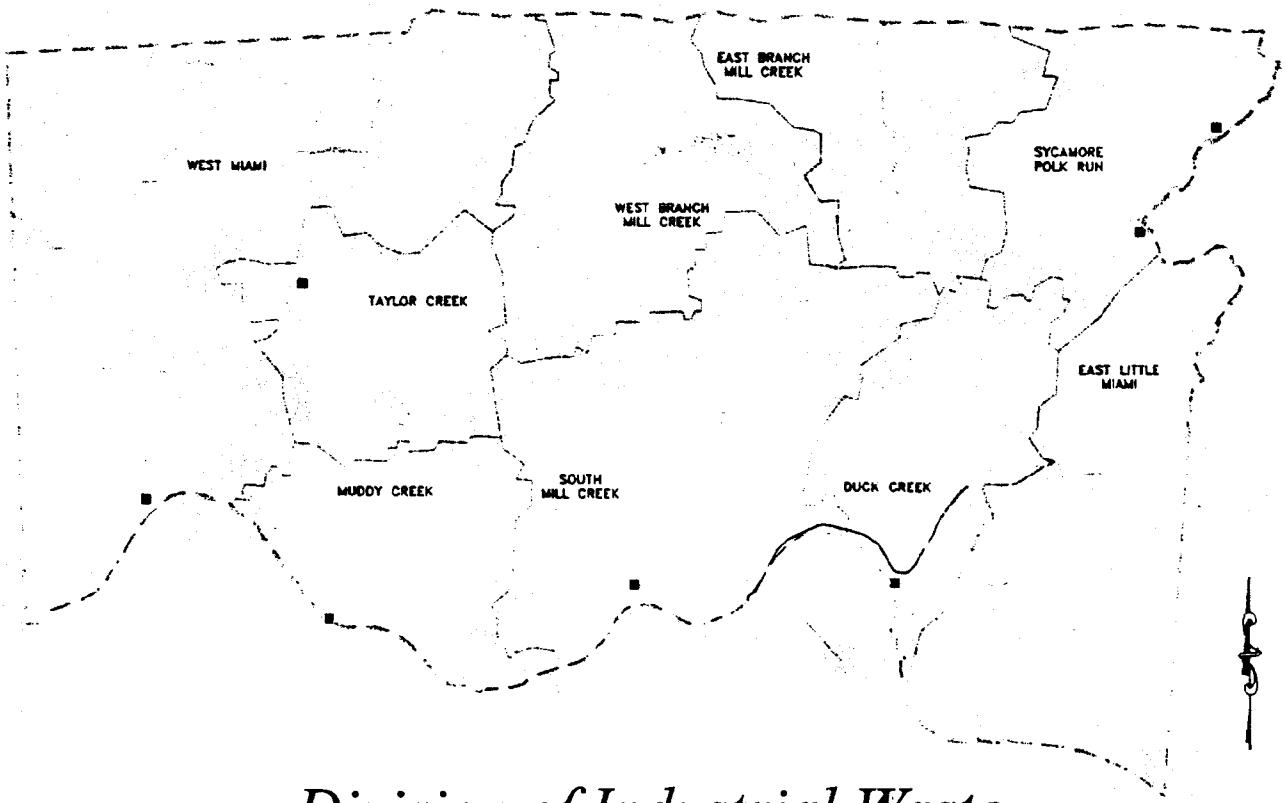
Metropolitan Sewer District of Greater Cincinnati

INDUSTRIAL WASTE SSO/CSO DISCHARGE MANAGEMENT AND MINIMIZATION PLAN



Division of Industrial Waste

DECEMBER 1999

REVISED FEBRUARY 2002

MSD

Metropolitan Sewer District
Division of Industrial Waste

Industrial Waste SSO/CSO Discharge Management and Minimization Plan

December 1999
Revised February 2002

Metropolitan Sewer District
Division of Industrial Waste
Industrial Waste SSO/CSO Discharge Management and Minimization Plan

OBJECTIVE

Using elements of the National Pretreatment Program, to minimize the impact of the discharges from industrial/commercial users during overflow conditions in the Metropolitan Sewer District's sewerage system; to provide additional collection and treatment capacity in the system; and to monitor the effectiveness of the procedures implemented. This is an ongoing procedure that is focused on examining all wet weather/clean water discharges for reuse, detainment, or curtailment.

Description of the Division of Industrial Waste

The Metropolitan Sewer District, Division of the Industrial Waste is responsible for the implementation of the National Pretreatment and Surcharge programs for the District. The Division also provides technical and analytical assistance for the District as well as other local agencies. The Division is composed of four sections. Organizational charts are found in Appendix A.

1) **Sampling and Surveillance**
   - Conducts sampling events used to determine compliance for the pretreatment program and surcharge determinations;
   - Collects surface water, treatment plant, sludge samples;
   - Conducts field investigations;
   - Responds to spill, odor and other citizens' complaints;
   - Participates in and conducts surveillance of activities impacting the District's sewer system and assists local, state, and Federal agencies with a variety of investigations;
   - Evaluates data and determines surcharge factors;
   - Inspects the collection system as necessary when troubleshooting or identifying discharges impacting overflows

2) **Laboratory**
   - Analyzes samples from industrial discharges, surface water sites, spills, wastewater treatment plants for NPDES compliance, investigations, and septic tanks (for Health Departments) using a variety of instrumentation and methods approved by USEPA (40 CFR 136).

3) **Permits and Compliance**
   - Evaluates all data generated for compliance with the conditions of the Pretreatment Program;
   - Conducts a variety of inspections of industrial/commercial sites and activities;
   - Responsible for all enforcement response activities of the District (Pretreatment Program and MSD Rules and Regulations violations as they pertain to non-domestic users);
   - Generates and issues all Wastewater Discharge Permits;
   - Evaluates sampling locations;
   - Provides direction for the use of pollution prevention principles for compliance; and
   - Reviews and approves discharges to the sewer system from industrial and commercial sources

4) **Office of the Superintendent**
   - Provides clerical support;
   - Information management;
   - Generates and maintains Divisional budget;
   - Maintains and processes personnel/payroll information;

- Performs other administrative activities and technical/analytical support to the Department and other agencies.

Authority

The Division of Industrial Waste is responsible for implementing the District's approved Pretreatment Program. The program is under the oversight of the Ohio Environmental Protection Agency (OEPA) and is audited annually for compliance with the National Pretreatment Program. The Division also enforces the Rules and Regulations of the Metropolitan Sewer District as they pertain to non-domestic sources.

Wastewater Discharge Permits are issued to the industrial users of the District. At present, there are 145 Significant Industrial Users and 45 non-Industrial Users holding permits. Monitoring requirements are established according to the flow discharged to the sewer. Classifications used to determine the monitoring requirements are found in Appendix B.

Activities

I. Discharge Prohibitions

A. Groundwater Remediation Projects

Groundwater remediation projects discharging to the Metropolitan Sewer District's system are required to cease all discharges to the sewer during and/or forty-eight hours after a precipitation/overflow event. Wastewater discharge permits issued to these projects include this prohibition. In some cases, the permitee is required to install a system to automatically monitor and interrupt the discharge. Depending on the location, the permitted entity may physically observe the point of overflow; use weather forecasts; or install telemetry systems as a basis upon which to determine when flow to the sewer system should cease. This requirement is explained at the time the request to discharge is made, allowing the permitee to plan for the need to construct and or design a system that would insure compliance with the prohibition conditions. Systems are inspected randomly during precipitation events to evaluate compliance with the requirements of the permits to discharge.

B. Batch Discharges

Significant Industrial Users who have been allowed to convert continuous discharges to batch processes, are limited to discharging to the system under the same conditions as described above. Examples of the documents issued are included in Appendix C.

II. Discharge Restrictions

A. Areas of Concern

All industries contributing wastewater to an SSO are of concern to the Division of Industrial Waste. All industries regulated by the Division's activities are evaluated for the impact on the SSO. The Division's activities are prioritized according to the classification of the SSOs.

Highly active SSOs as defined by the Capital Improvement Projects identified in Exhibit 3 of this consent decree are areas of primary concern for the Division of Industrial Waste. Where industrial contributions to these SSOs exist, all actions described in this plan may be implemented in these areas, requiring the industrial users to take the actions necessary to minimize the impact of the industrial discharge on the SSO. This may include pollution prevention, limiting production and/or wastewater discharge during precipitation events, recycling, and rerouting of storm water.

The highly active SSOs that also receive a contribution from industrial discharges are 1053, 701, 700, 628, 620, and 572 and are on the Master List included in Appendix F. The Division will implement actions to eliminate/minimize the contribution from any existing and future industry in these areas as a first priority.

CSOs

"Areas of Concern" also include the geographical area immediately upstream of a CSO. Industries in these areas are subject to the same evaluation criteria as those contributing to the highly active SSOs identified above. Contributory industries are regulated according to the impact of the wastewater discharge on the overflow. A list of the contributory industries and the CSOs are included in Appendix F.

Industries contributing to other SSOs on the Master List in Appendix F are evaluated using the criteria specified in this plan. Control mechanisms for the regulation of the discharge are generated based on the activity (frequency, volume, duration, characteristic, and impact) of the overflow. These requirements may or may not be as stringent those currently issued to the industrial users located upstream of SSOs 700, 572, 628, & 620.

B. Existing Industrial Users

The District's approved Pretreatment Program includes a classification of the Industrial Users by flow to assist in the determination of monitoring frequencies in excess of the National Pretreatment Program's requirements. During sampling events, the Division of Industrial Waste monitors the flows of all industrial users. This information, combined with flow monitoring data of the collection system, and system capacity calculations (from Wastewater Engineering) is used to evaluate requests or notifications of any changes (especially increases) in the amount of flow discharged to the system. An evaluation of the industrial user's discharge for the potential for reuse, recycling, retention, or curtailment during wet weather events is performed at the annual inspection and/or permit renewal. Current users whose facilities are located in an area of concern are now being advised of the potential need for extra storage capacity onsite. Implementation of measures to prevent discharges during wet weather conditions may be required by inclusion in the Wastewater Discharge Permit or by Administrative Order.

C. New Industrial Users

As required by the National Pretreatment Program, upon receipt of a Wastewater Discharge Permit Application, the discharges from new Industrial Users are evaluated by determining wastewater characteristics such as: flow volumes, pollutant types, and pollutant concentrations. This determination is initially made from design and process plans submitted by the industry and later verified by inspection, sampling, and analysis of the wastewater discharge stream. The Industrial User's process is carefully evaluated to determine whether or not a federal categorical standard is applicable. Local limits are applied to the discharge. The location of the discharge in reference to any known overflows is also determined. The need for restricting the discharge during wet weather events is evaluated in accordance with the guidelines outlined in Section A above. If necessary, the discharge may be subject to restrictions during wet weather.

III. Removal of "Clean Water" from the Sewer System

A. Existing Users

In 1997, the Division added to its inspection process an evaluation of the discharge of "clean water" (non-contact cooling water, uncontaminated storm water, etc.) into the sewer system. All

facilities are notified of the necessity to remove this flow from the sewer system. Users are also advised of options for eliminating contaminated storm water where possible, by covering production or storage areas exposed to precipitation events. Permitee's are advised of options such as treatment and reuse; discharge through the NPDES permitting process, etc. Users are evaluated for compliance with this request. As the Division is notified of the removal of this flow, the facility is inspected and the estimates are passed on to the Wastewater Engineering Division.

B. New Users

The discharge of "clean water" into the separate sewer system from new discharges is prohibited. These users are assisted with the elimination of the potential of the discharge of "clean water" to the system before the permit is issued.

C. Incentive to Remove "Clean Water" from the System

Prior to March 2001, the Metropolitan Sewer District's Rules and Regulations allowed a maximum deduction of eighty percent in sewer charges when non-contact cooling water, etc (clean water) was discharged to the sewer in areas serviced by separate sewers. The revised Rules and Regulations phases out this deduction over the next five years, with complete elimination of the deduction by 2005.

IV. Pretreatment Program Elements

A. Pretreatment Systems

In order to reduce the concentrations of pollutants discharged during overflow conditions, an Industrial User may be required to install a pretreatment system to address pollutant(s) that if discharged during an overflow, will negatively impact the quality of the receiving stream. Data from monitoring activities by MSD and OEPA, water quality standards, local limits, and categorical standards of the industry (where applicable) contributory to the basin are used to determine whether or not the system will be required. Once the evaluation is completed, a new or modified Wastewater Discharge Permit will be issued specifying all pretreatment requirements for the discharge such as monitoring, reporting, installation of the pretreatment system, and any additional measures necessary to address the minimization of the impact of the discharge during overflow events. These actions may also be ordered by issuance of an Administrative Order to the industry.

B. Pollution Prevention

Since 1992, pollution prevention has played an integral part in the Pretreatment Program of the Division. The first phase of the initiative identifies Pollution Prevention as a "tool" by which to attain compliance. Programs and internal resources have been developed and Industrial Users are informed of opportunities for compliance using pollution prevention. As a result of this activity, users are encouraged and/or required to implement principles of pollution prevention in order to comply with the requirements of the pretreatment program. Industries are also being advised to use pollution prevention measures to minimize the impact of their discharges on overflows during wet weather events. These actions may include but are not limited to recycling, reuse and reduction of the discharge. Pollution Prevention actions will be documented and evaluated during annual inspections performed by Industrial Investigators.

C. Spill, Slug, and Containment Plans

In accordance with the National Pretreatment Program, all significant industrial users and industrial users with reasonable potential to discharge a slug or spill that will have an impact on the collection system, wastewater treatment plants, or worker health and safety, to have a Slug, Spill, and Containment Plan. Each plan must contain all of the four elements in the federal pretreatment regulations, 40 CFR 403.8(f)(2)(v). They are reviewed annually for the ability to contain spills from the facility and also to retain flow, if necessary, in an overflow situation. As new plans are developed, industries may be required to provide for additional storage capacity during overflows if necessary. Copies of the criteria used are included in Appendix D.

D. Permitting Process

As described in Section II B&C the permitting process, in conjunction with inspections, is used extensively to determine the actions that should be taken to minimize discharges during overflow events. At the time of permit renewal or issuance of a new permit, all industries having the potential to contribute to an overflow in an area of concern, will be evaluated to identify actions that should be taken to minimize the contribution to the overflow during wet weather. These actions may include but are not limited to retention, curtailment, and rerouting. Implementation of any measure may be required by issuance of a permit containing a compliance schedule or Administrative Order.

Short-term remediation projects are regulated through the use of the "One Time Discharge" (OTD) permit. Holders of this permit are required to cease any and all discharges to the sewer system during and forty-eight hours after any wet weather event. Projects requiring extensive remediation processes are issued the "Long Term Discharge" (LTD) permit. These users are also required to cease discharging during wet weather events or if an overflow is observed. Examples of the types of control documents issued are included in Appendix C.

E. Oil and Grease Control

The Division has developed a limit for the discharge of non-biodegradable Oil and Grease into the sewer system from non-domestic sources as defined by USEPA Method 1664. The Division is also responsible for taking enforcement actions for violations of the section of the MSD Rules and Regulations pertaining to grease and blockages of the sewer system by industrial and/or commercial sources. The actions taken are in conjunction with the activities of the Wastewater Collection Division of the Department, City of Cincinnati Health Department, Hamilton County Health District, Plumbing and Inspections agencies, and other public licensing agencies.

The Wastewater Collections Division identifies blockages in the sewer lines during cleaning and/or responses to complaints. Information concerning the extent of the problem, and generator of the grease is sent to the Division of Industrial Waste. The generator is notified by the Division of Industrial Waste, by letter, of the requirement to clean and televise the private sewer servicing the property. Within forty days, the Wastewater Collection Division (WWC) cleans and televises the public sewer. Within four to six months, WWC will reinspect the public sewer. If grease is found to be originating from the same source, the public sewer will be cleaned and televised by WWC. All applicable information necessary to recover the costs of the investigation and cleaning of the line is sent to the Division of Industrial Waste. The source is then tracked according to the conditions of the Enforcement Response Plan. Enforcement actions may consist of the recovery of the costs of cleaning the lines and fines and penalties for repeat occurrences. Additionally, the source may be required to increase the frequency of cleaning of the grease traps and maintain documentation of said actions. To evaluate compliance with this requirement, the Division

conducts random inspections of the facilities. A list of violators is sent to the Health Departments regulating the sources for further action if necessary. Examples of letters used in this process are included in Appendix F.

F. Enforcement Response

The District's Enforcement Response Plan (ERP) allows for the use of a portion of the fines and penalties for Environmental Enhancement Activities (EEAs). This is the Division's version of Supplemental Environmental Projects. In addition to addressing the condition that caused the violation(s), the user's location is evaluated to determine whether or not a portion of the fine should also be used to reduce and/or eliminate the discharge of pollutants; minimize flow to the sewer system; implement pollution prevention principles; or address wet weather conditions that may contribute to CSOs or SSOs.

V. Voluntary Activities

A. Identification of Industrial Users Contributory to SSOs and CSOs

All industrial Users contributory to SSOs and CSOs are identified at the time of inclusion in the Industrial Waste Program. This information is maintained in the Cincinnati Area Geographical Information System. The data is updated frequently. The information is used in the Division of Industrial Waste's activities as they pertain to minimizing discharges during wet weather events as well as other pretreatment activities. Maps identifying these locations are included in Appendix F.

B. CSO Long Term Control Plan

The MSD has developed a CSO Long Term Control Plan. As the CSO controls are implemented, industries impacting the proposed work are notified and informed of their impacts on the CSO and potential future requirements of them, as well as any timelines of the District. At this point, any actions of the users are considered voluntary. Activities are monitored. As the District's activities progress, actions identified to the industries may become requirements through a compliance schedules in the Wastewater Discharge Permit or Administrative Orders.

C. Rerouting of Discharges

If the potential exists for the rerouting of a user's discharge to an area with little or no potential for contributing to a CSO or SSO, the User is encouraged to reroute its discharge to that location. Where and when necessary, the rerouting may be included in the permit as a requirement.

VI. Characterization of Discharges from CSOs and SSOs

A. Surface Water Monitoring Program

The Division of Industrial Waste has a surface water-monitoring program. The data generated from this program is used to evaluate the impact of discharges from the CSOs and SSOs. Sampling locations have been identified that bracket the SSOs and CSOs of concern. Sampling is conducted routinely in both wet and dry weather conditions. The samples are analyzed for all regulated pollutants, fecal coliform, BOD, Total Kjeldhal Nitrogen, and Total Suspended Solids. Current sampling locations and a summary of the program are found in Appendix G.

B. Data Evaluation

The Division reviews data generated by other departments to fulfill the NPDES requirements of the CSO program for the Department. The data is used to identify additional sampling points,

illegal discharges, non-point sources, CSOs and SSOs. It is also used as baseline information to determine the impact of spills and aid in the identification of the sources of contamination. This data is included with other data for water quality assessments of the conditions of the surface waters in Hamilton County.

Revisions

This plan will be subject to modification by the Director of MSD to account for changes in circumstances such as changes in the configuration of MSD facilities, the purchase of new equipment, changes in regulatory requirements, the development of new technologies, or changes in industry standards/best management practices. MSD shall report any such modifications to this Plan in the annual report required by Paragraph IX.C of the Consent Decree.

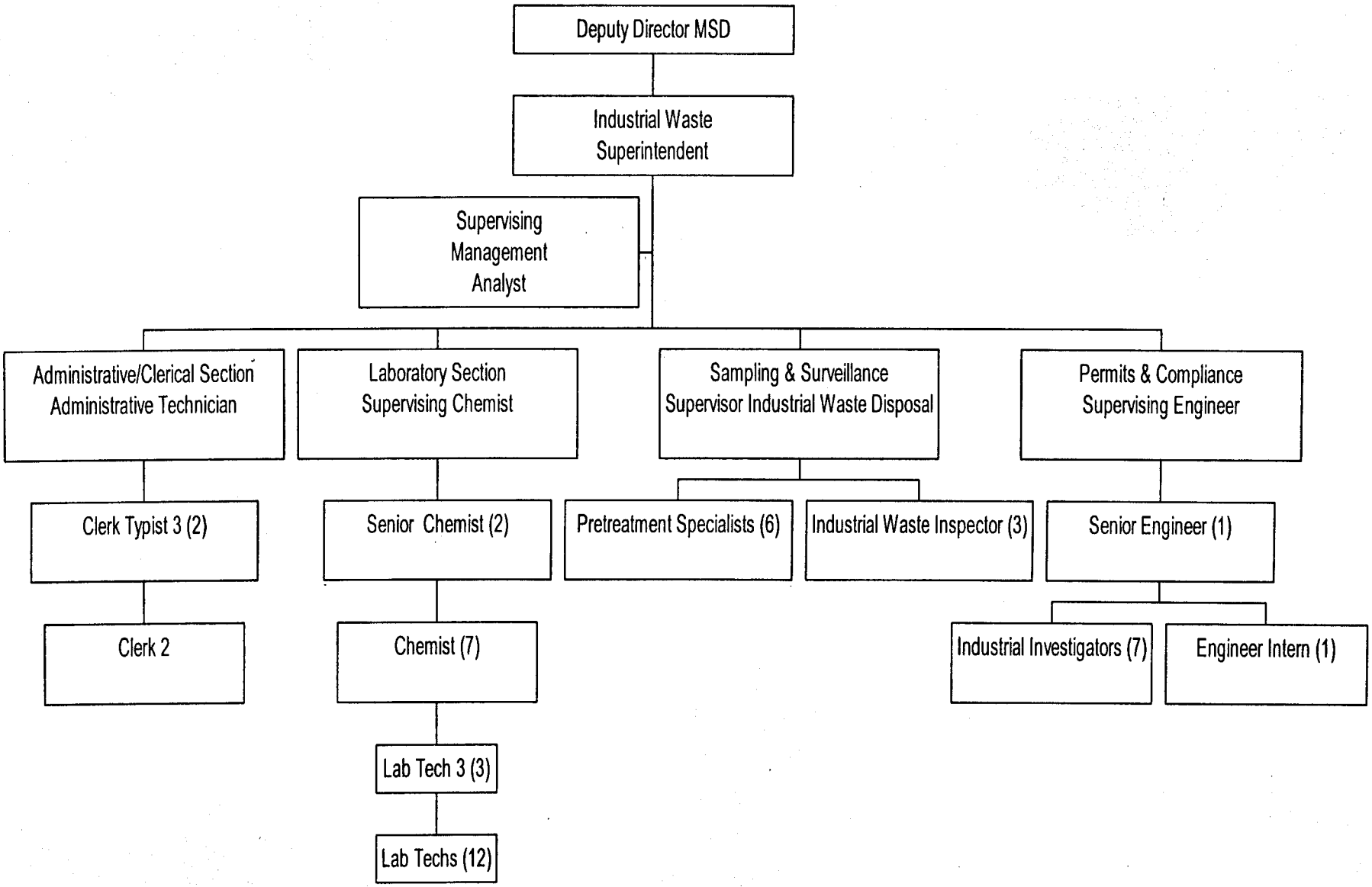
Resources Available in the Division of Industrial Waste

Equipment/instrumentation available to conduct the activities identified in this plan are included in Appendices J-K. Additional supporting documentation of all activities is included in the appendices attached to this document.

APPENDIX A

Organizational Charts

Industrial Waste Division



APPENDIX B

Pretreatment Program Classifications

General Monitoring Information

POTW: Little Miami WWTP Period Covered: January 1, 2000 to December 31, 2000

Industrial User Classification	POTW Industrial User Monitoring		Industrial User Self-monitoring	
	Inspection freq	Sampling freq	Sampling freq	Reporting freq
Average daily process flow - gallons	Investigation * frequency	Scheduled sampling frequency		
A greater than 250,000	At least once per year	Four per year	Monthly	Monthly
B 50,000 - 250,000	At least once per year	Two per year	Quarterly	Quarterly
C 10,000 - 50,000	At least once per year	Two per year	Semiannually	Semiannually
D less than 10,000	At least once per year	Two per year	Semiannually	Semiannually

* An annual investigation includes a thorough review of the Industrial User's Wastewater Discharge Permit conditions and requirements; an inspection of the Industrial User's processes, wastewater sources, pretreatment equipment, wastewater monitoring records, spill prevention plans; a review of the Industrial User's compliance status over the last year; an exchange of information and questions answered on such matters as new regulations or monitoring fees.

General Monitoring Information

POTW: Muddy Creek WWTP Period Covered: January 1, 2000 to December 31, 2000

Industrial User Classification	POTW Industrial User Monitoring		Industrial User Self-monitoring	
	Inspection freq	Sampling freq	Sampling freq	Reporting freq
Average daily process flow - gallons	Investigation * frequency	Scheduled sampling frequency		
A greater than 250,000	At least once per year	Four per year	Monthly	Monthly
B 50,000 - 250,000	At least once per year	Two per year	Quarterly	Quarterly
C 10,000 - 50,000	At least once per year	Two per year	Semiannually	Semiannually
D less than 10,000	At least once per year	Two per year	Semiannually	Semiannually

* An annual investigation includes a thorough review of the Industrial User's Wastewater Discharge Permit conditions and requirements; an inspection of the Industrial User's processes, wastewater sources, pretreatment equipment, wastewater monitoring records, spill prevention plans; a review of the Industrial User's compliance status over the last year; an exchange of information and questions answered on such matters as new regulations or monitoring fees.

General Monitoring Information

POTW: Mill Creek WWTP Period Covered: January 1, 2000 to December 31, 2000

Industrial User Classification	POTW Industrial User Monitoring		Industrial User Self-monitoring	
	Inspection freq	Sampling freq	Sampling freq	Reporting freq
Average daily process flow - gallons	Investigation * frequency	Scheduled sampling frequency		
A greater than 250,000	At least once per year	Four per year	Monthly	Monthly
B 50,000 - 250,000	At least once per year	Two per year	Quarterly	Quarterly
C 10,000 - 50,000	At least once per year	Two per year	Semiannually	Semiannually
D less than 10,000	At least once per year	Two per year	Semiannually	Semiannually

* An annual investigation includes a thorough review of the Industrial User's Wastewater Discharge Permit conditions and requirements; an inspection of the Industrial User's processes, wastewater sources, pretreatment equipment, wastewater monitoring records, spill prevention plans; a review of the Industrial User's compliance status over the last year; an exchange of information and questions answered on such matters as new regulations or monitoring fees.

General Monitoring Information

POTW: Sycamore WWTP Period Covered: January 1, 2000 to December 31, 2000

Industrial User Classification	POTW Industrial User Monitoring		Industrial User Self-monitoring	
	Inspection freq	Sampling freq	Sampling freq	Reporting freq
Average daily process flow - gallons	Investigation * frequency	Scheduled sampling frequency		
A greater than 250,000	At least once per year	Four per year	Monthly	Monthly
B 50,000 - 250,000	At least once per year	Two per year	Quarterly	Quarterly
C 10,000 - 50,000	At least once per year	Two per year	Semiannually	Semiannually
D less than 10,000	At least once per year	Two per year	Semiannually	Semiannually

* An annual investigation includes a thorough review of the Industrial User's Wastewater Discharge Permit conditions and requirements; an inspection of the Industrial User's processes, wastewater sources, pretreatment equipment, wastewater monitoring records, spill prevention plans; a review of the Industrial User's compliance status over the last year; an exchange of information and questions answered on such matters as new regulations or monitoring fees.

