plan is currently being developed and will be presented to the OEPA upon completion.

Item 13h

N/A

Item 13i

N/A

Item 13j

The City of Napoleon has reviewed CLEVITE's manufacturing processes and pretreatment facility, and has indicated that the POTW will be capable of adequately treating CLEVITE's discharge if the wastewater is within the following guidelines issued by the City of Napoleon:

No Commercial or Industrial Wastes of a deleterious nature shall be discharged into the City's Sanitary Sewer System, that prior to mixing with sanitary sewage do not meet the following limitations:

- a. Have a Ph greater than 9.0 or less than 6.5 .
- b. Contain Cyanide greater than 0.02 ppm.
- c. Contain more than 1.0 ppm of Hexavalent Chromium.
- d. Contain more than 0.5 ppm of Trivalent Chromium.
- e. Contain more than 5.0 ppm of Nickel as Ni.
- f. Contain more than 2.0 ppm of Zinc as Zn.
- g. Contain more than 50 ppm of Chloroform extractable substances.
- h. Contain more than 0.50 ppm of Copper.
- i. Contain more than 0.01 ppm of Cadmium.
- j. Contain more than 0.3 bbp of Mercury.
- k. Contain more than 0.02 ppm of Lead.
- l. Contain more than 7.0 ppm of Phosphorus.
- m. Contain more than 250 ppm of Suspended Solids.
- n. Contain more than 200 ppm of BOD by weight.

The City of Napoleon has indicated that their receiving sewer line has adequate capacity to handle both the existing and ultimate peak flows for CLEVITE's hydraulic loading as indicated under Item 5 of the attached Sanitary Sewer Data Sheet.

Item 13k  
N/A

Item 13l  
Yes.

Item 13m  
N/A



# City of NAPOLEON, OHIO

255 RIVERVIEW AVENUE • (419) 592-4010  
NAPOLEON, OHIO 43545-0151

Mayor  
Steven Lankenau

October 29, 1990

Members of Council  
James Hershberger, President  
Terri A. Williams  
John E. Church  
Randy J. Bachman  
Matthew G. Gloor  
Robert G. Heft

Ohio E.P.A.  
Northwest District  
1035 Deulac Grove Drive  
Bowling Green, Ohio 43402  
Sanitary Division

Re: Clevite Elastomers  
Napoleon, Ohio

Gentlemen:

City Manager  
Terry Dunn

*This letter will serve as our approval of the sanitary sewer plans that illustrate flow into our sanitary sewer system.*

Finance Director  
Rupert W. Schweinhagen

*We have sent a prior approval letter covering flow and sewerage discharge criteria.*

*As you will note, the City of Napoleon will provide all sewer testing supervision.*

Law Director  
Michael J. Wesche

*If you have any questions, please call.*

Prosecuting Attorney  
Thomas L. Bischoff

Respectfully,

*Marc S. Gerken*

Marc S. Gerken, P.E.  
City Engineer

cc: Don Engle  
Roger Noblit  
John Helberg

MSG:skw

SANITARY SEWER DATA SHEET

TO BE SUBMITTED IN TRIPLICATE TO THE OHIO ENVIRONMENTAL PROTECTION AGENCY  
DISTRICT OFFICE WITH DETAIL PLANS

Name of Municipality or County Sewer District City of Napoleon  
 Location of Project by City or County and Twp. CLEVITE, Napoleon, Ohio  
 Name of Project Installation of sewer line to carry industrial wastewater  
 Name of Engineer or Firm Preparing Plans CLEVITE-Elastomers  
 Address Route 424 E. Napoleon, Ohio 43545  
 Name and Address of Municipal or County Official to whom plan approval should  
 be sent Marc S. Gerken P.E. City Engineer  
City of Napoleon 255 Riverview Ave. Napoleon, Ohio 43545-0151

- Brief Description of project. Include information as to (a) the location, size and development of the area to be served, (b) total length of sewer to be installed, (c) possibility of future extensions, (d) exact location of connections to existing sewers, (e) treatment plant receiving wastes and (f) other data pertinent to the project. Installation of a 10 inch sewer line, 380 ft. length. Line will carry treated industrial wastewater from CLEVITE's pretreatment building to the City's 12 inch sewer line. Connection will be made to 12 inch line at new manhole on CLEVITE's property along the North side of Route 424.

2. PIPE MATERIAL	MATERIAL SPECIFICATION*	JOINT SPECIFICATION*	BEDDING** CLASSIFICATION	PIPE SIZE
PVC SDR35	ASTM 3034	ASTM D-3212	4310 Crushed Stone	10 inch
LENGTH OF PIPE	MINIMUM SLOPE	MAX. MANHOLE SPACING	TYPE OF MANHOLE	M.H. JOINT SPECIF. *
380 ft.	1.3 %	300 ft.	ASTM C-478	ASTM C443
			precast	
			concrete	

\*List ASTM, AWWA, or ANSI specification number.  
 \*\* Note: 100% to pass 3/4 inch sieve. ASTM C-12(A,B,C); D-2321(1,2,3) or OTHER

4/10/80

8. a. Are the sewers at least 10 feet horizontally from water lines and/or at least 18 inches below the water line? Yes  No

If No, why? \_\_\_\_\_

b. Are water supply sources, public or private, located within 200 feet of the sewer? Yes  No