APPENDIX C

Examples of Language Used in Wastewater Discharge Permits

M S D

METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

Hamilton County - Managed by the City of Cincinnati

1600 Gest Street
Cincinnati, Ohio 45204
513•244•5122

Board Of County Commissioners

John S. Dowlin
Tom Neyer, Jr.
Todd B. Portune

County Administrator

David J. Krings

City Manager

John F. Shirey

Director

Patrick T. Karney, P.E., DEE

Deputy Director

Robert J. Campbell, P.E., DEE

June 28, 1999

Michael S. Balster
Hull & Associates
4700 Duke Drive,Suite 172
Mason, Ohio 45040

MSD Permit No: OTD-909
Effective Date: 7/01/99
Expiration Date: 10/01/99

Dear Mr. Balster:

The Metropolitan Sewer District, Division of Industrial Waste (DIW) has reviewed your application, requesting to discharge 3, 600 gallons of groundwater, on behalf of BP Exploration & Oil, Inc. into the public sewer. DIW finds your project acceptable subject to the following conditions:

1) Groundwater shall be discharged into the sanitary sewer on the premises of BP located at 4545 Reading Road, Cincinnati, Ohio. The flowrate shall not exceed 10 gallons per minute. The groundwater shall not be discharge on a day when it is raining or up to two days immediately following the rain event.
2) On or before October 1, 1999 a written report shall be submitted to DIW. The following information must be included:

    a) Date(s) of discharge
    b) Time(s) and duration(s) of discharge
    c) Total quantity of discharge
    d) Discharge location description and/or sketch
    e) Results of a grab sample analysis taken during discharge and analyzed for pH, Lead, O&G, VSO.

3) The sewerage billing for one time of discharge is $170.00. An invoice is attached.

If you have any question or need additional information please contact Mr. Gian Nguyen at 557-7012.

BBH

GN

Cc: DIR, DIW, M. Anderson (WWA),
Mike Darr (BP, 200 Public Square, 7-A, Cleveland, OH 44114-2375)

M S D

METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

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Deputy Director

Robert J. Campbell, P.E., DEE

August 16, 2001

Andrew McCorkle
Regional Environmental Manager
Sun Company, Inc.
3499 West Broad Street
Columbus, Ohio 43204

RE: **Wastewater Discharge Permit No. MIL-235**

Dear Mr Andrew McCorkle:

Enclosed is a wastewater discharge permit applicable to the discharge of wastewater from the Company's premises at 6745 Cornell Road to the wastewater treatment system of the Metropolitan Sewer District. The effective date of the enclosed permit is February 01, 1999.

The Company's specific effluent limitations are listed in Attachment A and specific monitoring requirements are presented in Table B-1 of Attachment B. Enclosed for your use and convenience are copies of MSD Report Form and guidance and the most recent Metropolitan Sewer District Rules and Regulations.

Please read the permit carefully as its issuance makes certain obligations and conditions the responsibility of the Company. If you have any questions regarding the issuance of this permit please contact Gian Nguyen at (513)-557-7012.

Sincerely,

Beverly B. Head
Superintendent
Division of Industrial Waste

GN/

cc: DIR/Reading, DIW/Reading, I.W.File(purple-IUN 415)
Mathew J. Lamb (ATC Associates Inc., 687 N. James Rd, Columbus,OH 43219)

Enclosures

WASTEWATER DISCHARGE PERMIT

Permittee:	Sun Company, Inc.	MSD Permit No.:	MIL-235
	Sun Company, Inc.	Effective Date:	02/01/1999
Address:	6745 Cornell Road	Expiration Date:	02/01/2002
	Cincinnati, Ohio 45242	Industrial Cat.:	N-5C

In accordance with the provisions of Article XV, Rules and Regulations in the Metropolitan Sewer District of Greater Cincinnati, Hamilton County, Ohio (known hereinafter as "MSD"), the Permittee is authorized to discharge into the Wastewater Treatment System of MSD subject to the conditions set forth herein.

Issuance of this permit does not constitute expressed or implied approval or permission for a violation of any provision of MSD Rules and Regulations, nor does issuance constitute a waiver by the Department of Sewers, City of Cincinnati, or the Board of County Commissioners of Hamilton County, Ohio, of the right to seek any lawful remedy or penalty for any such violation.

In case the permit makes reference to, or includes in its terms, a plan for pretreating wastewater before its discharge into the Wastewater Treatment System, the issuance of the permit shall not constitute expressed or implied agreement or guarantee that the pretreatment facility constructed in accordance with said plan will operate as intended or in compliance with applicable MSD Rules and Regulations, or that the wastewater so pretreated will be acceptable for discharge to the Wastewater Treatment System.

This permit may be modified by MSD, as required or authorized by MSD Rules and Regulations, or as required by the federal government or agencies thereof.

Failure on the part of the Permittee to fulfill any of the specified conditions shall be sufficient cause for immediate revocation of this permit. This permit is further subject to termination upon thirty (30) days written notice to the Permittee by an authorized representative of MSD.

Violations of this permit are punishable by civil penalties of up to $10,000 per violation and by criminal penalties of up to $25,000 per violation or six months in prison or both.

Any assignment or transfer of this permit shall automatically make it void.

Superintendent Division of Industrial Waste	Director

PERMIT CONDITIONS

1.)The Permittee shall comply with the MSD Rules and Regulations or with federal regulations if more stringent. (Sections 204 and 402)*

2.)The Permittee shall allow MSD and any accompanying EPA personnel access to premises for inspection or sampling related to conditions of this permit. (Sections 201, 1507 and 1508)

3.)The Permittee shall promptly report to MSD any changes in locations, industrial processes, discharges (quantity or quality), or chemical storage procedures. (Sections 1503 and 1506)

4.)The Permittee shall notify MSD immediately in the event of any accident, negligence, or other occurrence having a reasonable probability of causing a discharge to the public sewer system of any wastes or process wastewaters not authorized by this permit; notifications shall be made immediately by telephoning MSD at 557-7000, 8:00 AM to 4:30 PM, Monday through Friday and 244-5500 at all other times, and shall include a description of the manner in which discharges in violation of this permit will be prevented including ceasing industrial discharges if necessary. Within 15 days of the date of any such occurrence, a detailed written statement describing the causes of the discharge and the measures being taken to prevent its future occurrence shall be submitted by Permittee to MSD, addressed to The Metropolitan Sewer District, Division of Industrial Waste, 1600 Gest Street, Cincinnati, Ohio 45204. (Sections 1525 and 1526)

5.)The Permittee shall discharge wastewater in conformance with the information contained in the permit application on file with MSD. (Section 1503)

6.)The Permittee shall retain and preserve for no less than three (3) years, any records, books, documents, memoranda, reports, correspondence, and any and all summaries thereof, relating to monitoring, sampling, and chemical analyses made by or in behalf of said Permittee. (Section 409)

7.)When the Permittee's monitoring of its wastewater discharge discloses a violation the Permittee must notify the Division of Industrial Waste of MSD within 24 hours and within 30 days shall submit to MSD in writing the results of repeat sampling and analysis. The 24 hour notification may be by telephone (557-7020).

8.)If the Permittee monitors its wastewater for any pollutant more often than is required by this Wastewater Discharge Permit, the results of the additional monitoring shall be included in the next periodic report to MSD.

9.)Of the following permit conditions, only those marked with an "X" are applicable to the Permittee:

(x) The Permittee's discharge shall conform to the wastewater flows and characteristics listed in Attachment "A". (Section 1503)

(x) The Permittee shall perform monitoring and submit signed reports as described in Attachment "B". (Section 1503)

( ) The Permittee shall comply with the pretreatment requirements and schedule in Attachment "C". (Sections 1503, 1520, 1521 and 1522)

*References are to the "Rules and Regulations Governing the Design, Construction, Maintenance, Operation, and Use of Sanitary and Combined Sewers in The Metropolitan Sewer District of Greater Cincinnati, Hamilton County, Ohio."

ATTACHMENT A

WASTEWATER FLOWS AND CHARACTERISTICS

PERMITTEE: **Sun Company, Inc.**
Sun Company, Inc.
MSD PERMIT NO.: **MIL-235**

The following limitations and conditions apply to the Permittee's effluent wastewater until such time as this Attachment is modified or revoked:

1. The Permittee shall maintain the **pH** of its wastewater discharged to MSD sewer system within the range of 6 to 10 standard units at all times in compliance with Sections 1518 (F) and 2204 Metropolitan Sewer District Rules and Regulations.

2. The .Permittee shall not discharge to the MSD sewer system waste or wastewater of characteristics such that the aggregate concentration of organic substances in the vapor space exceeds 450 ppm (v/v) when a single grab sample of the waste or wastewater is tested using the "Final Procedure **Vapor Space Organics**" as published by MSD. During any 90 consecutive calendar days the average of the maximum values for five consecutive monitoring days shall not exceed 300 ppm (v/v).

3. The Permittee shall not discharge to the MSD sewer system waste or wastewater that contains pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, wastestreams with a **closed cup flashpoint** of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21.

4. At no time shall the wastewater flow rate to the MSD sewer system exceed 3,000 gallons per day (gpd).

5. The Permittee shall not discharge wastewater on a day when it is raining or up to two days immediately following the rain event.

ATTACHMENT A

WASTEWATER FLOWS AND CHARACTERISTICS

PERMITTEE: **Sun Company, Inc.**
Sun Company, Inc.
MSD PERMIT NO.: **MIL-235**

6. **Local Limits** The Permittee shall not discharge to the MSD sewer system waste or wastewater with concentrations of pollutants that exceed the following values:

Sun Company, Inc. Limits			
Pollutant	Column A	Column B	Column C
Cadmium (Total)	6.0	9.0	n.a.
Chromium (Total)	10.0	15.0	n.a.
Copper (Total)	10.0	15.0	n.a.
Lead (Total)	6.0	9.0	n.a.
Mercury (Total)	0.02	0.03	n.a.
Nickel (Total)	10.0	15.0	n.a.
Zinc (Total)	10.0	15.0	n.a.
Cyanide (Total)	n.a.	15.0	n.a.
Cyanide (Amenable)	n.a.	3.0	n.a.
Phenols	n.a.	50.0	n.a.
Oil & Grease	n.a.	50.0	n.a.
Temperature	n.a.	150°F	n.a.
Vapor Space Organics	n.a.	450 ppm	300 ppm

Column A = concentrations (mg/L, unless otherwise noted) of composite samples collected over the daily period of operation in proportion to flow so as to produce a representative sample.

Column B = concentrations (mg/L, unless otherwise noted) of samples collected over a time interval of not more than one minute so as to produce a grab sample.

Column C = **average** concentration (mg/L, unless otherwise noted) of at least 5 samples collected over a period of 90 days.

n.a. = sampling and analytical method and/or regulatory limit requires grab samples only.

ATTACHMENT B

MONITORING AND REPORTING REQUIREMENTS

PERMITTEE: **Sun Company, Inc.**
Sun Company, Inc.
MSD PERMIT NO.: **MIL-235**

The following provisions shall apply to the Permittee until such time as this Attachment is modified or revoked:

1. The Permittee shall monitor and record the pH of its wastewater at the sampling location(s) specified at the end of this Attachment according to the schedule in Table B-1. The Permittee shall retain these records so that on any day the Permittee will have on hand and available for inspection pH records for the previous three (3) years.

2. The Permittee shall perform periodic self monitoring of its wastewater at the sampling location(s) defined in this Attachment **according to the schedule specified in Table B-1** by collecting data representative of the quality and quantity of its wastewater effluent. The Permittee shall submit these data to MSD within 45 days of the last day of the month in which the monitoring was performed. The Permittee shall use MSD Report Form No. MSD IW 88-2 or a reasonable facsimile for the required report. The monitoring report shall include:

   A. Average daily wastewater flow rates and total flow for the previous quarter from each sampling location described in this Attachment.

   B. The chemical identities, concentrations, and methods of analysis of the regulated pollutants as listed in Item 6 Local Limits of Attachment A of this permit and **as required for periodic monitoring in Table B-1.**

   C. In the event of no discharge during a quarter a report must be submitted to MSD describing the cause and expected duration of cessation.

ATTACHMENT B

MONITORING AND REPORTING REQUIREMENTS

PERMITTEE: **Sun Company, Inc.**
Sun Company, Inc.
MSD PERMIT NO.: **MIL-235**

3. The Permittee shall periodically submit separate written reports of groundwater meter readings and wastewater discharge volumes for billing purposes to:

   Metropolitan Sewer District – Division of Administration
   1600 Gest Street
   Cincinnati, OH 45204
   Attn: Ms. G. Tokarsky

   The dates when the reports are due, and the reporting periods of the volumetric discharges, are normally specified on the billing notices from Cincinnati Water Works.
   All reports shall contain detailed information and follow specific submitting instructions. These are outlined in the confirmation letter from the Division of Wastewater Administration after the meter installation is inspected.

4. The Permittee shall use the following applicable sampling and analytical techniques for the monitoring:

   A. The **metal pollutants** shall be analyzed using approved test procedures of the appropriate EPA Method Number 200.7 through 289.2. The **cyanide pollutant** shall be analyzed using approved test procedures of the appropriate EPA Method Numbers 335.1, 335.2, or 335.3. The **organic pollutants** shall be analyzed using the approved test procedures of the appropriate EPA Method Numbers 601-613, 624, 625, 1624 and 1625. The **phenols pollutant** listed in Item 6 of Attachment A shall be analyzed using the approved test procedure of the appropriate EPA Method Number 420.1 or 420.2. The **oil & grease pollutant** listed in Item 6 of Attachment A shall be analyzed using the approved test procedure 5520F Hydrocarbons as set forth in the 17th edition of Standard Methods for the Examination of Water and Wastewater, 1989. Further information regarding approved sampling and test procedures may be found in Title 40 Code of Federal Regulations, Part 136 (40 CFR 136).

   B. For the pollutants listed in **Item 6 Local Limits of Attachment A** samples shall be collected by the following appropriate method. The samples for **metal pollutants, cyanide, phenols, oil & grease and Vapor Space Organics (VSO)** shall each be taken as a single grab sample.

ATTACHMENT B

MONITORING AND REPORTING REQUIREMENTS

PERMITTEE: **Sun Company, Inc.**
Sun Company, Inc.
MSD PERMIT NO.: **MIL-235**

5. Permittees seeking renewal of a Wastewater Discharge Permit shall apply in writing between 30 and 60 days before the expiration date of the current permit. The application for renewal shall state significant changes in the quantity and quality of the wastewater or shall certify that there are no such significant changes.

SAMPLING LOCATION(S)

Sample Location 1. Samples shall be taken from the ***'end-of-process'*** sampling and gauging station which is located after Carbon Filter of the facility. This sampling point is in reference to: Your Company's drawing Number #3 (Flow Schematic).

Table B-1 Schedule for periodic monitoring.

Sun Company, Inc.	pH	Periodic monitoring (number of monitoring days per period)	Required regulated pollutants for periodic monitoring.	
			Item 6 Local Limits Attachment A	
Sample Location 1	one grab sample each calendar quarter in which there is discharge	one grab sample each calendar quarter in which there is discharge	Vapor Space Organics, Oil & grease, Lead.	

APPENDIX D

Pretreatment Program Requirements Slug, Spill and Containment Guidance

(iii) If, by July 1, 1983, a POTW has begun the PRM 75-34 analysis but due to circumstances beyond its control has not completed it, Consistent Removal, subject to the approval of the Approval Authority, may continue to be claimed according to the formula in paragraph (h)(2)(i) of this section as long as the POTW acts in a timely fashion to complete the analysis and makes an effort to implement the non-structural cost-effective measures identified by the analysis; and so long as the POTW has expressed its willingness to apply, after completing the analysis, for a construction grant necessary to implement any other cost-effective Overflow controls identified in the analysis should Federal funds become available, so applies for such funds, and proceeds with the required construction in an expeditious manner. In addition, Consistent Removal may, subject to the approval of the Approval Authority, continue to be claimed according to the formula in paragraph (h)(2)(i) of this section where the POTW has completed and the Approval Authority has accepted the analysis required by PRM 75-34 and the POTW has requested inclusion in its NPDES permit of an acceptable compliance schedule providing for timely implementation of cost-effective measures identified in the analysis. (In considering what is timely implementation, the Approval Authority shall consider the availability of funds, cost of control measures, and seriousness of the water quality problem.)

(Information collection requirements are approved by the Office of Management and Budget under control number 2040-0009)

[49 FR 31221, Aug. 3, 1984, as amended at 51 FR 20430, June 4, 1986; 53 FR 42435, Nov. 5, 1987; 58 FR 9386, Feb. 19, 1993; 58 FR 18017, Apr. 7, 1993]

§ 403.8 Pretreatment Program Requirements: Development and Implementation by POTW.

(a) POTWs required to develop a pretreatment program. Any POTW (or combination of POTWs operated by the same authority) with a total design flow greater than 5 million gallons per day (mgd) and receiving from Industrial Users pollutants which Pass Through or Interfere with the operation of the POTW or are otherwise subject to Pretreatment Standards will be required to establish a POTW Pretreatment Program unless the NPDES State exercises its option to assume local responsibilities as provided for in § 403.10(e). The Regional Administrator or Director may require that a POTW with a design flow of 5 mgd or less develop a POTW Pretreatment Program if he or she finds that the nature or volume of the industrial influent, treatment process upsets, violations of POTW effluent limitations, contamination of municipal sludge, or other circumstances warrant in order to prevent Interference with the POTW or Pass Through.

(b) Deadline for Program Approval. A POTW which meets the criteria of paragraph (a) of this section must receive approval of a POTW Pretreatment Program no later than 3 years after the reissuance or modification of its existing NPDES permit but in no case later than July 1, 1983. POTWs whose NPDES permits are modified under section 301(h) of the Act shall have a Pretreatment Program within three (3) years as provided for in 40 CFR part 125, subpart G. POTWs identified after July 1, 1983 as being required to develop a POTW Pretreatment Program under paragraph (a) of this section shall develop and submit such a program for approval as soon as possible, but in no case later than one year after written notification from the Approval Authority of such identification. The POTW Pretreatment Program shall meet the criteria set forth in paragraph (f) of this section and shall be administered by the POTW to ensure compliance by Industrial Users with applicable Pretreatment Standards and Requirements.

(c) Incorporation of approved programs in permits. A POTW may develop an appropriate POTW Pretreatment Program any time before the time limit set forth in paragraph (b) of this section. The POTW's NPDES Permit will be reissued or modified by the NPDES State or EPA to incorporate the approved Program as enforceable conditions of the Permit. The modification of a POTW's NPDES Permit for the

purposes of incorporating a POTW Pretreatment Program approved in accordance with the procedure in Sec. 403.11 shall be deemed a minor Permit modification subject to the procedures in 40 CFR 122.63.

+ (d) Incorporation of compliance schedules in permits. [Reserved].

(e) Cause for reissuance or modification of Permits. Under the authority of section 402(b)(1)(C) of the Act, the Approval Authority may modify, or alternatively, revoke and reissue a POTW's Permit in order to:

(1) Put the POTW on a compliance schedule for the development of a POTW Pretreatment Program where the addition of pollutants into a POTW by an Industrial User or combination of Industrial Users presents a substantial hazard to the functioning of the treatment works, quality of the receiving waters, human health, or the environment;

(2) Coordinate the issuance of a section 201 construction grant with the incorporation into a permit of a compliance schedule for POTW Pretreatment Program;

(3) Incorporate a modification of the permit approved under section 301(h) or 301(i) of the Act;

(4) Incorporate an approved POTW Pretreatment Program in the POTW permit; or

(5) Incorporate a compliance schedule for the development of a POTW pretreatment program in the POTW permit.

(6) Incorporate the removal credits (established under § 403.7) in the POTW permit.

(f) POTW pretreatment requirements. A POTW pretreatment program must be based on the following legal authority and include the following procedures. These authorities and procedures shall at all times be fully and effectively exercised and implemented.

(1) Legal authority. The POTW shall operate pursuant to legal authority enforceable in Federal, State or local courts, which authorizes or enables the POTW to apply and to enforce the requirements of sections 307 (b) and (c), and 402(b)(8) of the Act and any regulations implementing those sections. Such authority may be contained in a statute, ordinance, or series of contracts or joint powers agreements which the POTW is authorized to enact, enter into or implement, and which are authorized by State law. At a minimum, this legal authority shall enable the POTW to:

(i) Deny or condition new or increased contributions of pollutants, or changes in the nature of pollutants, to the POTW by Industrial Users where such contributions do not meet applicable Pretreatment Standards and Requirements or where such contributions would cause the POTW to violate its NPDES permit;

(ii) Require compliance with applicable Pretreatment Standards and Requirements by Industrial Users;

(iii) Control through permit, order, or similar means, the contribution to the POTW by each Industrial User to ensure compliance with applicable Pretreatment Standards and Requirements. In the case of Industrial Users identified as significant under 40 CFR 403.3(t), this control shall be achieved through permits or equivalent individual control mechanisms issued to each such user. Such control mechanisms must be enforceable and contain, at a minimum, the following conditions:

(A) Statement of duration (in no case more than five years);

(B) Statement of non-transferability without, at a minimum, prior notification to the POTW and provision of a copy of the existing control mechanism to the new owner or operator;

(C) Effluent limits based on applicable general pretreatment standards in part 403 of this chapter, categorical pretreatment standards, local limits, and State and local law;

(D) Self-monitoring, sampling, reporting, notification and recordkeeping requirements, including an identification of the pollutants to be monitored, sampling location, sampling frequency, and sample type, based on the applicable general pretreatment standards in part 403 of this chapter, categorical pretreatment standards, local limits, and State and local law;

(E) Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements, and any applicable compliance schedule. Such schedules may not extend the compliance date beyond applicable federal deadlines.

(iv) Require (A) the development of a compliance schedule by each Industrial User for the installation of

technology required to meet applicable Pretreatment Standards and Requirements and (B) the submission of all notices and self-monitoring reports from Industrial Users as are necessary to assess and assure compliance by Industrial Users with Pretreatment Standards and Requirements, including but not limited to the reports required in § 403.12.

(v) Carry out all inspection, surveillance and monitoring procedures necessary to determine, independent of information supplied by Industrial Users, compliance or noncompliance with applicable Pretreatment Standards and Requirements by Industrial Users. Representatives of the POTW shall be authorized to enter any premises of any Industrial User in which a Discharge source or treatment system is located or in which records are required to be kept under § 403.12(m) to assure compliance with Pretreatment Standards. Such authority shall be at least as extensive as the authority provided under section 308 of the Act;

+ (vi)(A) Obtain remedies for noncompliance by any Industrial User with any Pretreatment Standard and Requirement. All POTW's shall be able to seek injunctive relief for noncompliance by Industrial Users with Pretreatment Standards and Requirements. All POTWs shall also have authority to seek or assess civil or criminal penalties in at least the amount of $1,000 a day for each violation by Industrial Users of Pretreatment Standardsand Requirements.

(B) Pretreatment requirements which will be enforced through the remedies set forth in paragraph (f)(1)(vi)(A) of this section,

will include but not be limited to, the duty to allow or carry out inspections, entry, or monitoring activities; any rules, regulations, or orders issued by the POTW; any requirements set forth in individual control mechanisms issued by the POTW; or any reporting requirements imposed by the POTW or these regulations. The POTW shall have authority and procedures (after informal notice to the discharger) immediately and effectively to halt or prevent any discharge of pollutants to the POTW which reasonably appears to present an imminent endangerment to the health or welfare of persons. The POTW shall also have authority and procedures (which shall include notice to the affected industrial users and an opportunity to respond) to halt or prevent any discharge to the POTW which presents or may present an endangerment to the environment or which threatens to interfere with the operation of the POTW. The Approval Authority shall have authority to seek judicial relief and may also use administrative penalty authority when the POTW has sought a monetary penalty which the Approval Authority believes to be insufficient.

(vii) Comply with the confidentiality requirements set forth in § 403.14.

(2) Procedures. The POTW shall develop and implement procedures to ensure compliance with the requirements of a Pretreatment Program. At a minimum, these procedures shall enable the POTW to:

(i) Identify and locate all possible Industrial Users which might be subject to the POTW Pretreatment Program. Any compilation, index or inventory of Industrial Users made under this paragraph shall be made available to the Regional Administrator or Director upon request;

(ii) Identify the character and volume of pollutants contributed to the POTW by the Industrial Users identified under paragraph (f)(2)(i) of this section. This information shall be made available to the Regional Administrator or Director upon request;

(iii) Notify Industrial Users identified under paragraph (f)(2)(i) of this section, of applicable Pretreatment Standards and any applicable requirements under sections 204(b) and 405 of the Act and subtitles C and D of the Resource Conservation and Recovery Act. Within 30 days of approval pursuant to 40 CFR 403.8(f)(6), of a list of significant industrial users, notify each significant industrial user of its status as such and of all requirements applicable to it as a result of such status.

(iv) Receive and analyze self-monitoring reports and other notices submitted by Industrial Users in accordance with the self-monitoring requirements in § 403.12;

(v) Randomly sample and analyze the effluent from industrial users and conduct surveillance activities in order to identify, independent of information supplied by industrial users, occasional and continuing noncompliance with pretreatment standards. Inspect and sample the effluent from each Significant Industrial

User at least once a year. Evaluate, at least once every two years, whether each such Significant Industrial User needs a plan to control slug discharges. For purposes of this subsection, a slug discharge is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge. The results of such activities shall be available to the Approval Authority upon request. If the POTW decides that a slug control plan is needed, the plan shall contain, at a minimum, the following elements:

(A) Description of discharge practices, including non-routine batch discharges;

(B) Description of stored chemicals;

(C) Procedures for immediately notifying the POTW of slug discharges, including any discharge that would violate a prohibition under 40 CFR 403.5(b), with procedures for follow-up written notification within five days;

(D) If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response;

(vi) Investigate instances of noncompliance with Pretreatment Standards and Requirements, as indicated in the reports and notices required under § 403.12, or indicated by analysis, inspection, and surveillance activities described in paragraph (f)(2)(v) of this section. Sample taking and analysis and the collection of other information shall be performed with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions; and

(vii) Comply with the public participation requirements of 40 CFR part 25 in the enforcement of national pretreatment standards. These procedures shall include provision for at least annual public notification, in the largest daily newspaper published in the municipality in which the POTW is located, of industrial users which, at any time during the previous twelve months, were in significant noncompliance with applicable pretreatment requirements. For the purposes of this provision, an industrial user is in significant noncompliance if its violation meets one or more of the following criteria:

(A) Chronic violations of wastewater discharge limits, defined here as those in which sixty-six percent or more of all of the measurements taken during a six-month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter;

(B) Technical Review Criteria (TRC) violations, defined here as those in which thirty-three percent or more of all of the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC (TRC=1.4 for BOD, TSS, fats, oil, and grease, and 1.2 for all other pollutants except pH.

(C) Any other violation of a pretreatment effluent limit (daily maximum or longer-term average) that the Control Authority determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of POTW personnel or the general public);

(D) Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the POTW's exercise of its emergency authority under paragraph (f)(1)(vi)(B) of this section to halt or prevent such a discharge;

(E) Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance;

(F) Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;

(G) Failure to accurately report noncompliance;

(H) Any other violation or group of violations which the Control Authority determines will adversely affect the operation or implementation of the local pretreatment program.