If Yes, specify plan sheet page number(s) on which sources are shown \_\_\_\_\_

If yes, will sewers be encased or watertight? Yes \_\_\_\_\_ No

c. Is there any connection between the sewer and a public or private potable water supply or appurtenances? Yes \_\_\_\_\_ No

d. Are sewers in streams constructed to remain watertight and in alignment? Yes \_\_\_\_\_ No  N/A

e. Are watertight covers used where manholes are subject to flooding by street runoff or high water? Yes \_\_\_\_\_ No  N/A

9. a. Are manholes provided at all changes in size, grade, alignment, and sewer intersections? Yes  No  N/A

b. Are drop manholes provided where the entrance sewer invert is 30 inches or more above manhole invert? Yes \_\_\_\_\_ No  N/A

10. a. Where small sewers join larger ones, have the inverts of the larger sewers been lowered sufficiently to maintain the same energy gradient? Yes  No  N/A

b. Have provisions been made to protect sewers at velocities of over 15 feet per second? Yes \_\_\_\_\_ No  N/A

c. Are sewers secured with concrete anchors (or equal) spaced as required? Yes \_\_\_\_\_ No  N/A

11. Are there any overflows or bypasses on the collection system? Yes \_\_\_\_\_ No  If yes, specify plan sheet(s) where shown \_\_\_\_\_

12. a. Will this project include any pump stations? Yes \_\_\_\_\_ No  If yes, please complete pump station data sheet.

b. Will there be a pump station involved in receiving sewage from future sewer extension? Yes \_\_\_\_\_ No  N/A  If yes, specify design flows of pumping station:

Existing buildings; Average daily flow \_\_\_\_\_ peak flow \_\_\_\_\_

Immediate area; Average daily flow \_\_\_\_\_ peak flow \_\_\_\_\_

With future extensions; Average daily flow \_\_\_\_\_ peak flow \_\_\_\_\_



SANITARY SEWERS

All work shall be performed in accord with these plans and specifications and requirements of the Ohio Environmental Protection Agency and the current specifications of the City of Napoleon, Ohio.

Excess excavated material shall be placed where directed by the Engineer. Existing utilities indicated on the plans are based on available information and are not guaranteed by the Engineer for accuracy of completeness. Any work to be performed in the area of existing utilities shall require prior notice to the utility owner.

Specifications for sanitary pipe and fittings shall be:

<u>Pipe Material</u>	<u>Material Spec.</u>	<u>Joint Spec.</u>
Clay	ASTM C-700	C-425
Plain Concrete	ASTM C-14	C-443
Reinforced Concrete	ASTM C-76	C-443
Asbestos Cement	ASTM C-428	D-1969
Polyvinyl Chloride	ASTM D-3034	D-3212

Manholes shall be four foot inside diameter with steps cast at vertical intervals not to exceed sixteen inches, pre-cast concrete conforming to ASTM C-478 with o-ring joints conforming to ASTM C-443. Pre-cast manhole adjusting rings properly grouted shall be used to bring the top of manhole to proper grade. Exfiltration of the completed sewer shall not exceed 200 gallons per hour per inch of diameter per mile. The leakage test shall be performed under the supervision of the Owners Engineer.

Sewer line crossings of pavement shall be backfilled with #310.02 ODOT Spec. material placed in layers not to exceed six (6) inches compacted thickness. A minimum vertical clearance of 18 inches between water and sewer pipe shall be maintained. In areas where this requirement cannot be met, the sewer pipe shall be of water main type pipe (which will withstand a 50 psi pressure test) for a distance of ten (10) feet each side of the water pipe. Ends of sewer services shall be marked by placing wooden markers. The wooden markers shall extend four (4) foot above the top of the sewer pipe.

Compensation for all items of work shall be based on the unit price bid for the specified unit and shall include, but not be limited to all materials, supplies, labor, equipment and other items required to complete said item. Compensation for work required for which no unit price is provided shall be included in other items of work and no additional compensation shall be allowed therefor. Roofs drains, foundation drains and other clean water connections to the sanitary sewer system are prohibited.

BREAK SHARP EDGES - STAMP PT NO.

DR.	STD.	TOL.	HEAT TREAT	REQ.	MATL.	SIZE
	CH.	FRAC ± 1/64		SCALE	DATE	DESIGN NO.

CLEVITE

**CLEVITE ELASTOMERS**

ROUTE NO. 424, EAST  
NAPOLEON, OH 43545

11885

56-14/412

Oct. 30 1990

PAY  
TO THE  
ORDER OF

Treasurer of State of Ohio  
One hundred forty-one and 10/100

\$ 141.00

DOLLARS

**CC OHIO CITIZENS BANK**  
A MEMBER OF NATIONAL CITY CORPORATION  
TOLEDO, OHIO 43603-1688

CLEVITE ELASTOMERS  
BRANCH MANAGERS ACCOUNT

*John F. Elliott*

FOR DEPA permit fee - sewer line

⑈011885⑈⑈1041200144⑈ 24 00840⑈



ROAD CLASSIFICATION

Light-duty

Unimproved dirt

U.S. Route

State Route

(MC CLURE)  
4266 IV SW

84°00' 22" 30" W

41°22' 30" N

**NAPOLEON EAST, OHIO**

N-122.5-W8-C0/7.5

1960