(3) Funding. The POTW shall have sufficient resources and qualified personnel to carry out the authorities and procedures described in paragraphs (f) (1) and (2) of this section. In some limited circumstances, funding and personnel may be delayed where (i) the POTW has adequate legal authority and procedures to carry out the Pretreatment Program requirements described in this section, and (ii) a limited aspect of the Program does not need to be implemented immediately (see § 403.9(b)).

(4) Local limits. The POTW shall develop local limits as required in § 403.5(c)(1), or demonstrate that they are not necessary.

(5) The POTW shall develop and implement an enforcement response plan. This plan shall contain detailed procedures indicating how a POTW will investigate and respond to instances of industrial user noncompliance. The plan shall, at a minimum:

(i) Describe how the POTW will investigate instances of noncompliance;

(ii) Describe the types of escalating enforcement responses the POTW will take in response to all anticipated types of industrial user violations and the time periods within which responses will take place;

(iii) Identify (by title) the official(s) responsible for each type of response;

(iv) Adequately reflect the POTW's primary responsibility to enforce all applicable pretreatment requirements and standards, as detailed in 40 CFR 403.8 (f)(1) and (f)(2).

+ (6) The POTW shall prepare and maintain a list of its industrial users meeting the criteria in Sec. 403.3(u)(1). The list shall identify the criteria in Sec. 403.3(u)(1) applicable to each industrial user and, for industrial users meeting the criteria in Sec. 403.3(u)(ii), shall also indicate whether the POTW has made a determination pursuant to Sec. 403.3(u)(2) that such industrial user should not be considered a significant industrial user. The initial list shall be submitted to the Approval Authority pursuant to Sec. 403.9 as a non-substantial modification pursuant to Sec. 403.18(d). Modifications to the list shall be submitted to the Approval Authority pursuant to Sec. 403.12(i)(1).

(Information collection requirements are approved by the Office of Management and Budget under control number 2040-0009)

[46 FR 9439, Jan. 28, 1981, as amended at 49 FR 31224, Aug. 3, 1984; 51 FR 20429, 20430, June 4, 1986; 51 FR 23759, July 1, 1986; 53 FR 40612, Oct. 17, 1988; 55 FR 30129, July 24, 1990; 58 FR 18017, Apr. 7, 1993; 60 FR 33926, June 29, 1995; 62 FR 38406, July 17, 1997]

§ 403.9 POTW pretreatment programs and/or authorization to revise pretreatment standards: Submission for approval.

(a) Who approves Program. A POTW requesting approval of a POTW Pretreatment Program shall develop a program description which includes the information set forth in paragraphs (b)(1) through (4) of this section. This description shall be submitted to the Approval Authority which will make a determination on the request for program approval in accordance with the procedures described in § 403.11.

(b) Contents of POTW program submission. The program description must contain the following information:

(1) A statement from the City Solicitor or a city official acting in a comparable capacity (or the attorney for those POTWs which have independent legal counsel) that the POTW has authority adequate to carry out the programs described in § 403.8. This statement shall:

(i) Identify the provision of the legal authority under § 403.8(f)(1) which provides the basis for each procedure under § 403.8(f)(2);

Metropolitan Sewer District Rules and Regulations

SPILL CONTROL PLAN

Section 1524 Each user shall provide facilities for protection of the wastewater treatment system from accidental discharge of prohibited materials or other regulated wastes. Such facilities shall be provided and maintained at the User's expense. Detailed plans delineating such facilities and detailed operating procedures to provide this protection shall be maintained by the User and made available for inspection by the Department at any reasonable time, upon request of the Department.

Section 1525 Users shall notify the Department immediately of any slug loading or any other discharges of wastes or highway spills in violation of these Rules and Regulations.

This notification shall be followed, within 15 days of the date of occurrence, by a detailed written statement from the User describing the causes of the discharge and the measures being taken to prevent its future occurrence.

Such notification will not relieve Users of liability for any consequential expense, loss or damage, including without limitation any fines and/or penalties imposed on the Department which result from the violative discharge.

Users shall make available to their employees copies of these Rules and Regulation together with such other wastewater information and notices which may be furnished by the Director from time to time directed toward more effective water pollution control. A notice shall be furnished and permanently posted by the User in a conspicuous place advising employees whom to call in case of any discharge in violation of these Rules and Regulations.

General Pretreatment Regulations

SLUG CONTROL PLAN

Evaluate, at least once every two years, whether each Significant Industrial User needs a plan to control slug discharges. For purposes of this subsection {40 CFR 403.8(f)(2)(v)}, a slug discharge is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge. ...the plan shall contain, at a minimum, the following elements:

(A) Description of discharge practices, including non-routine batch discharges;

(B) Description of stored chemicals;

(C) Procedures for immediately notifying the POTW of slug discharges, including any discharge that would violate a prohibition under 40 CFR 403.5(b), with procedures for follow-up written notification within five days;

(D) If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents) and/or measures and equipment for emergency response.

APPENDIX E

Grease Control Program

GREASE INVESTIGATING PROCEDURE
Revised (modified 11-30-00 by DIW)

1. Initial investigation initiated by Service Request or MSD Personnel.

2. WWC takes all measures to remedy immediate situation- this may include an initial cleaning or flushing if needed.

3. Initial TV (1) investigation is performed to identify possible violations.

4. If no violations are found, investigation is complete. If violations are found WWC will notify DIW expeditiously in writing with the business identification (correspondence request from G. Stephen Minges to Beverly Head) including the Name, Street Address, and CAGIS map of affected sewers.

5. DIW will expeditiously contact business in writing with a copy of notice sent to WWC promptly. In the notice DIW will explain the situation and require within 30 days at business' expense that their private sewer lateral be jet cleaned and televised to verify that the lateral is clean. The business will be asked to keep a taped copy of their video inspection.

6. Approximately 40 days after the date of notice to the business, WWC will have the public sewer cleaned and televised. The TV (2) inspection will show that the main sewer has been cleaned in its entirely.

7. WWC will return in four to six months to re-inspect the public sewer. The public sewer will be televised (3) first to see if grease has returned to the sewer and where the grease is coming from. If no grease violations are found WWC will return in four to six months again for a second re-inspection. If no grease violations are found in this second re-inspection the investigation will be closed.

8. If grease is found and if it is determined that the grease is coming from the same business as identified from Step 3, WWC will clean (B) the sewer again, and televise (4), and notify DIW expeditiously with all applicable information to recover the costs of the investigation and cleaning. WWC will return to step 7. DIW will expeditiously prepare and send a NOV with proposed costs, fines, and CAM (Compliance Attainment Meeting) notice.

9. The CAM is held, and afterwards, a final decision of WWC/DIW is given to the business.

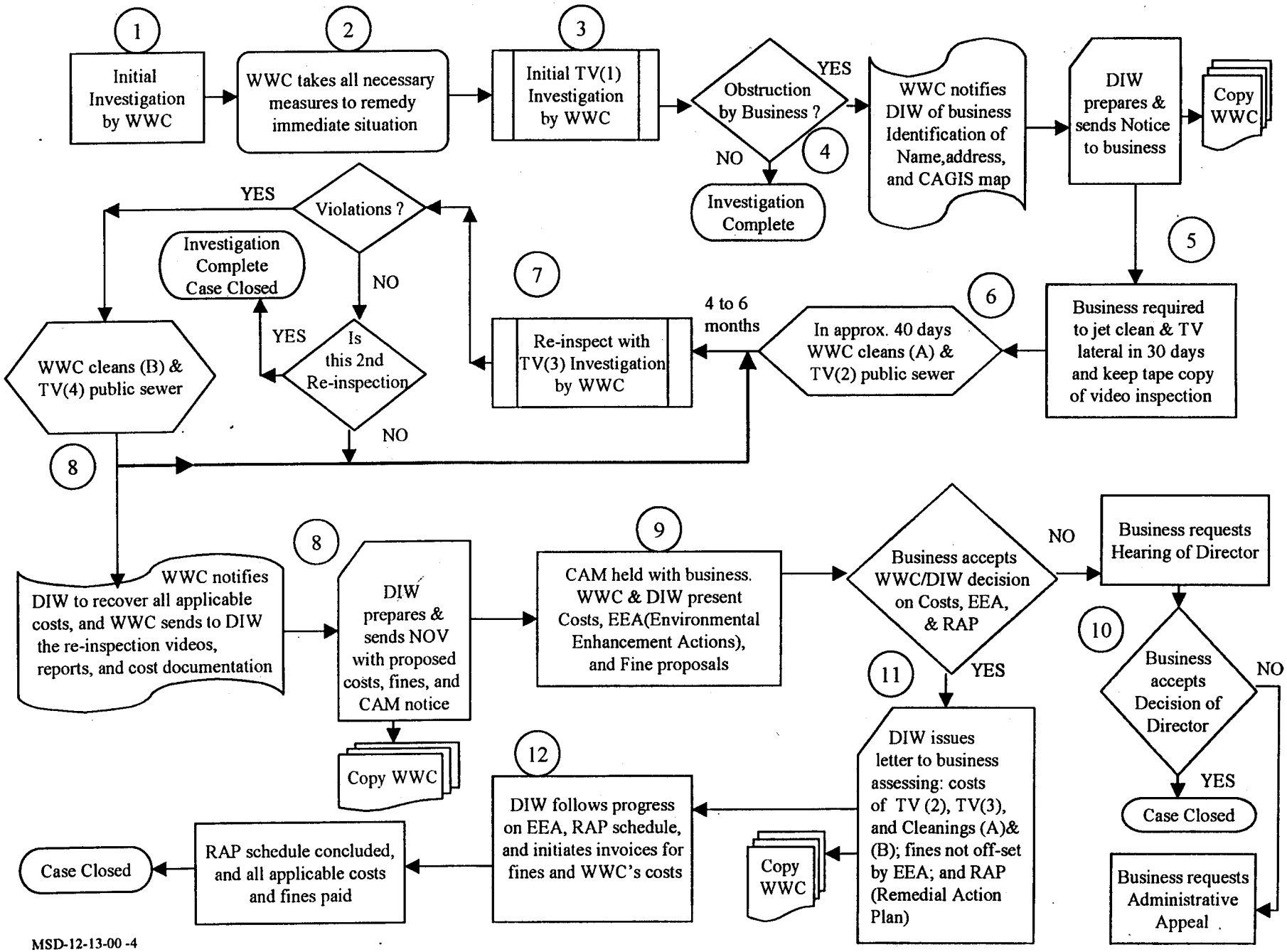
10. If the WWC/DIW decision is not accepted, business can request a Hearing.

11. If the business does accept the WWC/DIW decision, with all information available, DIW will within 30 days issue a letter assessing the business costs for investigating, cleaning, and televising the public sewer from TV (2), TV (3), Cleaning (B), and any applicable fines.

12. DIW will track progress on RAPs, and collection of costs and fines.

GREASE INVESTIGATION PROCEDURE

Revised



MSD-12-13-00 -4

M S D

METROPOLITAN SEWER DISTRICT
OF GREATER CINCINNATI

Hamilton County - Managed
by the City of Cincinnati

1600 Gest Street
Cincinnati, Ohio 45204
513•244•5122

Board Of County Commissioners

John S. Dowlin
Tom Neyer, Jr.
Todd B Portune

County Administrator

David J Krings

City Manager

John F Shirey

Director

Patrick T. Karney, P.E., DEE

Deputy Director

Robert J Campbell P.E DEE

July 11, 2001

Store Manager
Restaurant Name
Street address
City, State Zip

Dear Store Manager:

This letter is being sent to you as notification that on March 15, 2001 a light to heavy grease buildup was found in the public sewer and building sewer serving your facility. Preliminary evidence suggests that the source of the grease may be from current or previous operations at the above address. Metropolitan Sewer District Rules and Regulations, Section 1207 requires your company to maintain its building drain and building sewer grease-free. In addition, Section 1518(D) prohibits the discharge of materials capable of blocking the public sewer. Furthermore, Section 1523 requires your company to maintain its grease trap in continuously efficient operation. Failure to comply with any of these sections is a violation of MSD Rules and Regulations.

The Metropolitan Sewer District has temporarily halted the grease investigation to allow your company time to review its grease control procedures. At a minimum this review should include jet cleaning of your building drain, grease trap and building sewer. In addition the building sewer should be video inspected and taped from your building to the point of connection with the public sewer. Copies of the inspection tapes and related cleaning and repair invoices should be retained for at least three years. Whether your company chooses to take this opportunity for review or not, the District will restart its grease investigation approximately 30 days after the date of this letter. Your company is also requested to take any other actions necessary to ensure compliance.

Should the District conclusively determine that the source of the grease is your company, the District may choose to pursue some or all of the legal recourses available. These include recovery of investigation and repair costs, penalties of up to $10,000 per day per violation, elimination of service or referral to the Attorney General's office. The District urges you to preempt this action by ensuring that your grease handling procedures are adequate to protect the public sewer from impairment. If you have any questions or require additional information, please contact Michael Cappel, Industrial Investigator at 557-7013.

Sincerely,

Beverly B. Head
Superintendent
Division of Industrial Waste

BBH:MLC:mlc:example

cc: DIW/Reading File, IW File Manila(XXXX), Jerry Weimer WWC

APPENDIX F

Industrial Users Contributory to CSOs and SSOs

Metropolitan Sewer District of Greater Cincinnati Division of Industrial Waste CSO & SSO Maps

Prepared August 6, 2001

By Mike Nalley, MSD-IT

CSO Maps

MSD Industrial User (IU) Facilities tributary to CSO (includes Significant Industrial User (SIU) Facilities)

Company Name	Premise Address	ZIP	Permit Type	IUN	Discharges to Sewer Segment	Contributes to CSO	SSO
V-W-00-308-25 & 26							
Items #34, #35, #36							
Porter Guertin Company	2150 Colerain Avenu	45214	SIU	95	33016037-29404065	004	
Andrew Jergens Company	2535 Spring Grove A	45214	SIU	4	29411006-29411005	007	
Security Systems Equipment	3015 Garrard Ave	45225	SIU	1299	29506045-29506021	009	
Deaconess Hospital	311 Straight Street	45219	nonSIU	151	32911021-32910060	009	
Ken Meyer Meats, Inc.	2910 Sidney Avenue	45225	nonSIU	234	29505016-29504018	009	
New Horizons Meats and Distribution L	2842 Massachusetts	45225	nonSIU	232	29504024-29504021	009	
Oliver Chemical Co Inc	2908 Spring Grove A	45225	nonSIU	88	29506002-29503024	009	
Osborne Coinage/Doran Manufacturing	2851 Massachusetts	45225	nonSIU	913	29504016-29504015	009	
Queen City Sausage & Provision	1135 Straight St.	45214	nonSIU	327	29413012-29413009	009	
FBF Limited	2980 Spring Grove A	45225	nonSIU	466	29506014-29506013	011	
Klor Kleen, Inc.	3118 Spring Grove A	45225	SIU	186	29511011-29511012	012	
Good Samaritan Hospital	375 Dixmyth Avenue	45220	nonSIU	51	32811024-32810035	012	
U.S. Environmental Protection	26 W Martin Luther	45268	nonSIU	127	33808048-33808049	012	
Micro Metal Finishing LLC	3448 Spring Grove A	45225	SIU	82	29606008-29603025	015	
S. Lee Corporation	3241 Spring Grove A	45225	SIU	56	29515004-29515003	015	
Mutual Manufacturing & Supply	3300 Spring Grove A	45225	nonSIU	220	29603054-29603001	015	
Molded Pulp Products, Inc.	1780 Dreman Ave.	45223	SIU	202	29616023-29615009	017B	
Spaulding Lighting Inc.	1736 Dreman Ave	45223	SIU	112	29615009-29615010	017B	
Barrel & Drum Service, Inc.	1728 Powers St.	45223	SIU	9	29702033-29702034	018	
CINOX Corporation	4914 Gray Rd.	45232	SIU	269	32407005-32407004	025A	
Environmental Enterprises, Inc	4650 Spring Grove A	45232	SIU	42	32613044-32613045	026	
Phthalchem Inc.	266 West Mitchell A	45232	SIU	93	34101019-34101018	029	
Nutone Inc.	Madison and Redbank	45227	SIU	86	45304008-45303031	068	
Cincinnati Paperboard Corporattion	5500 Wooster Road	45226	SIU	22	45614005-45614004	085	
Richards Industries, Inc.	3170 Wasson Road	45209	SIU	67	42415024-42415023	136	
Kroger Co.	1240 State Avenue	45204	SIU	70	29216042-29216018	152	
V.I.P. Products, Inc.	1400 State Ave	45204	nonSIU	1063	29301013-29301012	152	
United Dairy Farmers, Plant	3955 Montgomery Roa	45212	SIU	129	37711010-37711011	170	
United States Playing Card Company	4590 Beech Street	45212	SIU	126	40503011-40503012	170	
360 North Pastoria Environment	2345 Langdon Farm R	45237	SIU	1462	40307011-40307007	181	
BFGoodrich Hilton Davis, Inc.	2235 Langdon Farm R	45237	SIU	57	40308012-40308011	181	
Fierro Technologies, Inc.	5624 Montgomery Rd	45212	SIU	1179	40414016-40414019	181	
Fusite Division - Emerson Electric Co	6000 Fernview Avenu	45212	SIU	41	40303001-40414018	181	
Imperial Adhesives Inc	6315 Wiehe Rd	45237	SIU	62	40316008-40316007	181	
John Gray Awards Co. Inc.	6222 Wiehe Rd.	45237	SIU	451	40309014-40309013	181	
Smith Electrochemical Company	5936 Carthage Court	45212	SIU	111	40308010-40301011	181	
U.S. Food & Drug Administration	6751 Steger Drive	45237	SIU	500	38016012-38016011	181	
Fusite Stamped Products	6265 Wiehe Road	45237	nonSIU	684	40316004-40316003	181	
GE Engine Services, Inc.	1201 E. Edison Rd.	45216	nonSIU	453	38016012-38016011	181	
Ohio Pulp Mills	2100 Losantiville R	45237	nonSIU	230	40207003-40207002	181	
Ashland Chemical Co.	1953 Losantiville A	45237	LTD	211	40201018-40201017	181	
Fusite Division - Emerson Electric Co	Lysle Lane	45212	LTD	1208	40414019-40414015	181	
CEEMCO Inc.	5313 Robert Ave	45248	SIU	1470	20609006-20609005	198	692
International Industrial Services	10520 Chester Road	45215	SIU	77	20608001-20608002	198	692
Stegner Food Products Co. Inc.	3640 Muddy Creek Ro	45238	SIU	119	20607021-20607020	198	692
Victory Plating, Inc.	3814 Olivette Avenu	45211	SIU	132	23701028-23701029	198	692
Franciscan Hospital Western Hiills Ca	3131 Queen City Ave	45238	nonSIU	114	23908025-23908026	198	692
Rock-Tenn Company	3347 Madison Rd.	45209	SIU	103	42514033-42514034	205	
Meier's Wine Cellars, Inc.	6955 Plainfield Roa	45236	nonSIU	1209	45005013-45005012	214	
Gray Road Fill, Inc.	5106 Gray Road	45232	nonSIU	319	32302002-32302001	217A	
Lindsey Motor Express, Inc.	3500 Southside Aven	45204	SIU	75	24708005-24708004	416	
Clark Oil Company	4000 Delhi Pike	45204	LTD	329	24815015-24815002	419	
Bodycote Metal Treating Inc.	710 Burns Street	45204	nonSIU	278	29208004-29208003	426A	
Queen City Barrel Company	621 Evans Street	45204	nonSIU	227	29208012-29208009	427	
Cargo Clean, Inc - South	837 Depot St.	45204	SIU	447	28812062-28812063	428	

MSD Industrial User (IU) Facilities tributary to CSO (includes Significant Industrial User (SIU) Facilities)

Company Name	Premise Address	ZIP	Permit Type	IUN	Discharges to Sewer Segment	Contributes to CSO	SSO
Consolidated Metal Products	920 Depot Street	45204	SIU	400	28812057-28812056	428	
Queen City Barrel Co.	1937 South Street	45204	SIU	100	29209022-29209023	428	
Bodycote Metal Treating Inc.	901 Evans Street	45204	nonSIU	330	29209030-29209029	428	
A&B Deburring Co., Inc.	525 Carr St.	45203	SIU	440	29204069-29113053	433	
Cincinnati Gas & Electric Company	2801 Eastern Avenue	45226	nonSIU	335	37413034-37413033	433	
Interstate Brands Corp.	747 W. 5th Street	45203	nonSIU	321	33215018-33215017	436	
Trigen/Cinergy Solutions of Ci	105 East Fourth Str	45202	nonSIU	1106	33501016-33501015	442	
Cincinnati Plating & Repair, Inc	331 E. 13th Street	45210	SIU	352	33516091-33516057	461	
Superior Linen & Apparel Servi	481 Wayne Street	45206	SIU	121	33705012-33705011	461	
Tru-Etch Company	2338 Boone Street	45206	SIU	125	33704010-33704009	461	
Bethesda Oak Hospital Inc.	619 Oak St	45206	nonSIU	142	33712018-33712017	461	
Mercy Hospital - Anderson	7500 State Road	45255	nonSIU	233	52010008-52010007	476	
Berghausen Corporation	4524 Este Avenue	45232	SIU	148	34109019-34108002	481	
Health Alliance of Greater Cincinnati	234 Goodman Street	45219	SIU	136	33806056-33806057	482	
Children's Hospital Medical Ce	3333 Burnet Ave.	45229	nonSIU	18	33811056-33811019	482	
Shriners Hospital for Children	3229 Burnet Ave	45229	nonSIU	47	33806014-33806015	482	
VA Medical Center	3200 Vine Street	45220	nonSIU	229	33809024-33809029	482	
BP Exploration & Oil Inc.	3983 Vine Street	45217	LTD	147	34007017-34007016	482	
Cincinnati Specialties, LLC	501 Murray Road	45217	SIU	89	36616011-36616004	485	
Alex Fries Inc.	10261 Chester Road	45215	SIU	272	39716003-39716002	486	
Alex Fries, Inc.	1000 Redna Terrace	45215	SIU	501	39609007-39609008	486	
Allwaste Container Services, Inc.	10671 Evendale Driv	45241	SIU	382	43509001-43509002	486	700
Aluminum Extruded Shapes, Inc.	10549 Reading Road	45241	SIU	5	43505001-43504007	486	700
American Metal Cleaning of Cincinnati,	475 Northland Blvd.	45240	SIU	425	35610003-35610004	486	700
Astro Container	2795 Sharon Road	45241	SIU	7	43602008-43602011	486	700
Avon Products, Inc.	175 Progress Place	45246	SIU	8	39015006-39015005	486	700
Best Solutions Environmental, Inc	120 Citycentre Driv	45216	SIU	163	38201008-38116005	486	
Borden Chemical, Inc.	630 Glendale-Milfor	45215	SIU	11	38704010-38704009	486	
Cargo Clean, Inc.	10300 Evendale Dr.	45241	SIU	1218	43501003-43416004	486	700
CDR Pigments and Dispersions	410 Glendale-Milfor	45215	SIU	13	38703013-38703012	486	
Celsus Laboratories, Inc.	12150 Best Place	45241	SIU	1279	43815004-43815001	486	700
CertainTeed Corporation	320 South Wayne Ave	45215	SIU	15	40016011-38313006	486	
Cincinnati Drum Service, Inc	400 Cavett Ave.	45215	SIU	20	39805002-39805001	486	700
City of Cincinnati - OEM	5700 Center Hill Av	45232	SIU	16	36401010-36401011	486	
Clippard Instrument Laboratory	7390 Colerain Ave	45239	SIU	158	25907010-25907011	486	
Club Chef, Inc.	630 Shepherd Lane	45215	SIU	25	38511013-38511012	486	
Color Intermediates, Inc.	5366 Este Ave.	45232	SIU	92	34211001-34207009	486	
CREANOVA INC.	620 Shepherd Drive	45215	SIU	58	38506016-38506015	486	
Daniel & Assoc. Inc.	10639 Chester Rd	45215	SIU	49	39610005-39610004	486	
DiverseyLever, Inc.	3630 East Kemper Rd	45241	SIU	38	44212001-44205002	486	700
ELDA Recycling & Disposal Faci	5701 Este Avenue	45232	SIU	144	34304002-34304001	486	
Ethicon Endo-Surgery, Inc.	4545 Creek Road	45242	SIU	692	48505003-48505002	486	700
Fierro Technologies, Inc.	635 Shepherd Lane	45215	SIU	123	38511013-38511012	486	
Floturn, Inc.	120 Progress Place	45246	SIU	332	39103001-39014001	486	700
Ford Motor Company	3000 Sharon Road	45241	SIU	44	43615019-43610013	486	700
Formica Corporation	10155 Reading Road	45241	SIU	46	43315006-43315004	486	700
GE Engine Services, Inc.	199 Container Pl.	45246	SIU	239	39101001-39101002	486	700
General Electric Company	1 Neuman Way N123	45215	SIU	52	39804016-39804015	486	
General Mills Operations, Inc.	11301 Mosteller Roa	45241	SIU	101	43702006-43615023	486	700
Georgia-Pacific Corporation	220 W. North Bend R	45216	SIU	341	36304001-36414016	486	
Gold Medal Products, Inc	10700 Medallion Dr.	45241	SIU	1302	43514001-43511001	486	700
Green Bay Dressed Beef, Inc.	3480 E. Kemper Road	45241	SIU	1479	44211010-44206001	486	700
Grippo Potato Chip Co Inc	6750 Colerain Ave	45239	SIU	139	25815019-25814026	486	
H. Meyer Dairy Company	415 John Street	45215	SIU	80	40010004-40010003	486	
Harland Drumm Enterprises, Inc	5366 Este Avenue	45232	SIU	35	34211001-34207009	486	
HTG/Aerobraze Corp.	940 Redna Terrace	45215	SIU	416	39609006-39609007	486	
John Morrell & Co.	801 East Kemper Roa	45246	SIU	30	39409006-39409007	486	700
Keco Industries, Inc.	11060 Kenwood Road	45242	SIU	289	49315004-49315003	486	700

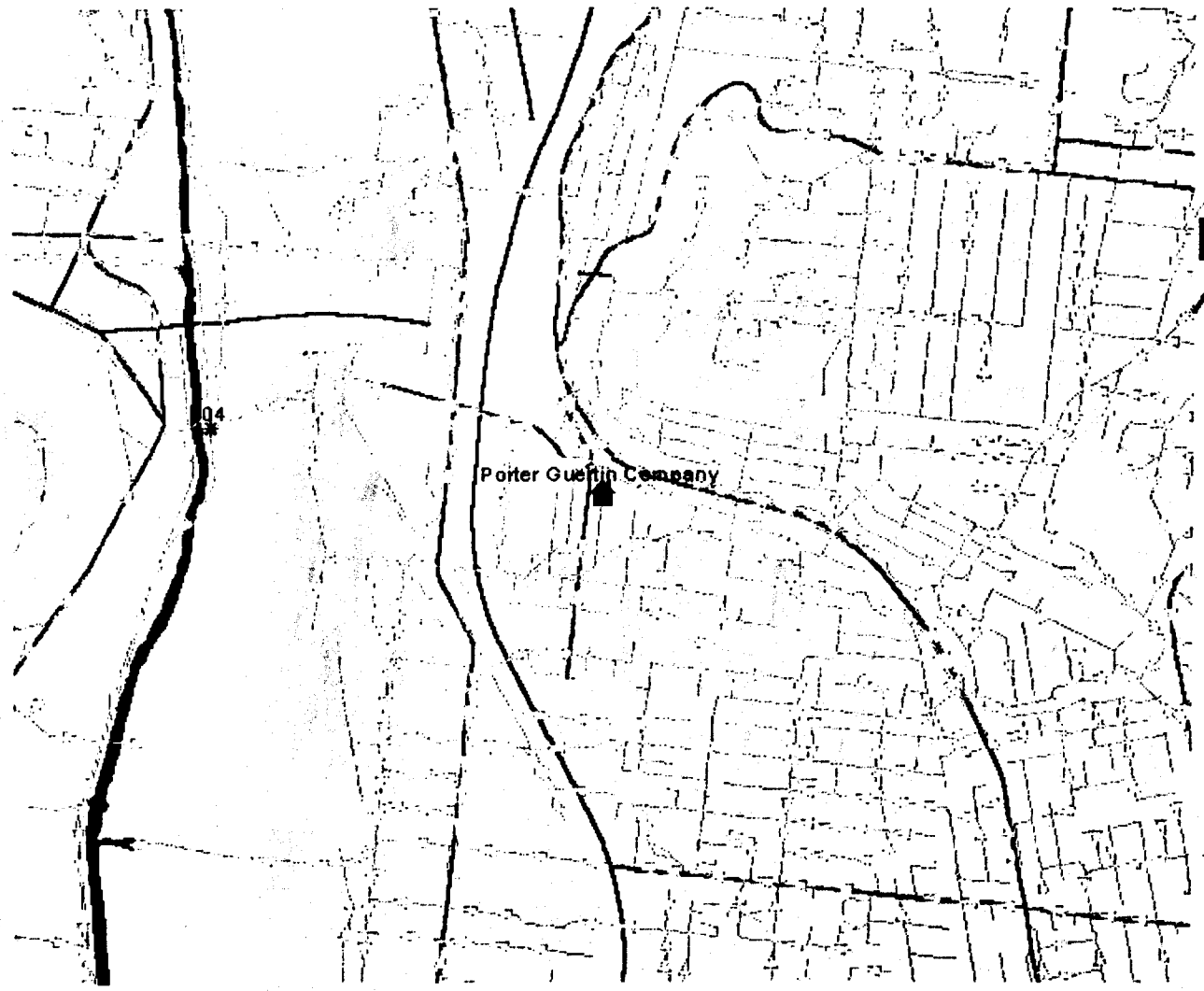
MSD Industrial User (IU) Facilities tributary to CSO (includes Significant Industrial User (SIU) Facilities)

Company Name	Premise Address	ZIP	Permit Type	IUN	Discharges to Sewer Segment	Contributes to CSO	SSO
Kroger Co.	11801 Chesterdale R	45246	SIU	69	39306005-39306004	486	700
Lehr Precision, Inc.	11230 Deerfield Roa	45242	SIU	1	53701007-53701003	486	700
Lehr Precision, Inc.	11495 Deerfield Rd.	45242	SIU	143	53709010-53709007	486	700
Leonhardt Plating Co.	5753 Este Ave.	45232	SIU	72	34213014-34213013	486	
Mechanical Finishing, Inc.	140 West 66th Stree	45216	SIU	188	36407006-36407003	486	
METLWEB Ltd.	3330 E. Kemper Road	45241	SIU	1464	44211004-44211003	486	700
Michelman, Inc.	9080 Shell Road	45236	SIU	156	48202009-48202008	486	603
Michelman, Inc.	3023 East Kemper Ro	45241	SIU	1500	44201007-44201005	486	700
Morton International, Inc.	2000 West Street	45215	SIU	84	39804011-39804010	486	700
National Starch and Chemical Compan	2960 Exon Ave	45241	SIU	85	43504003-43503010	486	700
Pepsi Cola General Bottlers, Inc	2121 Sunnybrook Dri	45237	SIU	91	40111007-40110009	486	
Picker International, Inc.	925 Redna Terrace	45215	SIU	1197	39609006-39609007	486	
Pilot Chemical Company	606 Shepherd Drive	45215	SIU	94	38505001-38505002	486	
Procter & Gamble Co	11510 Reed Hartman	45241	SIU	189	49215007-49210010	486	700
Procter & Gamble Company	6083 Center Hill Ro	45224	SIU	97	34311004-34311003	486	
R.A. Heller Company	10530 Chester Road	45215	SIU	55	39607002-39607001	486	
Richards Industries, Inc.	9070 Pippin Rd	45251	SIU	201	26105011-27608002	486	
Rumpke Sanitary Landfill, Inc.	10795 Hughes Rd.	45251	SIU	105	26501012-26501013	486	628
Sealtron, Inc.	9705 Reading Road	45215	SIU	109	43310012-43307021	486	700
Spring Grove Resource Recovery	4879 Spring Grove A	45232	SIU	113	34108005-34107002	486	
St. Bernard Polishing Co.	5560 Vine St.	45216	SIU	361	36508018-36508017	486	
Stearns Technical Textiles Co.	100 Williams Street	45215	SIU	116	39902015-39902016	486	1009
Steelcraft Div. of Ingersoll-Rand Co	9017 Blue Ash Rd.	45242	SIU	117	48114004-48114003	486	603
Sun Chemical Corporation	4526 Chickering Ave	45232	SIU	120	34110047-34110046	486	
Sun Chemical Corporation	4645 Este Avenue	45232	SIU	412	34116005-34116006	486	
Trans-Acc, Inc.	11167 Deerfield Rd.	45242	SIU	124	53616004-53701001	486	700
U.S. Filter Surface Preparatio	601 N. Wayne Ave	45215	SIU	474	38505015-38504008	486	
United Waste Water Services, Inc	11807 Reading Road	45241	SIU	413	44214002-44214001	486	700
Wood Graphics Inc.	1270 Hillsmith Dr	45215	SIU	135	39715001-39715002	486	
Wornick Company	10825 Kenwood Road	45242	SIU	317	49307002-49307003	486	700
Amko Plastics, Inc.	12025 Tricon Rd.	45246	nonSIU	242	39103003-39103002	486	700
Ashland Chemical Company	2788 Glendale-Milfo	45241	nonSIU	356	43503011-43506005	486	700
Cindus Corporation	515 Station Avenue	45215	nonSIU	340	38305012-40009002	486	572
Enerfab, Inc.	4955 Spring Grove A	45232	nonSIU	408	34110003-34107012	486	
EPCOR Foundries, Inc.	425 North Bend Road	45216	nonSIU	290	36410006-36410007	486	
Feintool Cincinnati Inc.	11280 Cornell Park	45242	nonSIU	252	49210006-49211001	486	700
Franciscan Hospital Mt Airy Campus	2446 Kipling Ave.	45239	nonSIU	98	27909004-27909005	486	
International Paper Company	100 Progress Place	45246	nonSIU	171	39014002-39014003	486	700
JACKSONLEA	7020 Vine Street	45216	nonSIU	391	36412009-36406019	486	
Japlar Acquistion Co	4500 Alpine Ave.	45242	nonSIU	249	48203003-48203002	486	682
Kin Products, Inc.,	1060 Skillman Drive	45215	nonSIU	149	39608001-39608002	486	
Premium Finishes, Inc.	10448 Chester Road	45215	nonSIU	279	39608005-39608006	486	
Ralph J. Stolle Co.	6954 Cornell Road	45242	nonSIU	172	53701008-53701007	486	700
Riverwood International Corp.	10600 Evendale Dr	45241	nonSIU	102	43508002-43508001	486	700
Sun Chemical Corporation	5020 Spring Grove A	45232	nonSIU	1148	34107008-34107009	486	
Trinity Industries, Inc.	11861 Mosteller Rd	45241	nonSIU	190	43802011-43802007	486	700
Xtek, Inc.	11451 Reading Road	45241	nonSIU	271	44202006-44202005	486	700
Englefield Oil Company	401 Glendale-Milfor	45215	LTD	685	39602011-39602004	486	
Evergreen Limited Partnership	Shepherd Drive	45215	LTD	366	38506023-38506013	486	
Marathon Oil Company	5571 Colerain Ave	45239	LTD	23	28009002-28009003	486	
Speedway SuperAmerica LLC	6430 Colerain Ave.	45239	LTD	219	25815011-25814008	486	
Sunoco, Inc.	6745 Cornell Rd.	45242	LTD	415	53701001-49204011	486	700
Aramark Uniform Services, Inc.	4936 Montgomery Roa	45212	SIU	6	40516015-40516014	487	
GE Engine Services, Inc.	1350 Tennessee Ave.	45229	SIU	50	37901012-37901011	487	
Health Alliance of Greater Cincinnati	3200 Burnet Avenue	45229	SIU	65	33806041-33806042	487	
Varland Metal Service	3231 Fredonia Avenu	45229	SIU	2	36908043-36908041	487	
W.R. Grace & Co.-Conn.	4775 Paddock Road	45229	SIU	33	36611013-36611008	487	
Frisch's Restaurants, Inc.	3011 Stanton Ave	45206	nonSIU	1149	37016015-37016016	487	

MSD Industrial User (IU) Facilities tributary to CSO (includes Significant Industrial User (SIU) Facilities)

Company Name	Premise Address	ZIP	Permit Type	IUN	Discharges to Sewer Segment	Contributes to CSO	Contributes to SSO
Klosterman Baking Co., Inc.	1000 E. Ross Ave	45217	nonSIU	344	36603024-36603023	487	
Occidental Chemical Corporatio	4701 Paddock Road	45229	nonSIU	87	36612004-36605010	487	
BP Exploration & Oil, Inc.	4600 Paddock Road	45229	LTD	295	36604021-36604019	487	
CHEMCENTRAL Corporation	4619 Reading Road	45229	LTD	208	37902011-37902010	487	
Metro/Southern Ohio Regional Transit	4700 Paddock Rd	45229	LTD	218	36605011-37908023	487	
Unocal Corp.	4950 Paddock Road	45237	LTD	288	36504007-36504006	487	
Givaudan Roure Flavors Corp.	110 E. 70th Street	45216	SIU	262	36406010-36406011	488	
Givaudan Roure Flavors Corp.	1199 Edison Dr.	45216	SIU	1310	36513023-36404001	488	
Jim Beam Brands Company	7324 Paddock Road	45216	SIU	66	38109017-36412040	488	
Merrell Pharmaceuticals Inc.	2110 East Galbraith	45215	SIU	79	40003018-40003009	507	
Rosemont Industries Inc.	1700 West Street	45215	SIU	104	43216015-39913006	513	
Perkins Family Restaurants, L.P	24 Landy Lane	45215	nonSIU	1153	43301006-43301005	513	
Milacron, Inc.	4701 Marburg Avenue	45209	SIU	21	42609013-42610001	551	
Cast-Fab Technologies, Inc.	3040 Forrer Street	45209	nonSIU	14	42608002-42608005	551	
Kirk & Blum Mfg. Co.	3120 Forrer St	45209	nonSIU	165	42602009-42602008	551	
Duramed Pharmaceuticals, Inc.	5040 Duramed Drive	45213	SIU	36	42615017-42615018	552	
Cincinnati Machine	4701 Marburg Ave	45209	SIU	1318	42603033-42606001	553	
Hater Industries, Inc.	240 Stille Drive	45233	SIU	54	19708011-19708010	654	
Cintas Corporation	5570 Ridge Road	45213	SIU	24	42711001-42707018	656	
Coca-Cola Bottling Company of Cincinn	5100 Duck Creek Rd.	45227	SIU	141	45311020-45314019	656	
EM Science	2909 Highland Avenu	45212	SIU	39	42616007-42616014	656	
Forest Pharmaceuticals, Inc.	3941 Brotherton Roa	45209	SIU	45	45410021-45410022	656	
ILSCO Corporation	4730 Madison Rd	45227	SIU	61	45309003-45309002	656	
Kutol Products Co.	7650 Camargo Road	45243	SIU	71	50011008-50011009	656	1053
P-G Products Inc.	5200 Lester Road	45213	SIU	150	42702022-42701004	656	
Schulte Metal Finishing, Inc.	4909 Charlemar Driv	45227	SIU	108	45302027-45302026	656	
Shepherd Chemical Company	2803 Highland Ave.	45212	SIU	110	40513006-40513007	656	
Stat Processing Inc.	4821 Stafford Stree	45227	SIU	115	47603012-47603004	656	
Texo Corporation	2801 Highland Avenu	45212	SIU	122	40513004-40513005	656	
Cincinnati Steel Treating Company	5701 Mariemont Aven	45227	nonSIU	611	47408004-47408003	656	
CNW, Inc.	4710 Madison Road	45227	nonSIU	12	45308028-42605033	656	
Hadronics, Inc.	4570 Steel Place	45209	nonSIU	53	45301005-45301006	656	
Keebler Foods Company	One Trade Street	45227	nonSIU	210	47407001-47408006	656	
Witt Industries, Inc.	4454 Steel Place	45209	nonSIU	134	45301010-45302009	656	
Sunoco, Inc.	3905 Brotherton Roa	45209	LTD	243	45410019-45410020	656	
Advanced Technology	1910 Elm Street	45210	SIU	68	33011006-33011007	666	
Christ Hospital	2139 Auburn Ave.	45219	SIU	19	33616022-33616021	666	
Club Chef Central	800 Bank Street	45214	SIU	351	33016031-33016032	666	
Husman Snack Foods Co.	1621 Moore Street	45210	SIU	59	33005033-33004061	666	
Samuel Adams Brewery Company.	1625 Central Pkwy	45214	SIU	107	33007040-33007041	666	
Cincinnati Enquirer	1531 Western Ave	45214	nonSIU	237	29305006-29305005	666	
F.L. Emmert Company	2007 Dunlap Street	45214	nonSIU	248	33011022-33011021	666	
Hoffmann Sausage Co.	2111 Kindel Ave	45214	nonSIU	40	33016021-33016088	666	
Kaiser Foods, Inc.	2155 Kindel Ave.	45214	nonSIU	225	29313059-29313058	666	
Tri-State Beef Company	2124 Baymiller St	45214	nonSIU	418	33016023-33016080	666	

CSO 004

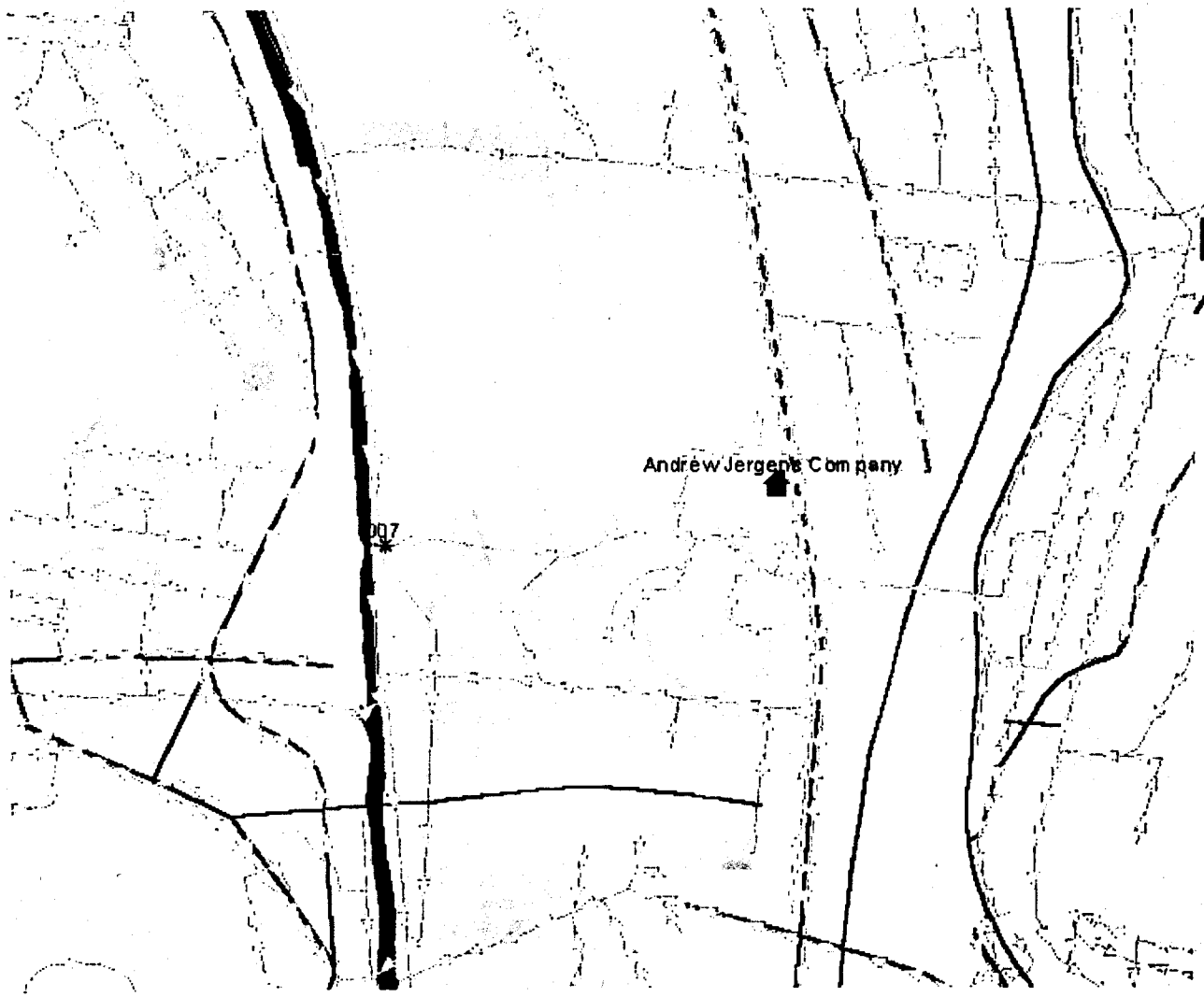


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 007



Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

This map produced
3 Aug 2001
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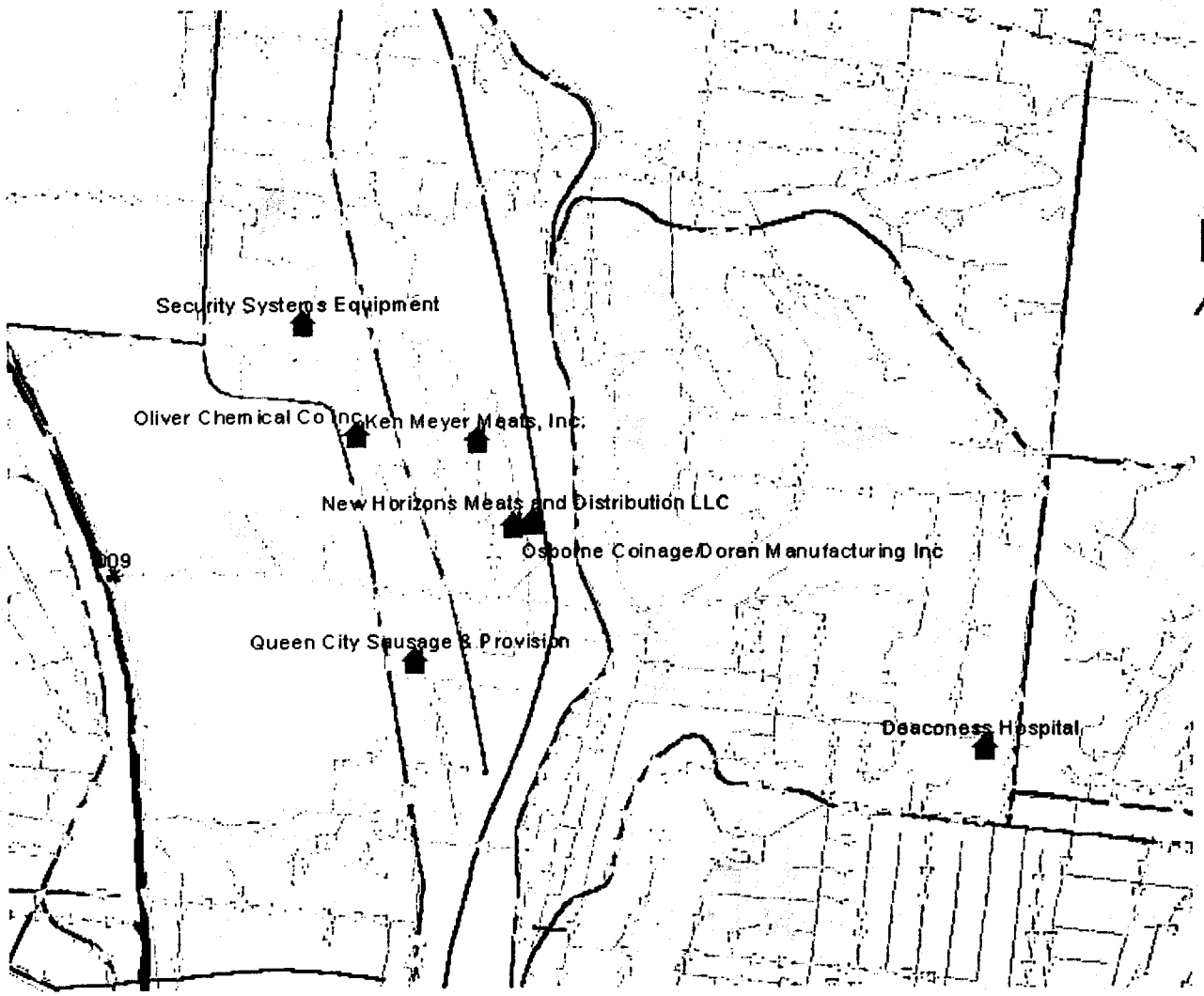
(MSD-IT)
using data from
CAGIS

CSO 009



Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W E
S

This map produced
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(MSD-IT)
using data from
CAGIS

CSO 011

Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

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3 Aug 2001
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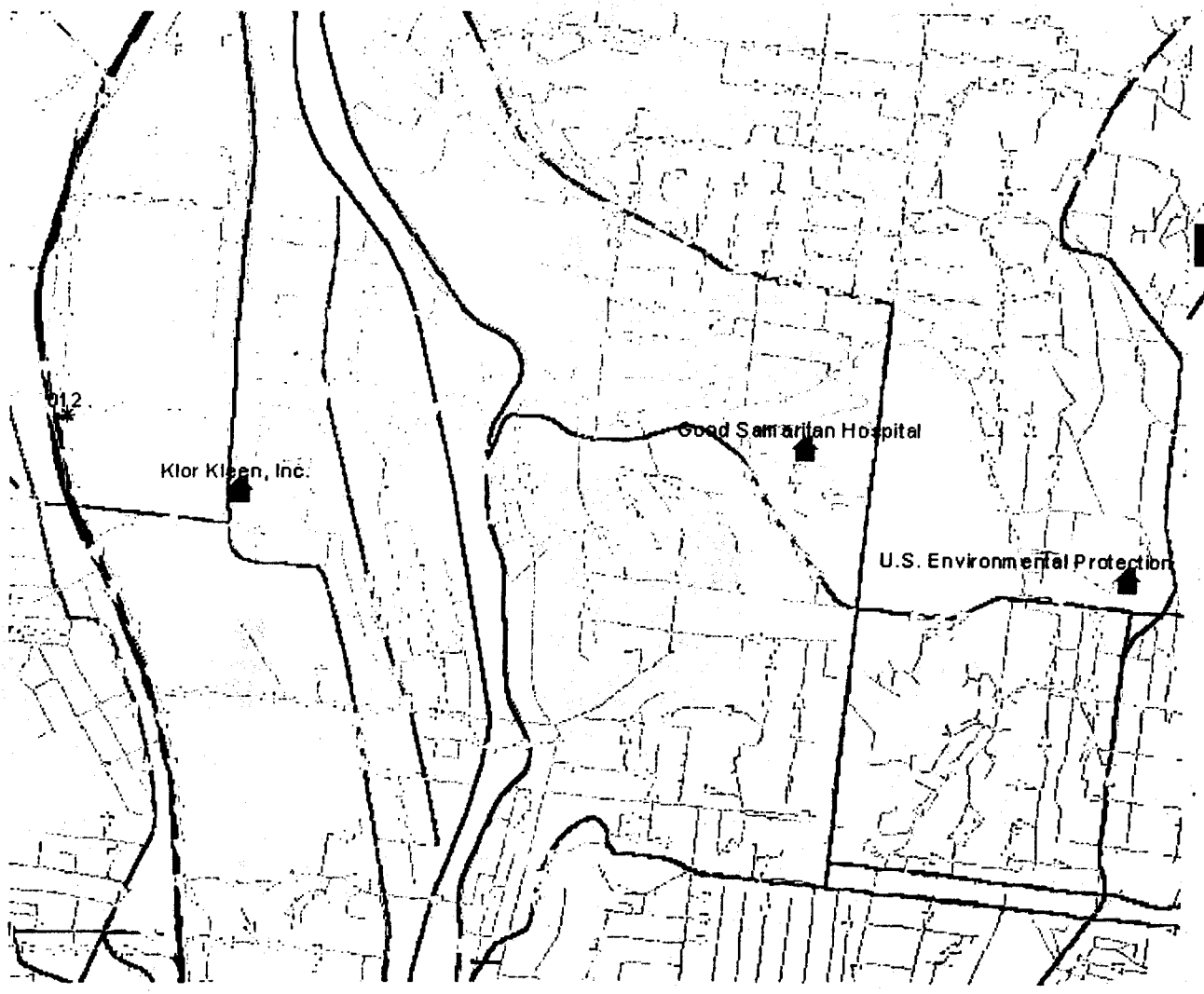
(MSD-IT)
using data from
CAGIS

CSO 012



Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

This map produced
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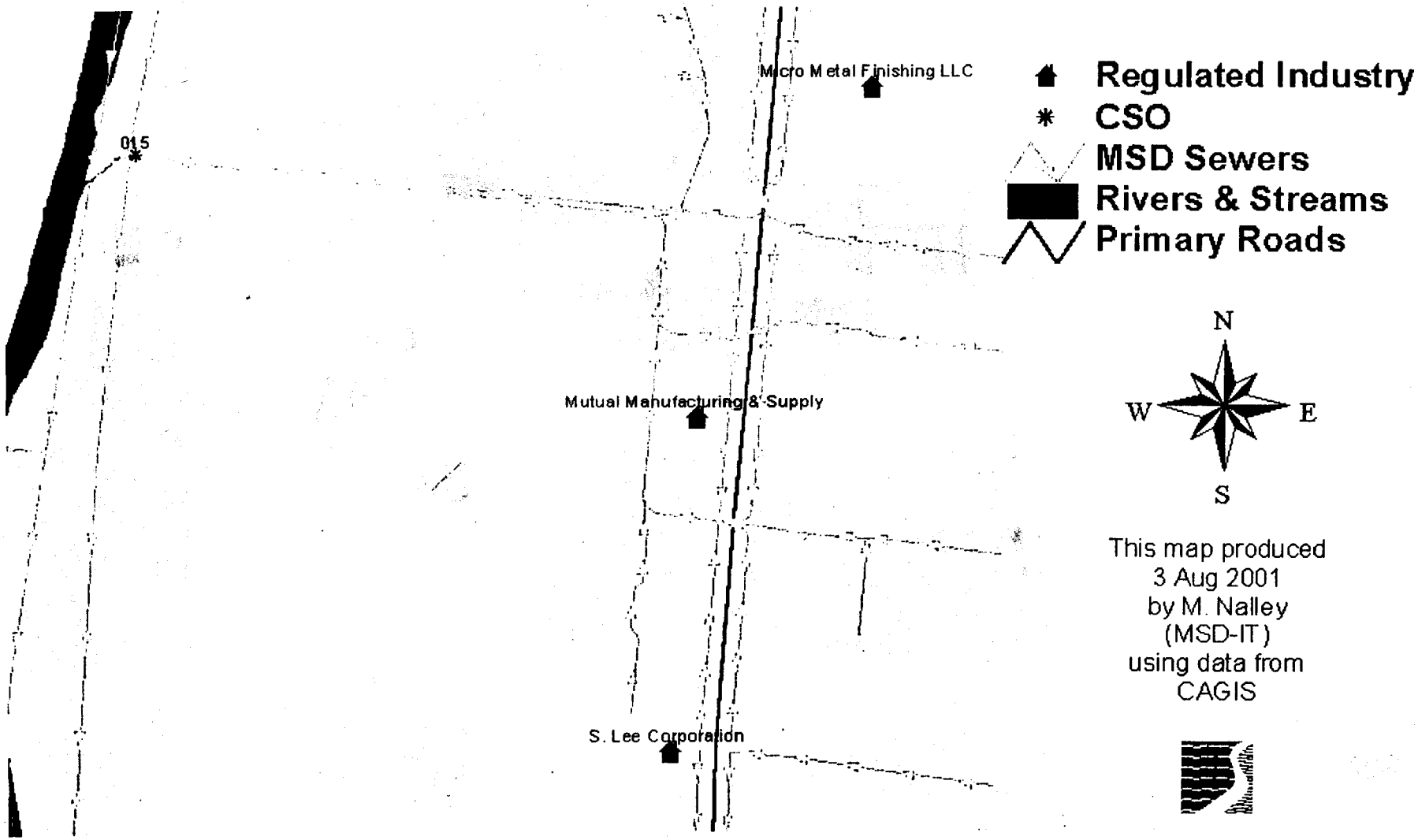
(MSD-IT)
using data from
CAGIS

CSO 015


015
Micro Metal Finishing LLC
Mutual Manufacturing & Supply
S. Lee Corporation
Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads
N
W
E
S
This map produced
3 Aug 2001
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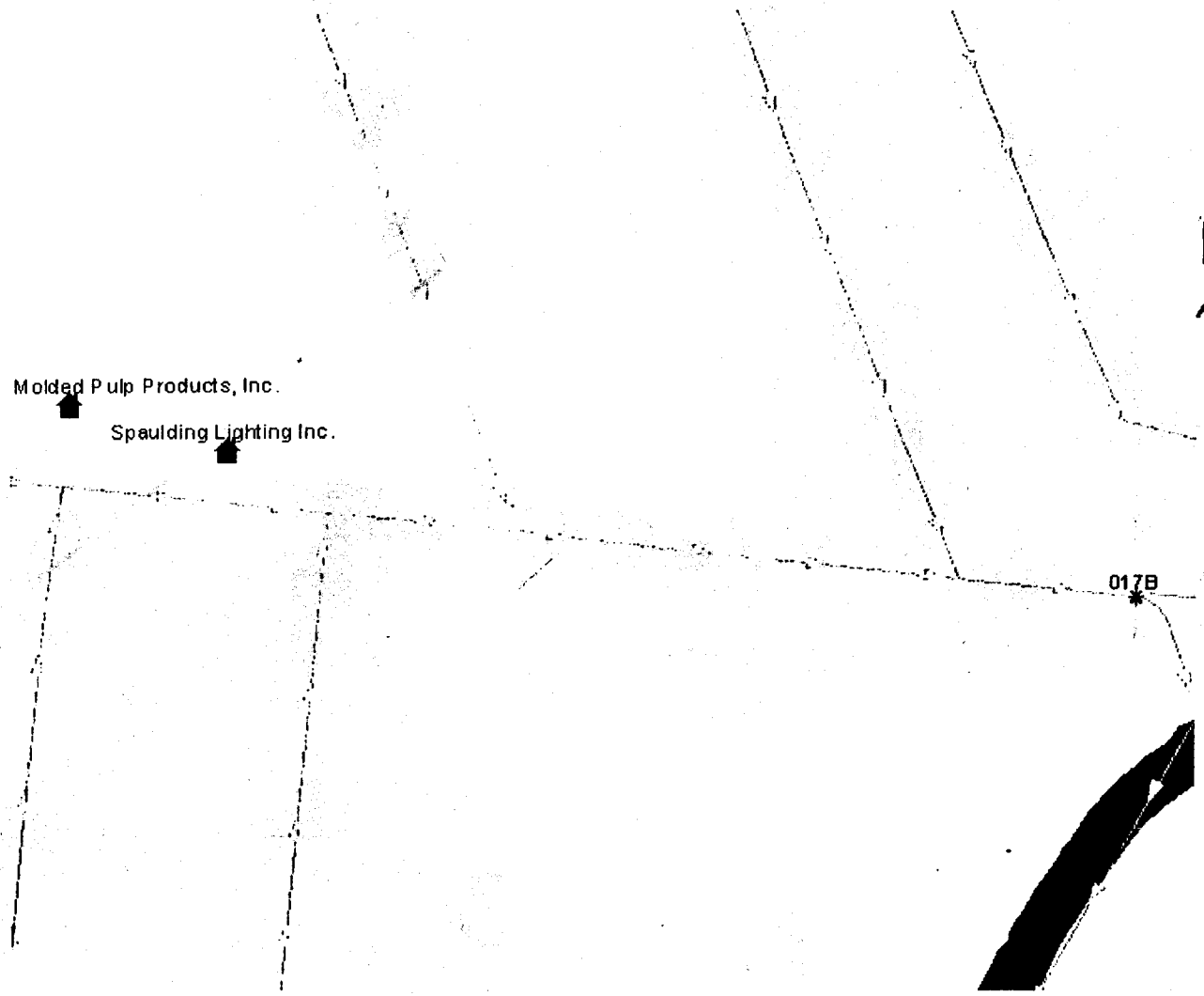
(MSD-IT)
using data from
CAGIS

CSO 017b



Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W E
S

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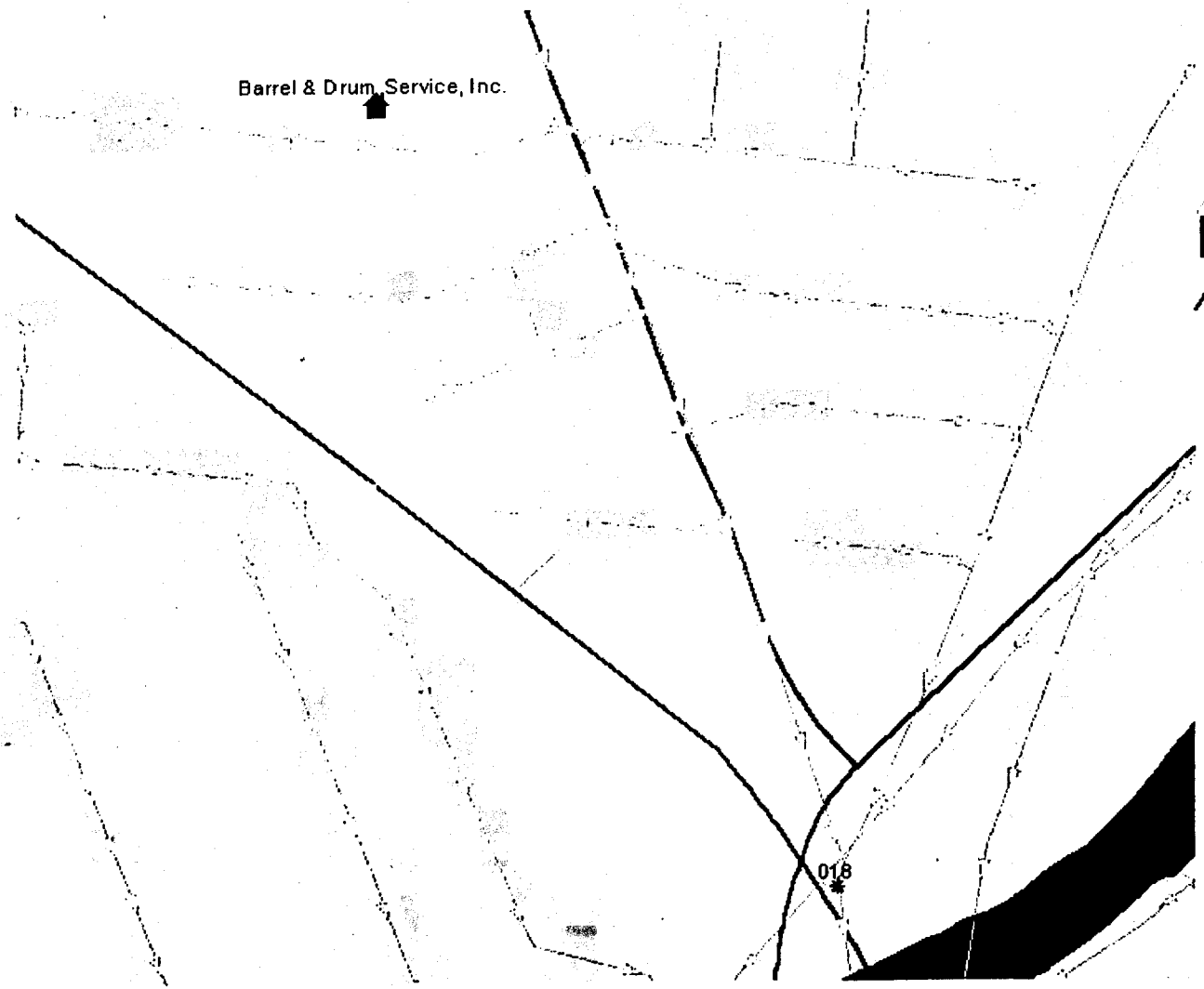
(MSD-IT)
using data from
CAGIS

CSO 018



Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

This map produced
3 Aug 2001
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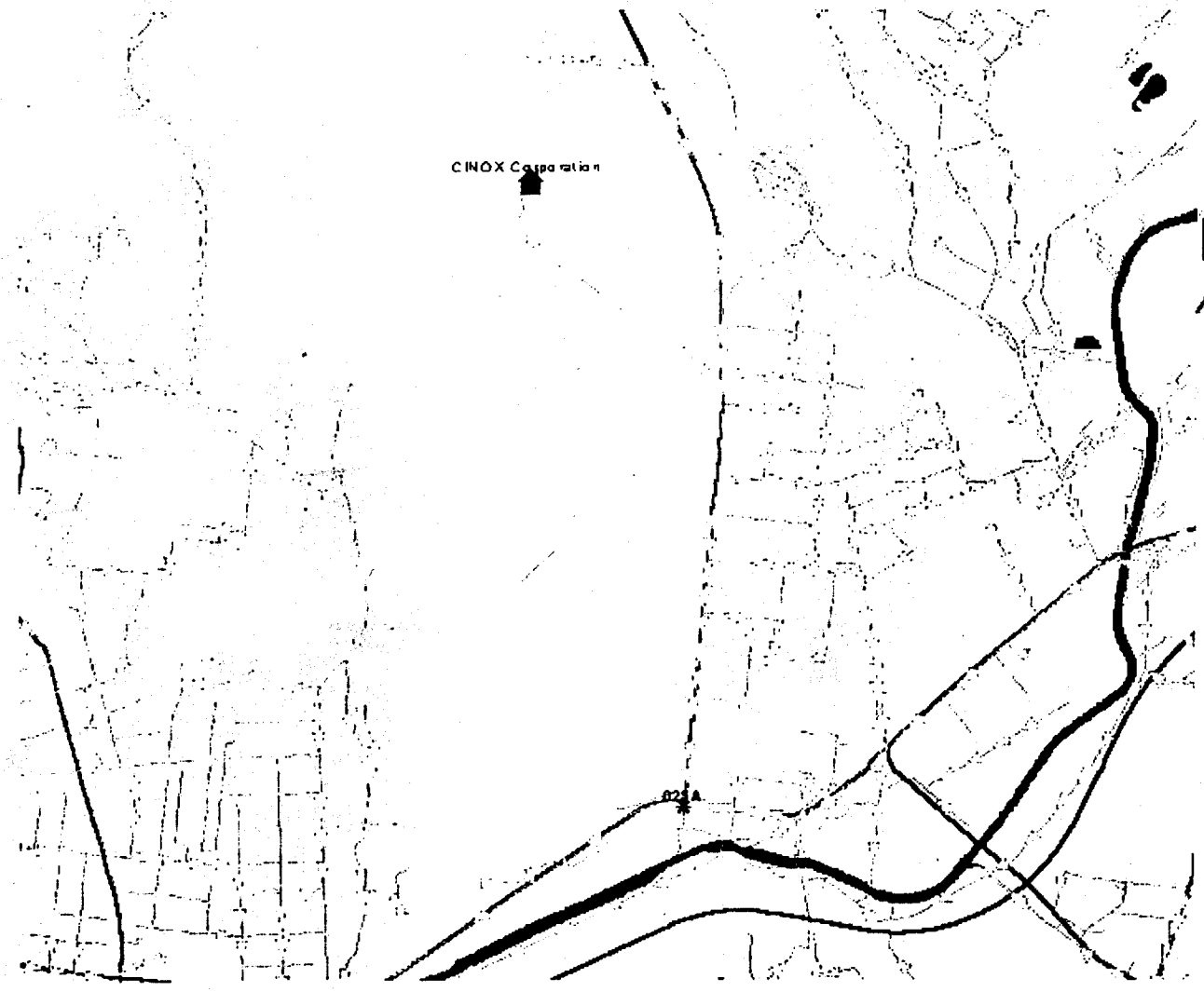
(MSD-IT)
using data from
CAGIS

CSO 025a

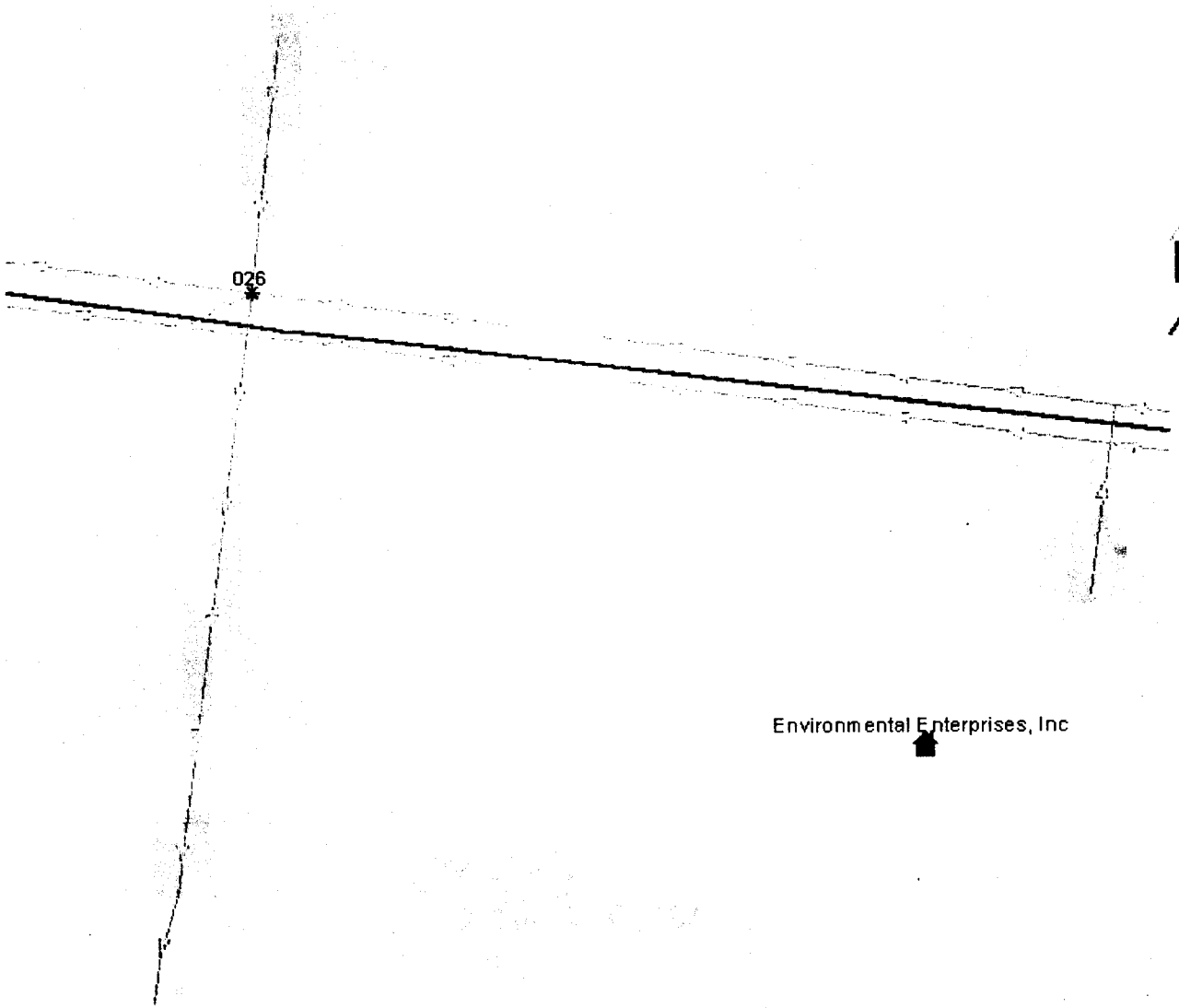


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 026

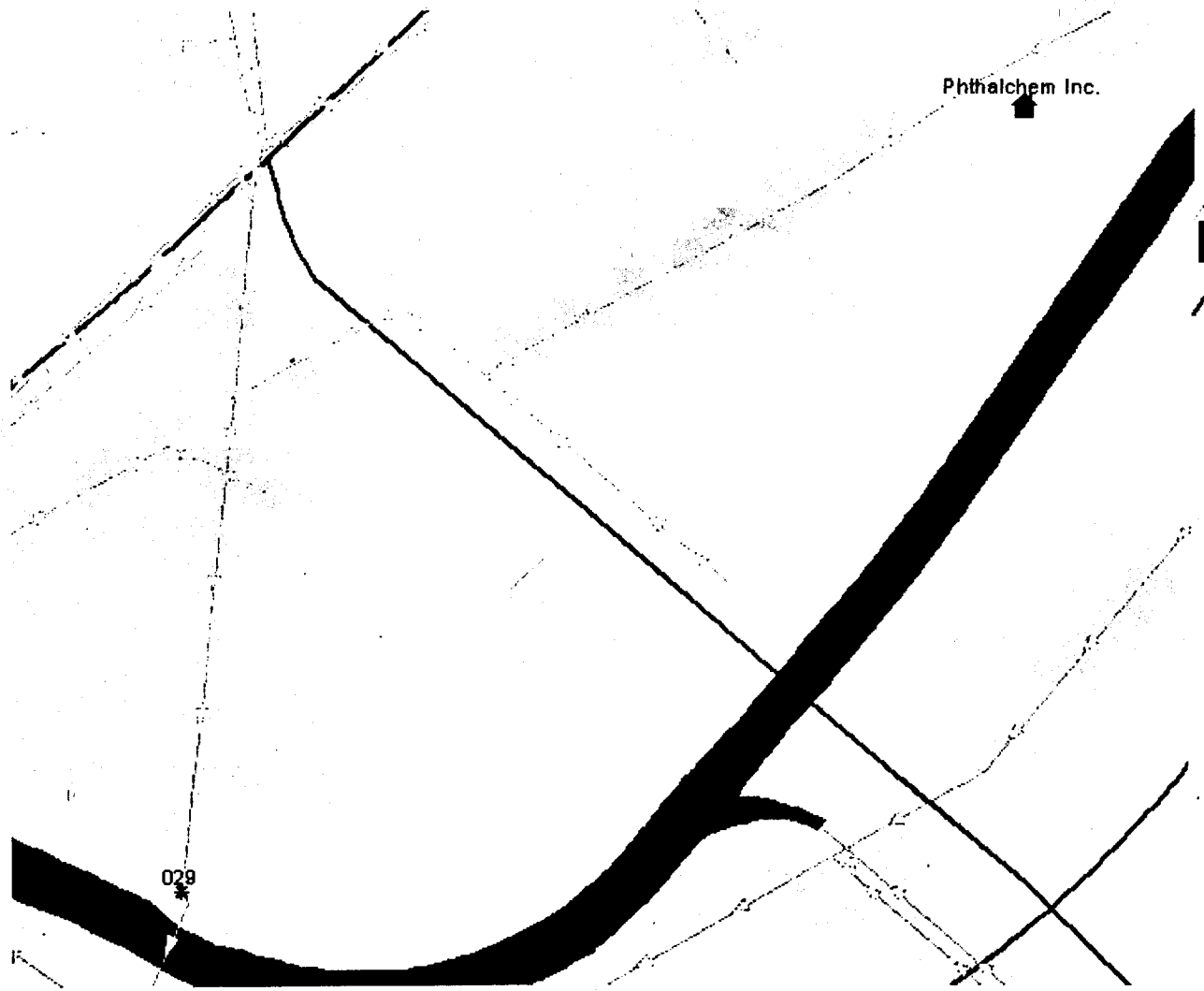


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 029

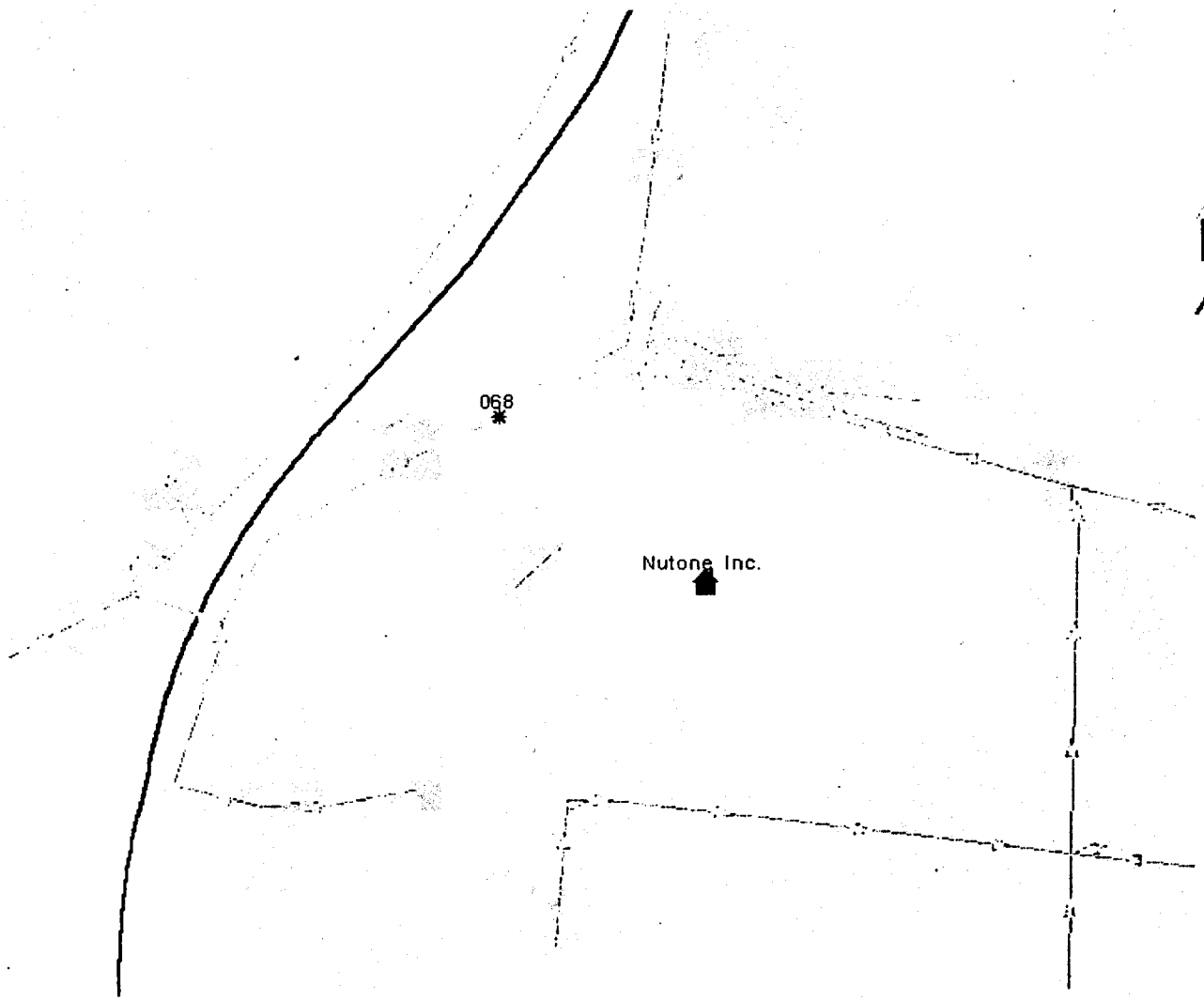


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 068

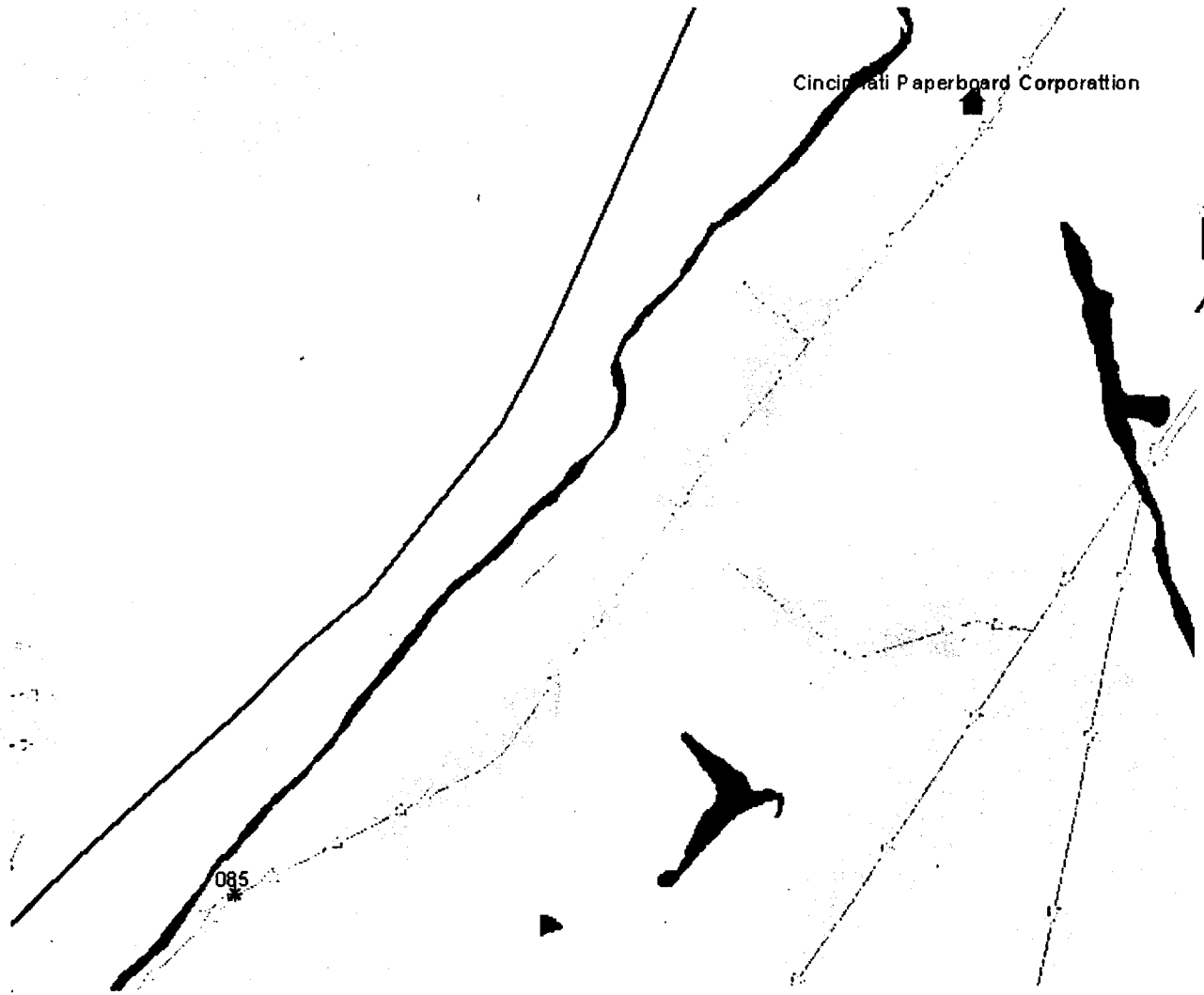


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 085

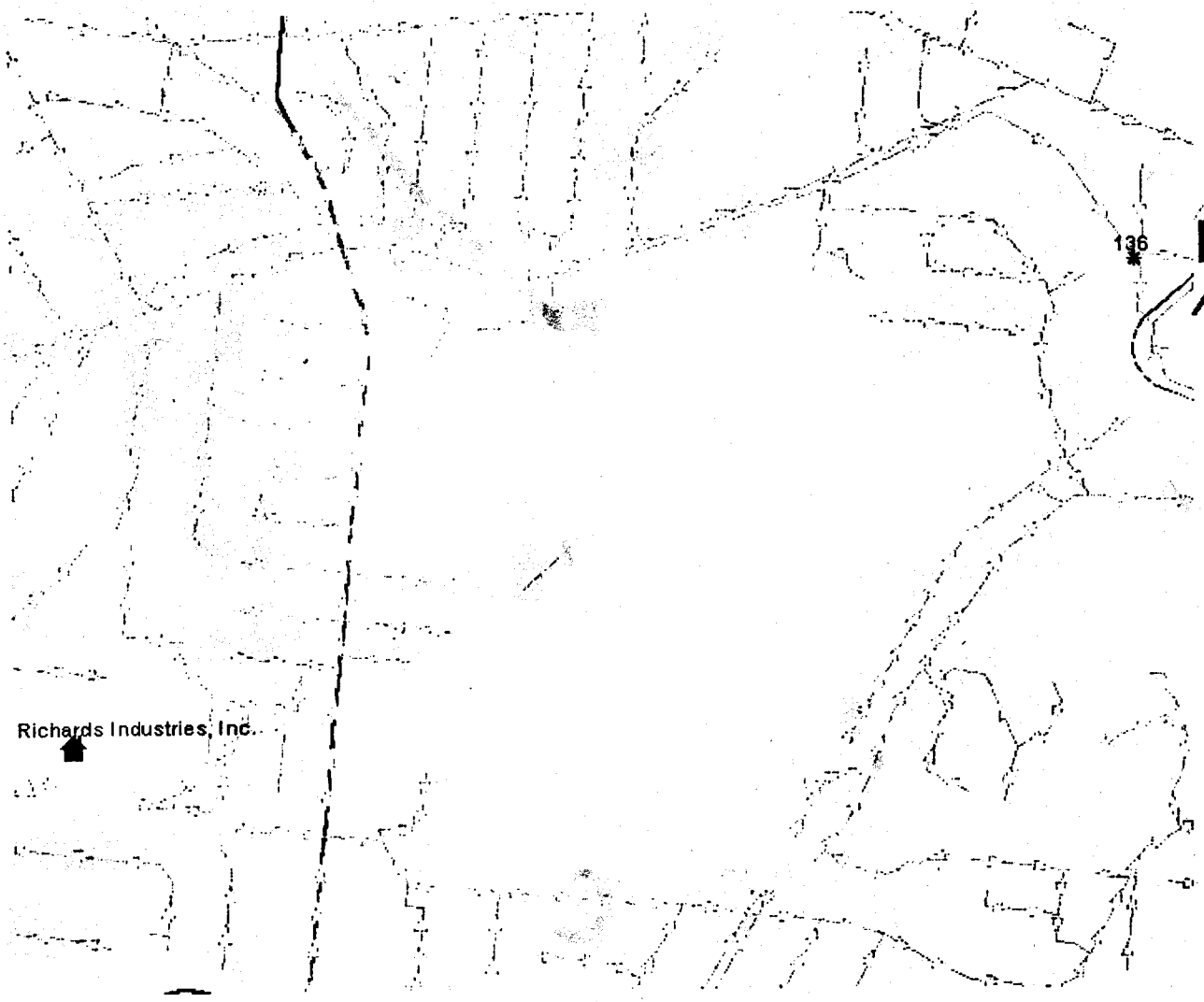


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 136

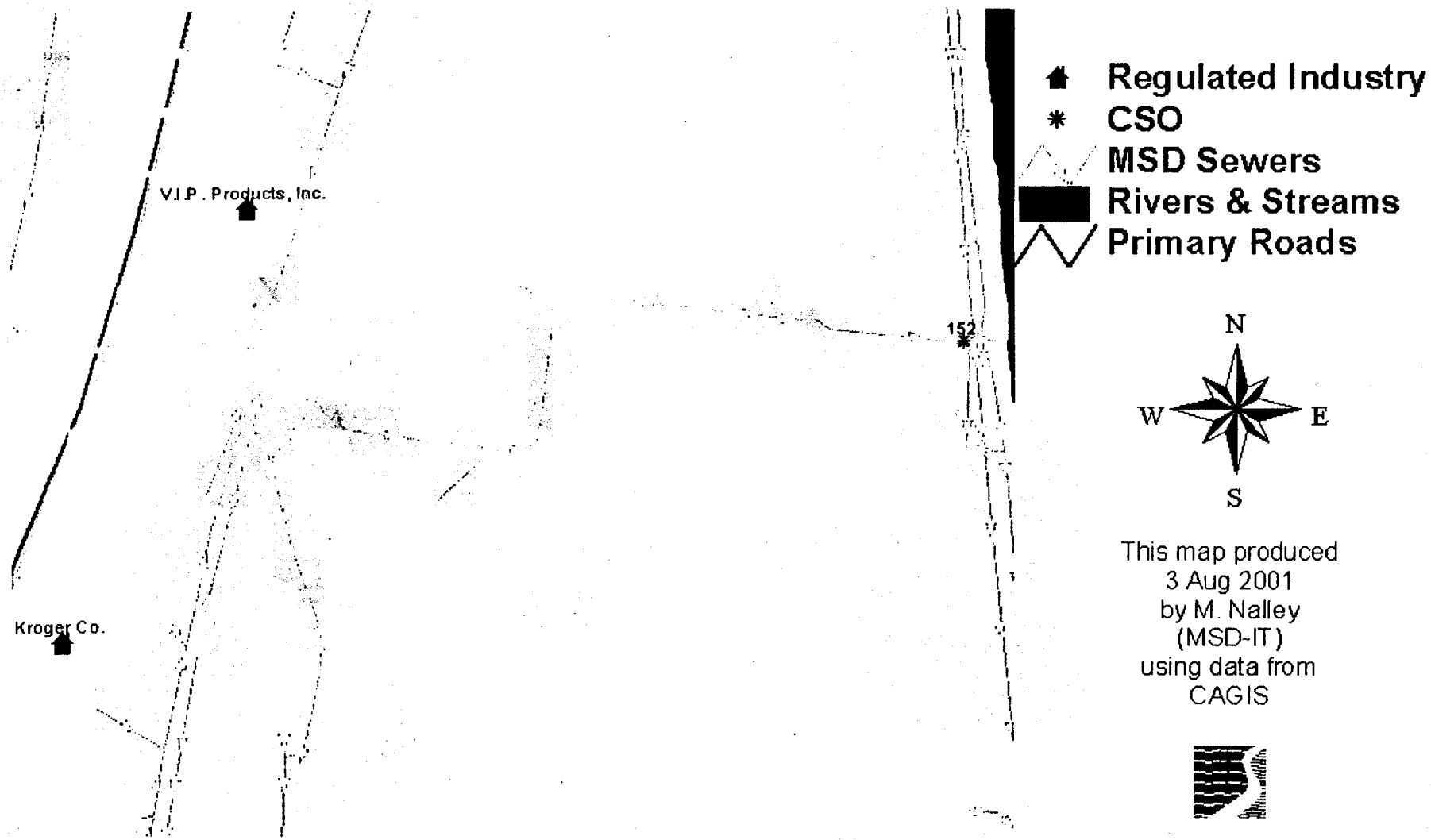


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

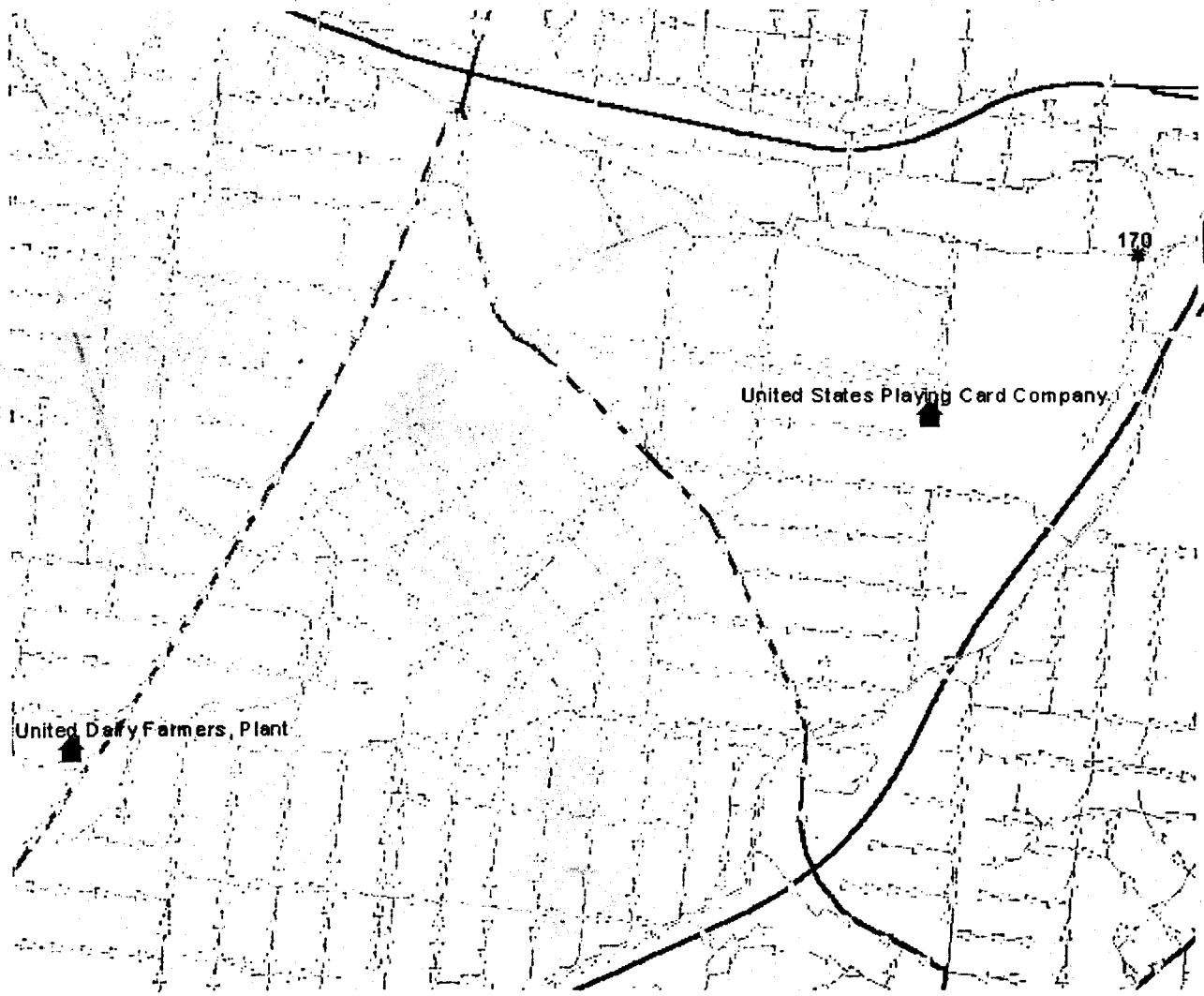
N
W
E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 152


V.I.P. Products, Inc.
Kroger Co.
152
Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads
N
W
E
S
This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 170

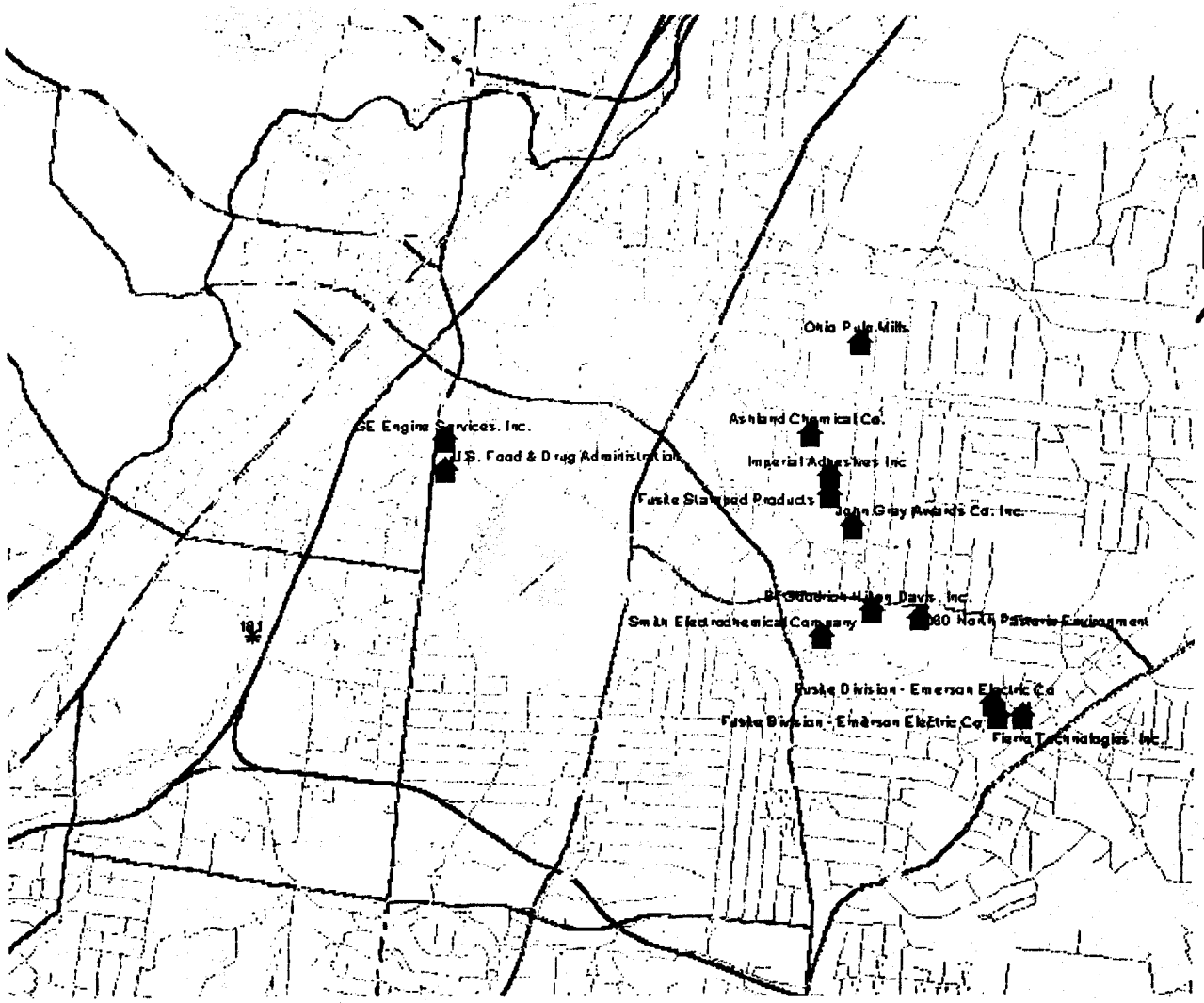


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 181

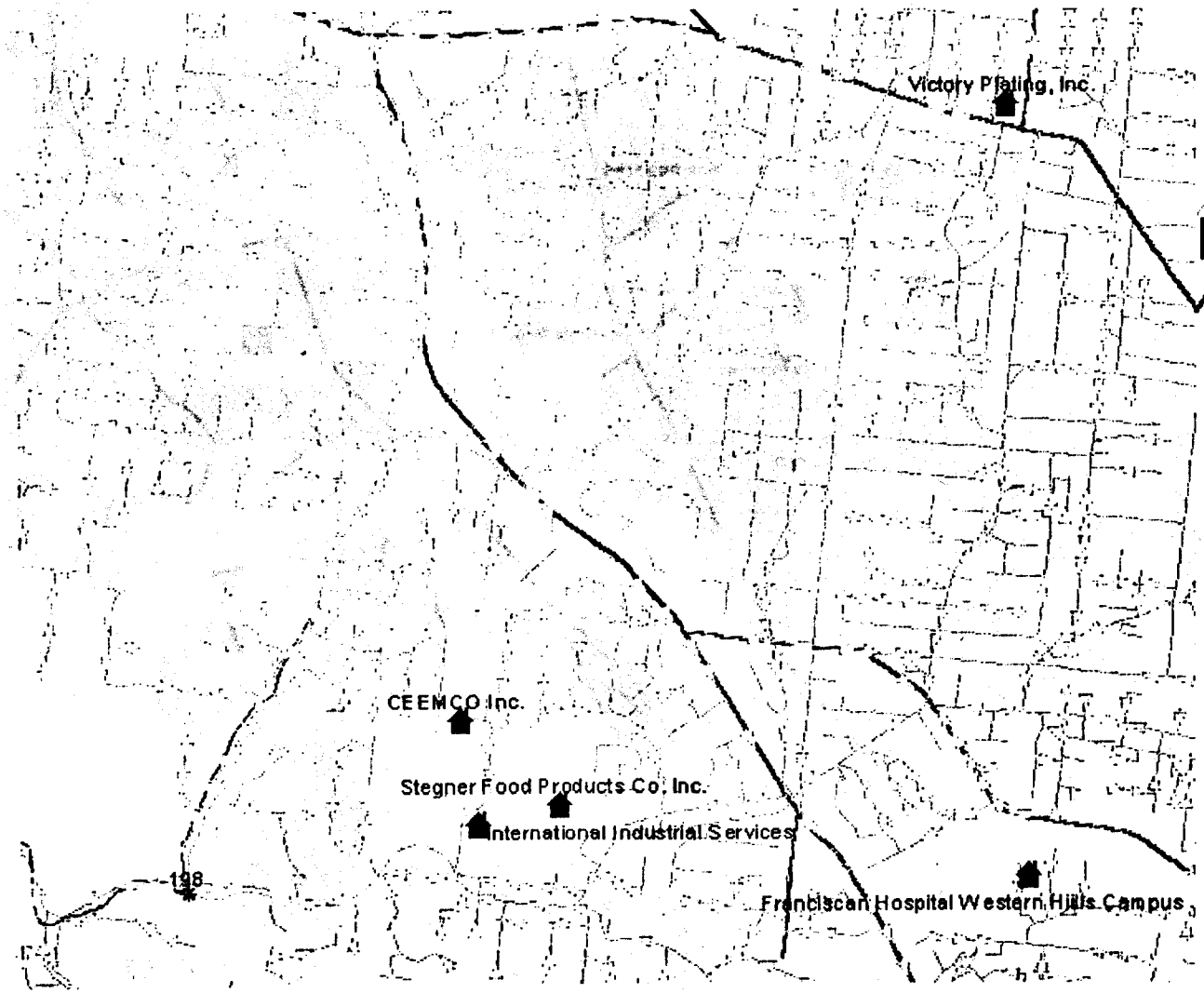


- Regulated Industry
- CSO
- MSD Sewers
- Rivers & Streams
- Primary Roads

N
W E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 198

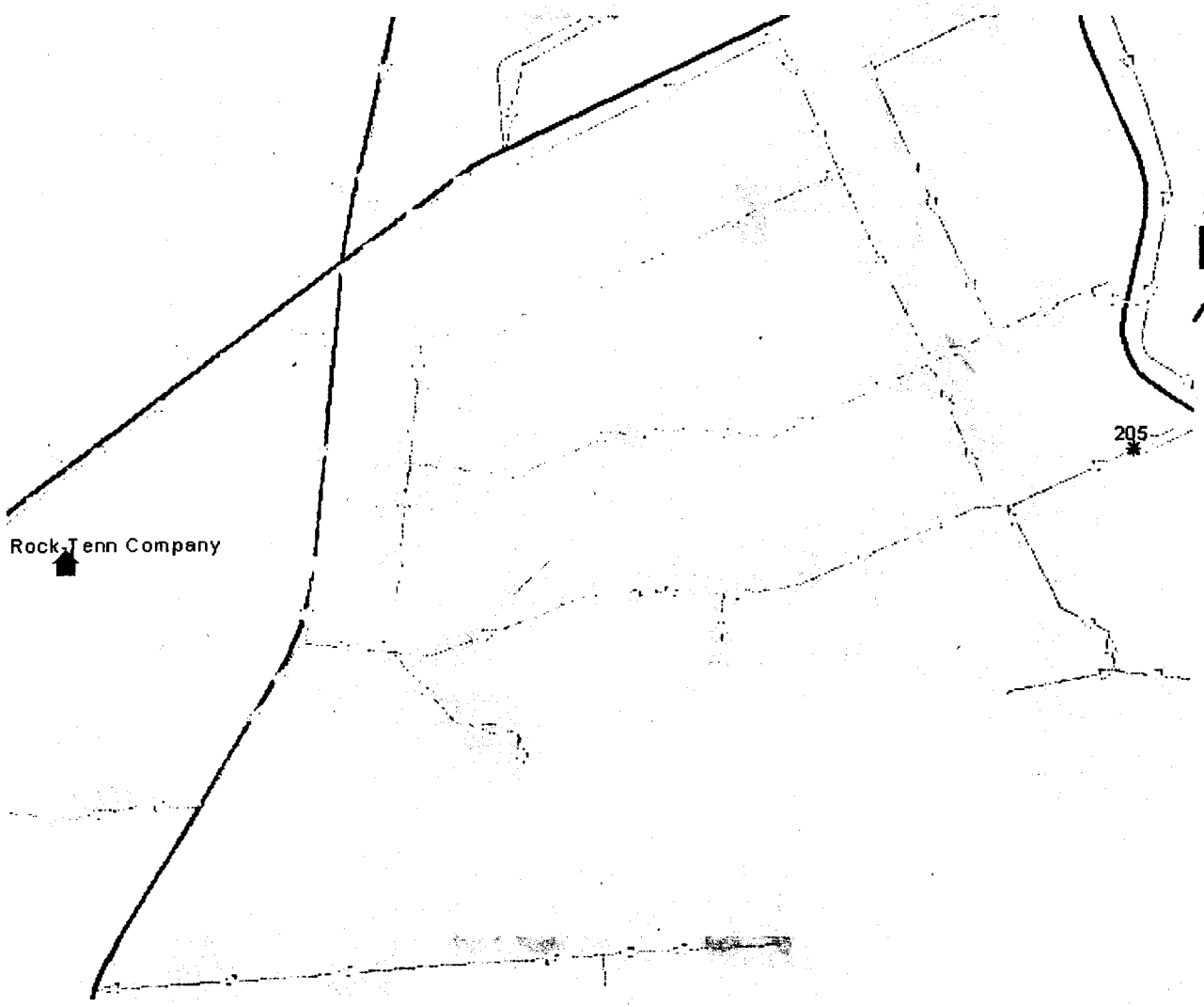


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 205



Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 214

Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W E
S

This map produced
3 Aug 2001
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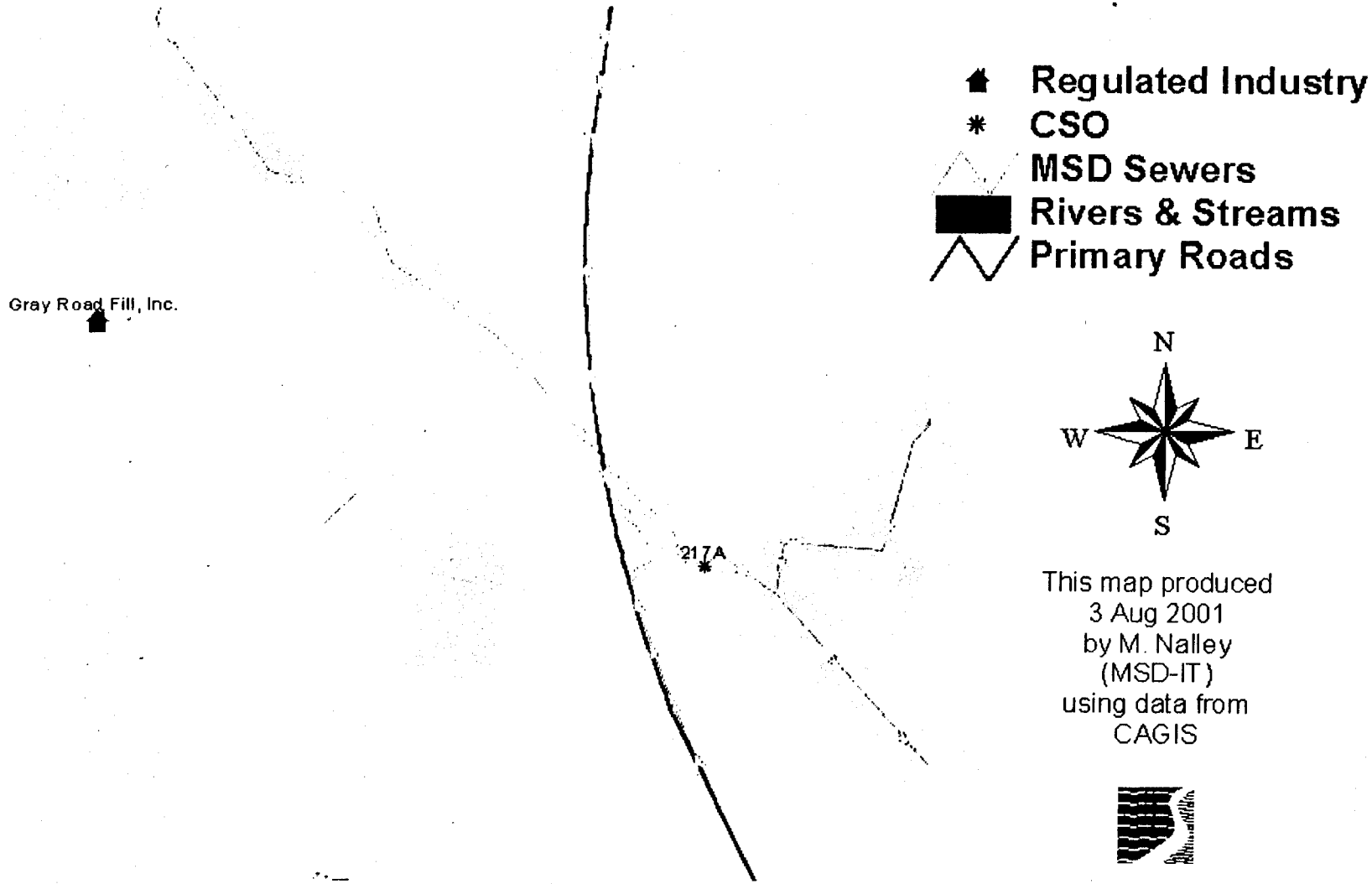
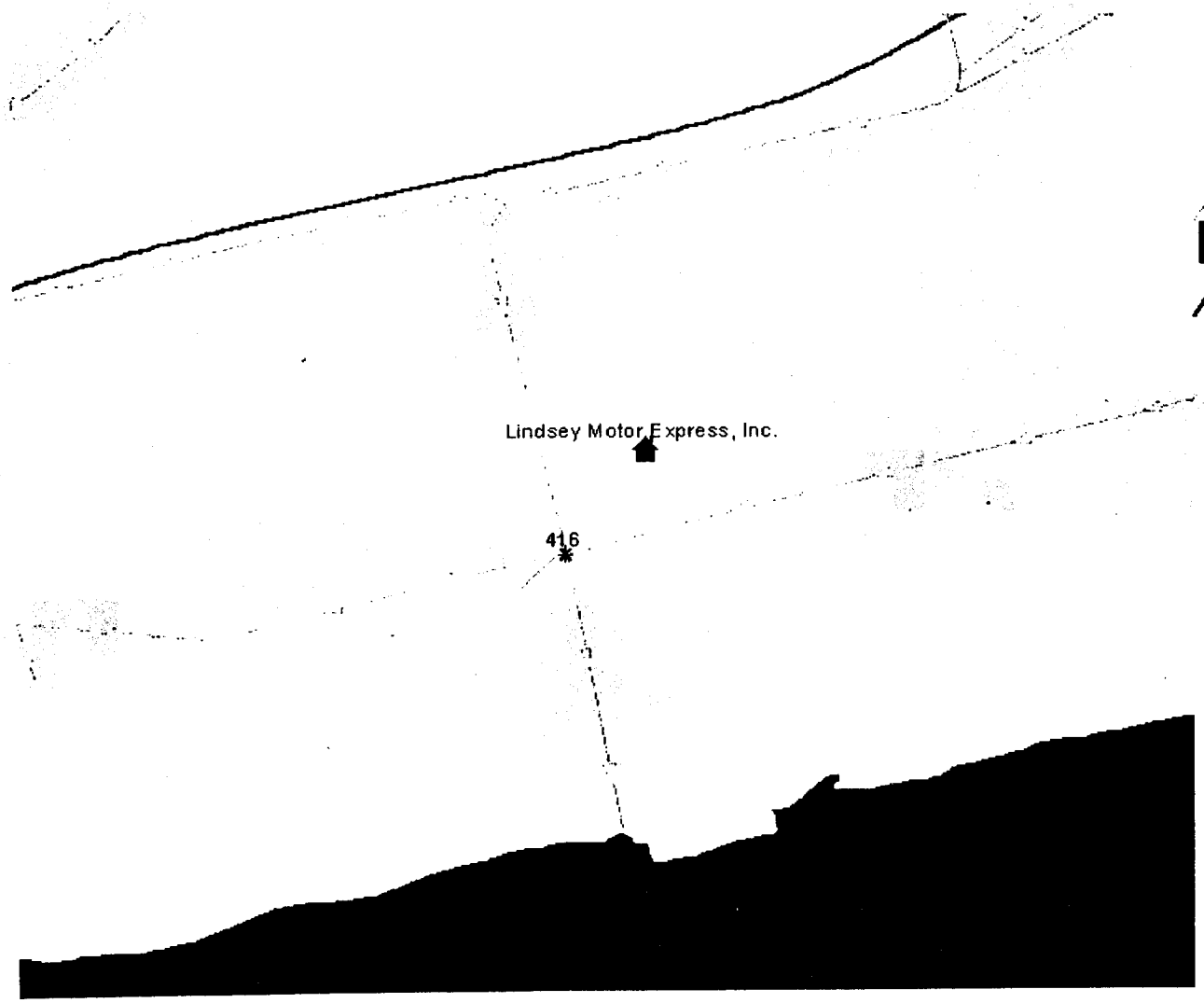
(MSD-IT)
using data from
CAGIS

CSO 217a


Gray Road Fill, Inc.
217A
Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads
N
W
E
S
This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 416



Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 419

Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

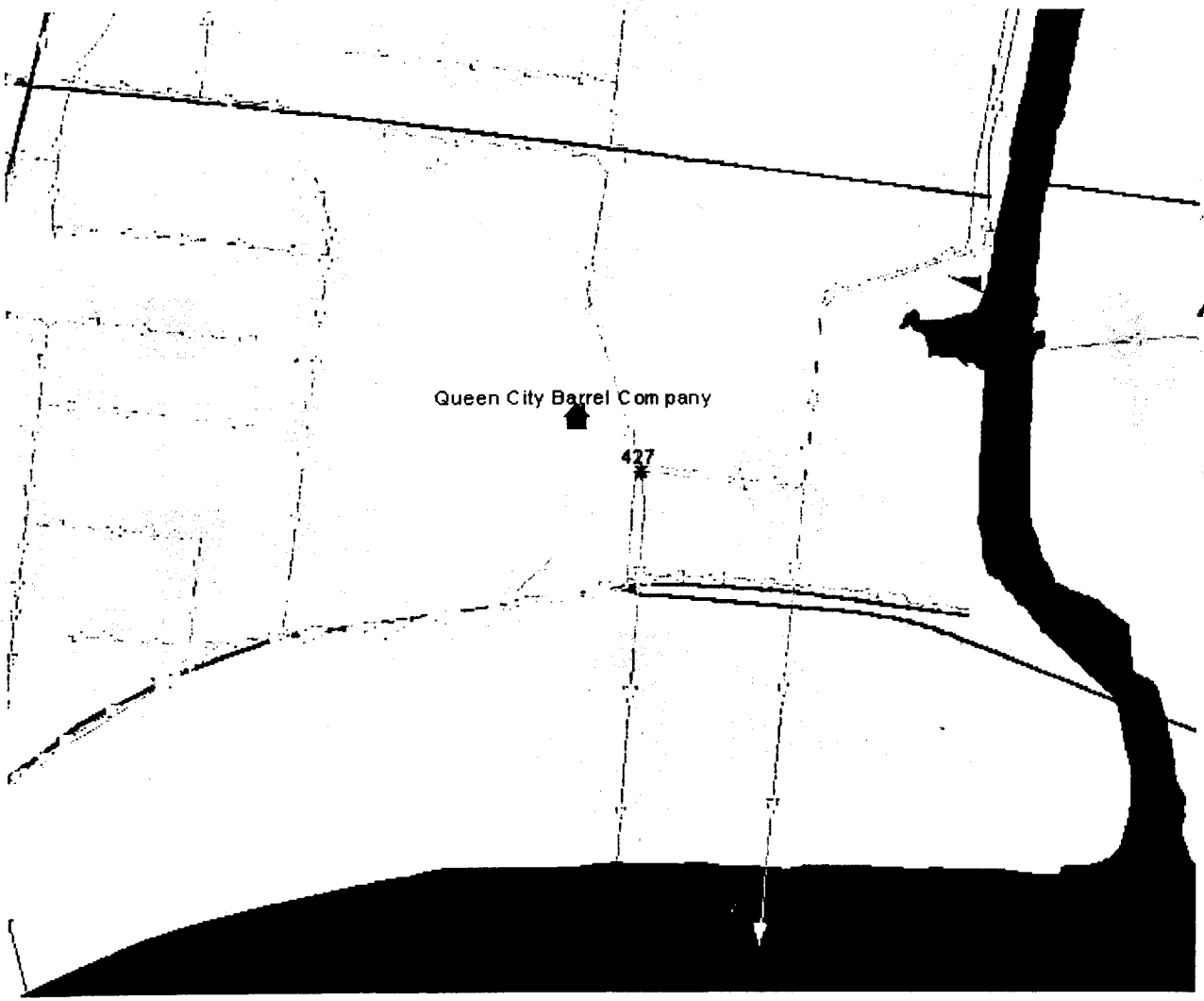
CSO 426a

Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 427

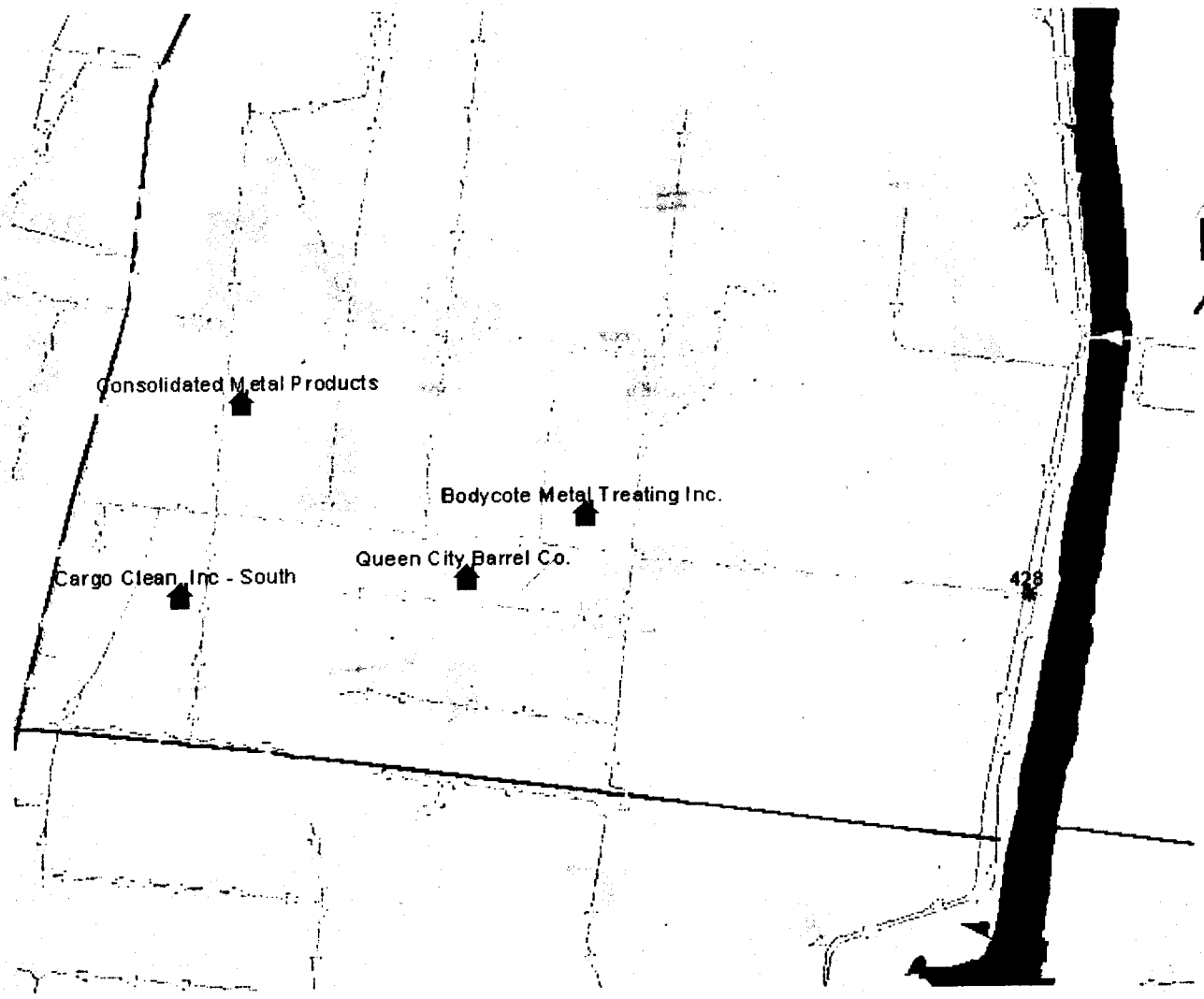


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 428



Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

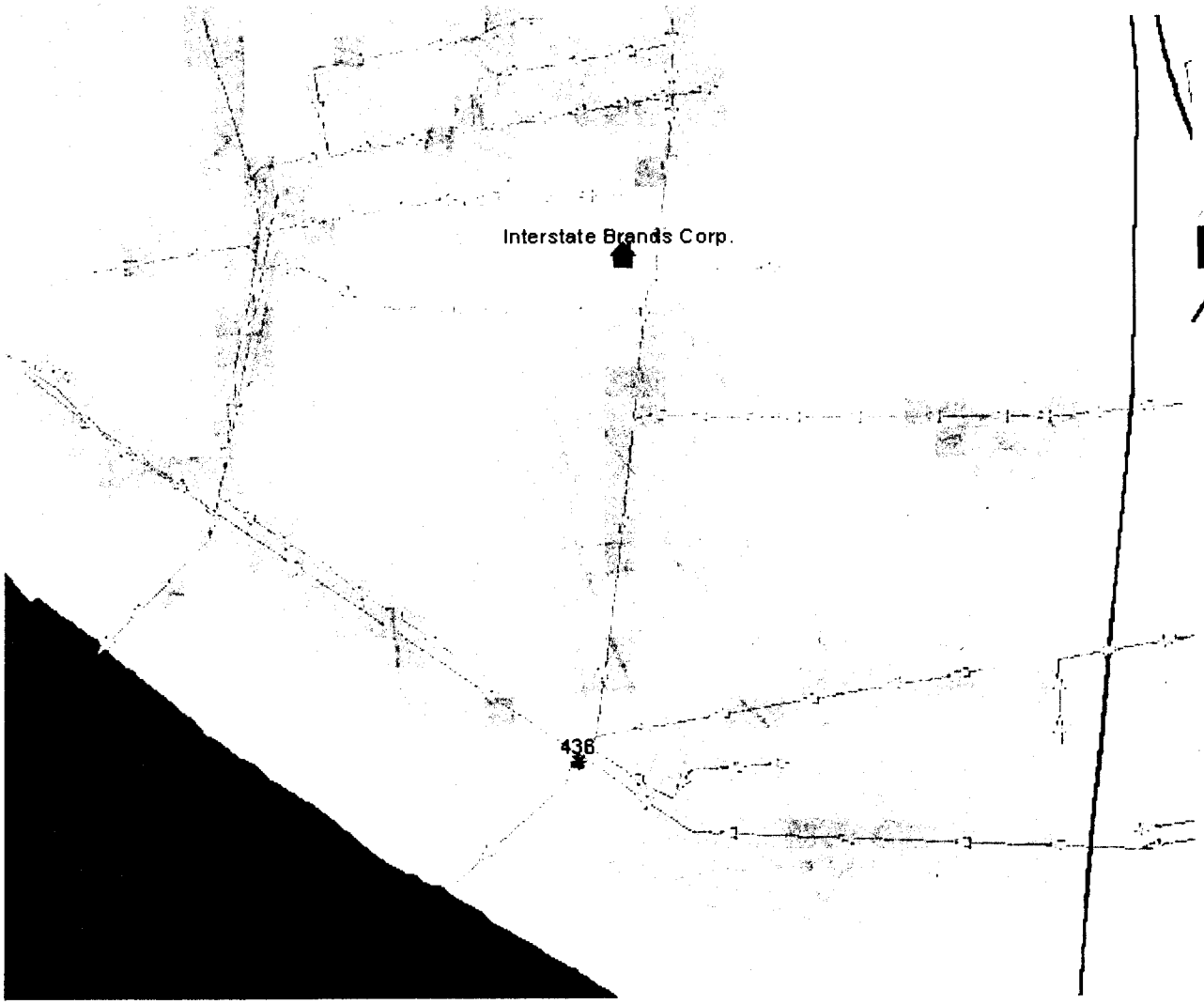
CSO 433

Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 436

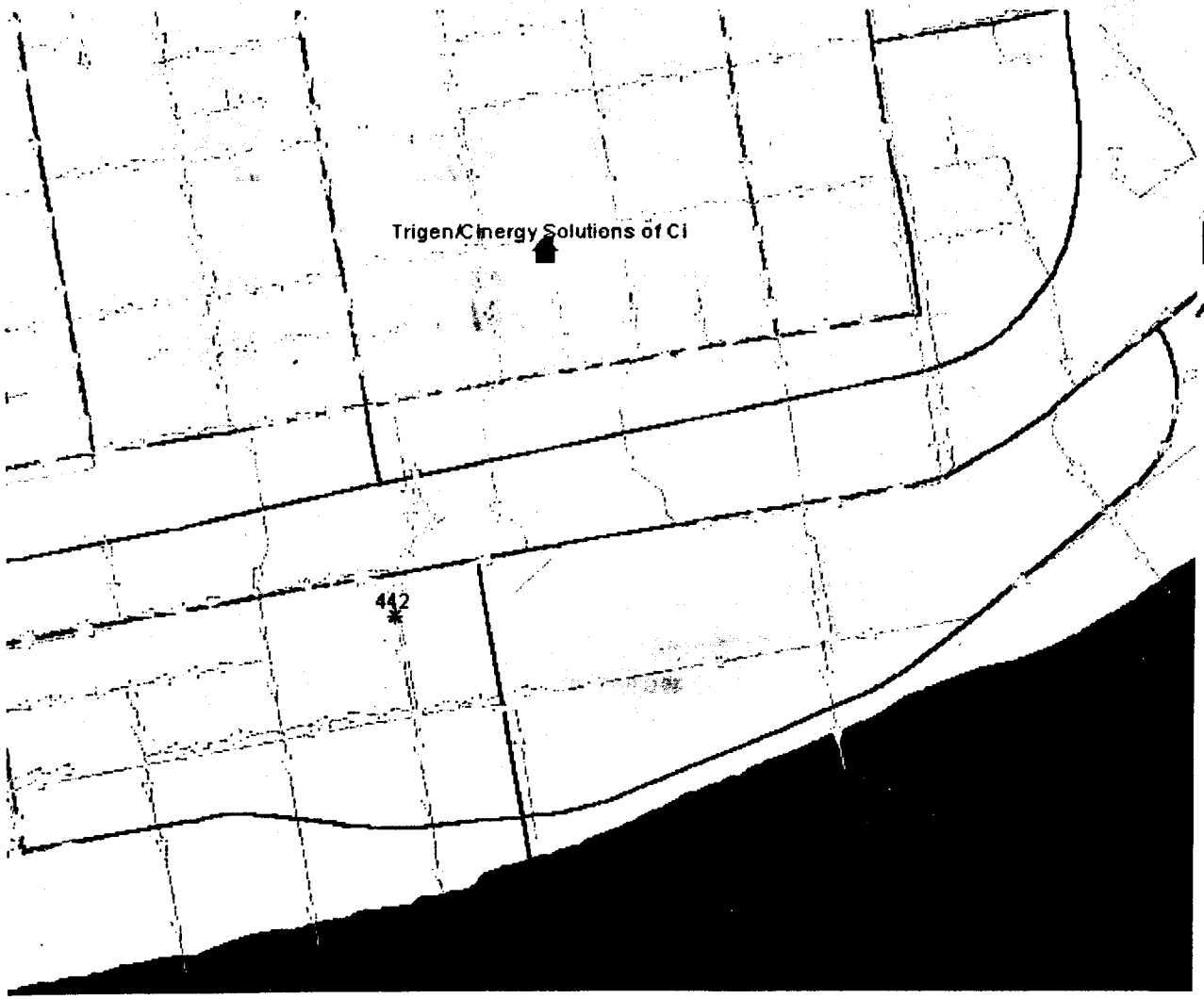


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 442

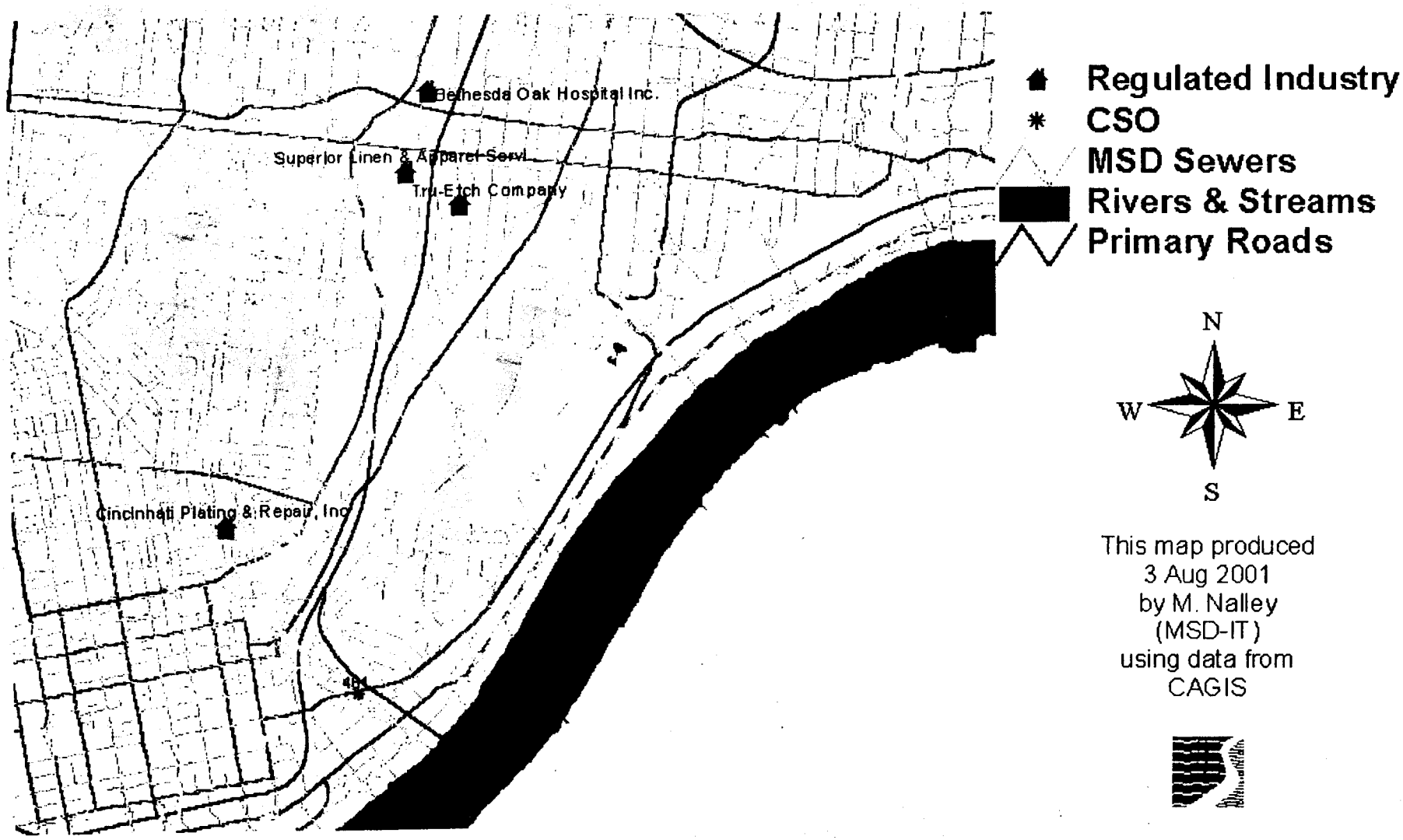


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

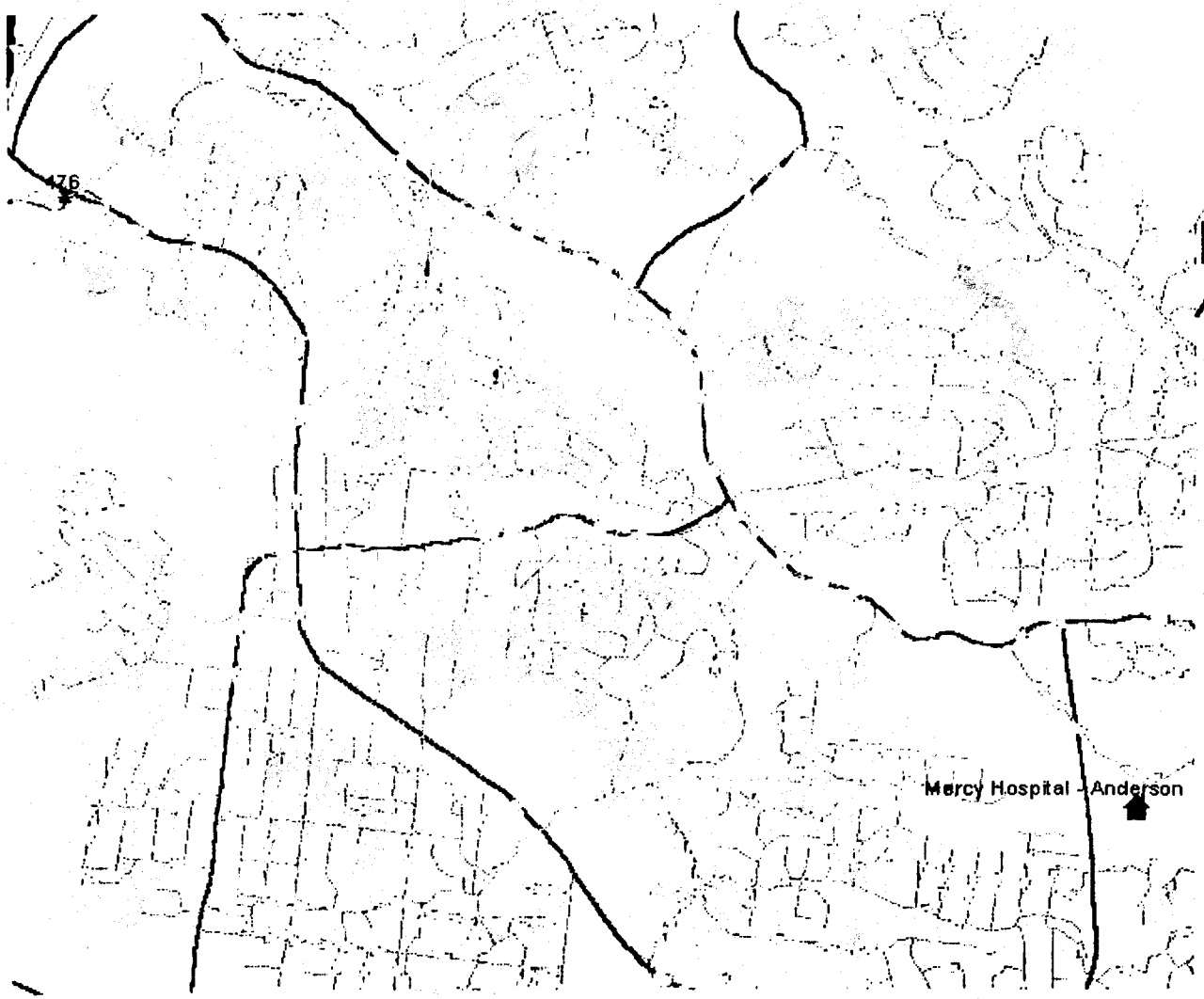
N
W E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 461


Bethesda Oak Hospital Inc.
Superior Linen & Apparel Servi
Tru-Etch Company
Cincinnati Plating & Repair, Inc
461
Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads
N
W
E
S
This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 476



Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

This map produced
3 Aug 2001
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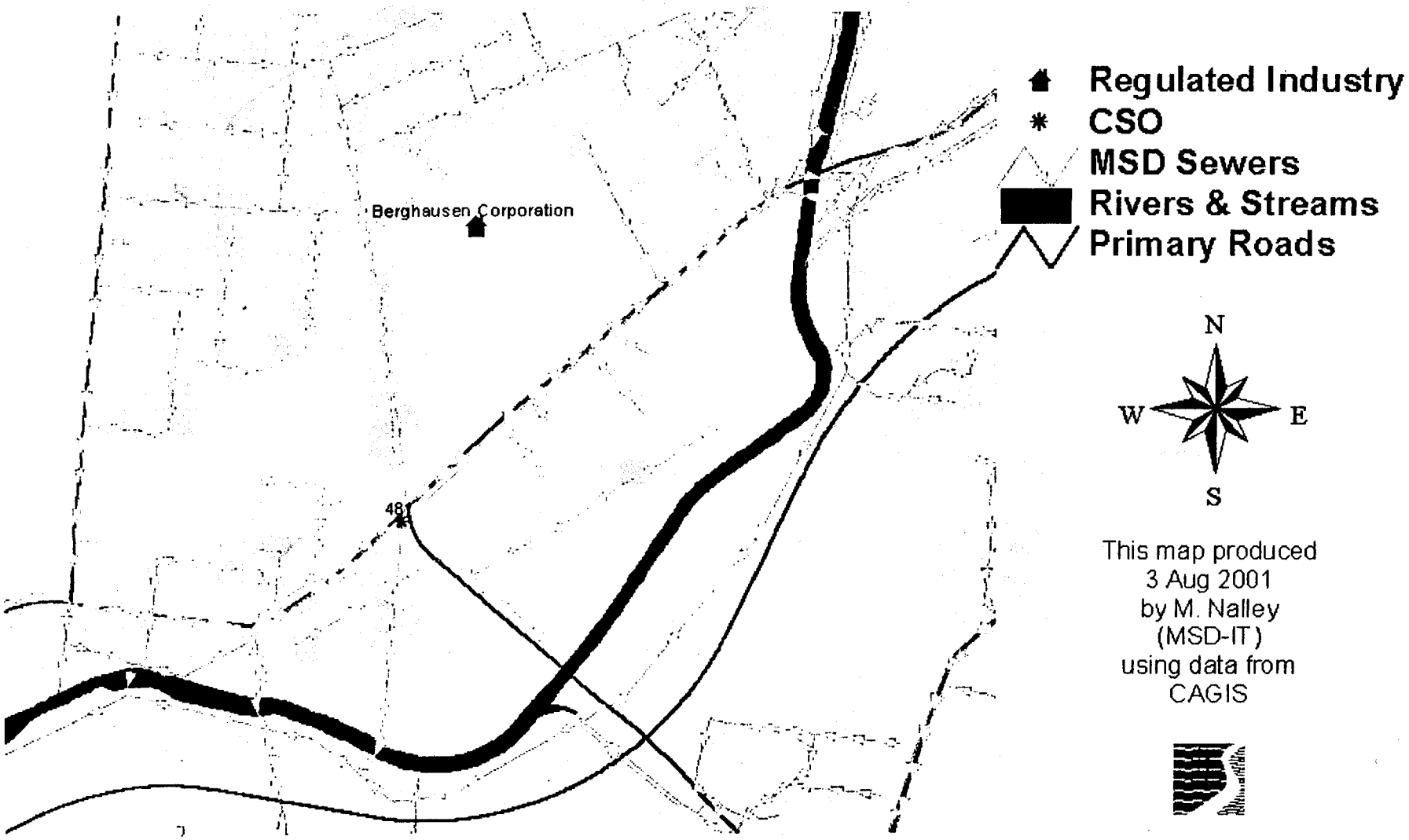
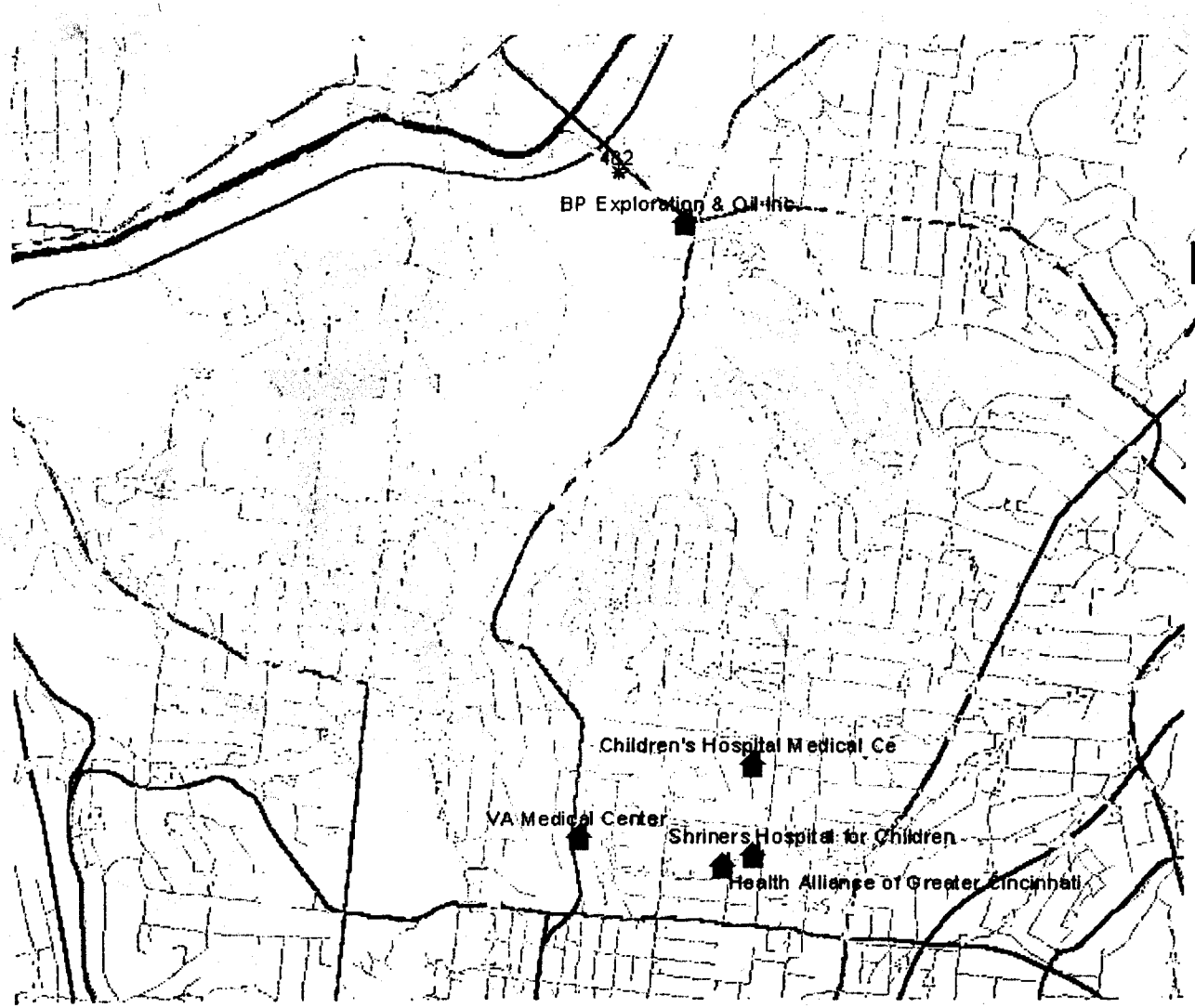
(MSD-IT)
using data from
CAGIS

CSO 481


Berghausen Corporation
481
Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads
N
W
E
S
This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 482

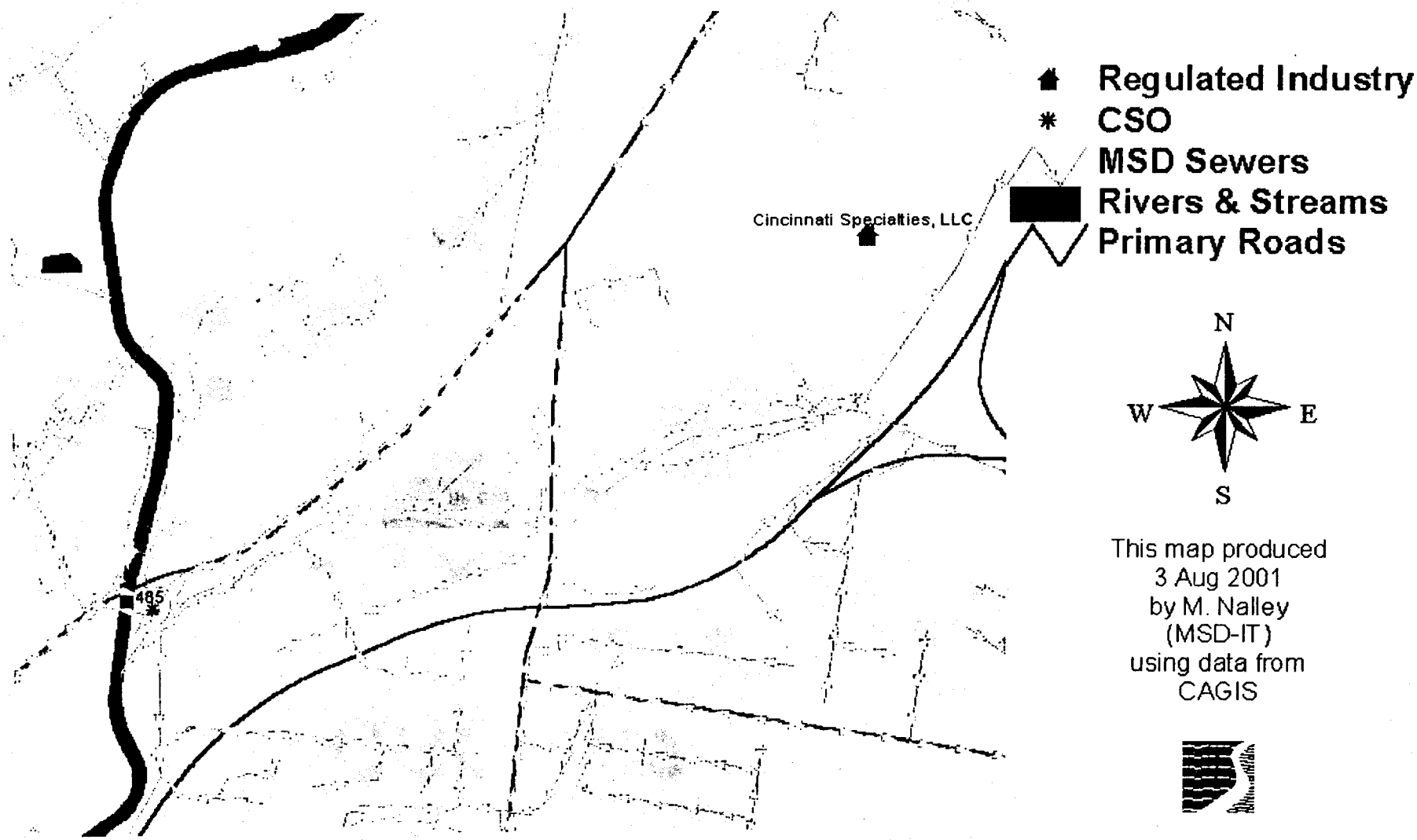


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

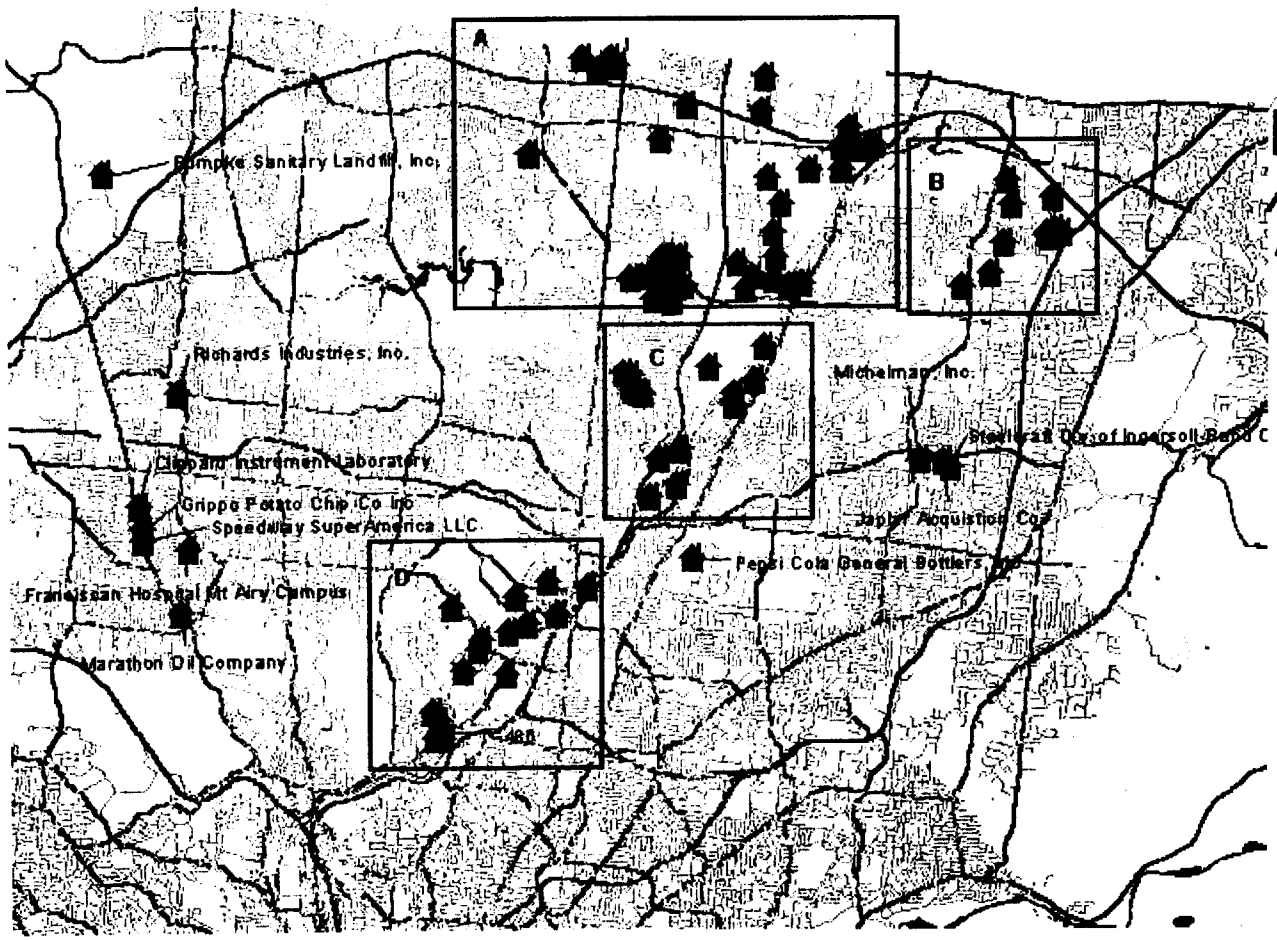
N
W
E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 485


Cincinnati Specialties, LLC
485
Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads
N
W
E
S
This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 486



Regulated Industry

CSO

MSD Sewers

Rivers & Streams

Primary Roads

A,B,C,D Supplemental maps for Industry detail

N

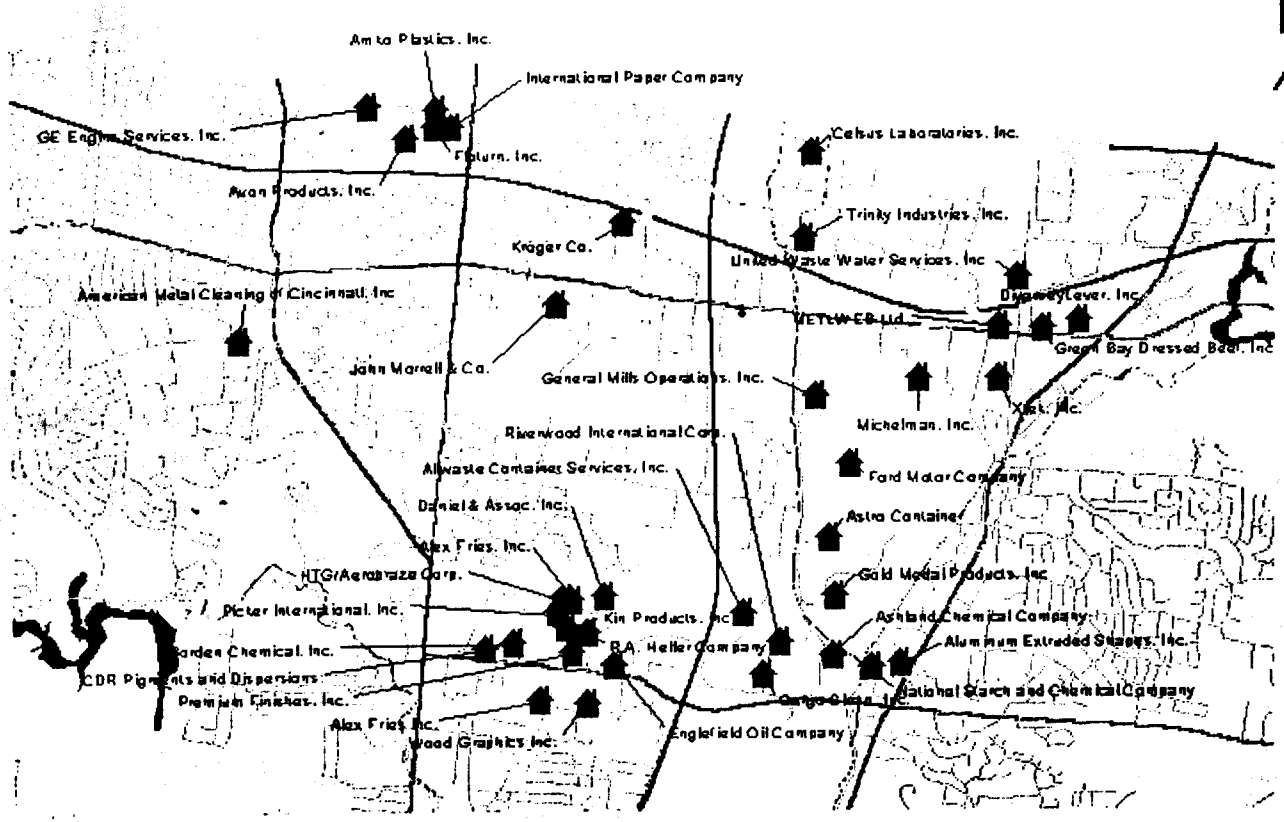
W E

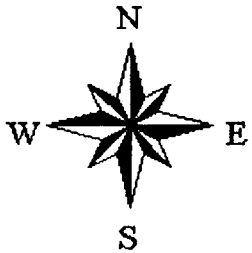
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 486 (Sheet A)

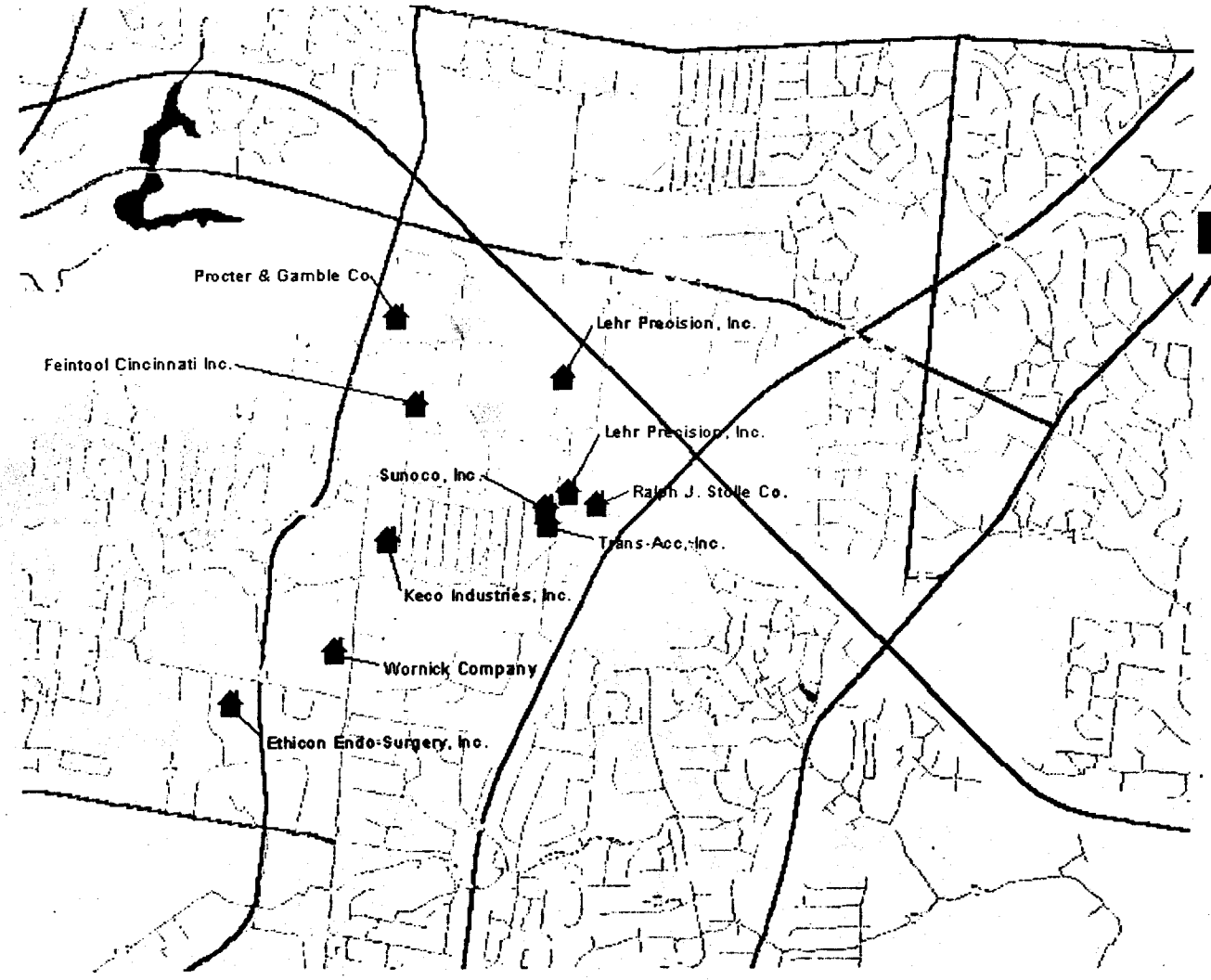
- Regulated Industry
- CSO
- MSD Sewers
- Rivers & Streams
- Primary Roads





This map produced
6 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 486 (Sheet B)

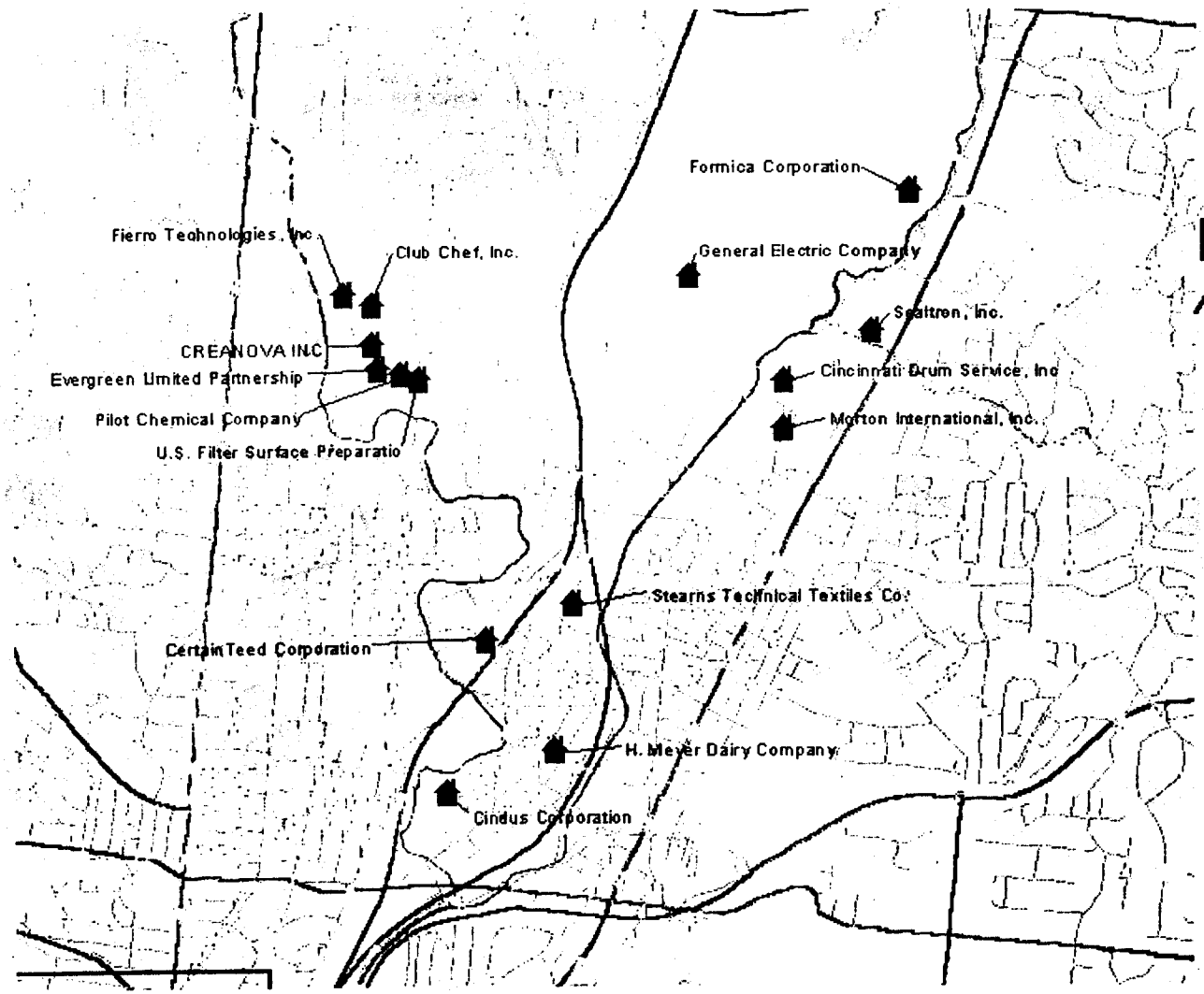


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W E
S

This map produced
6 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 486 (Sheet C)

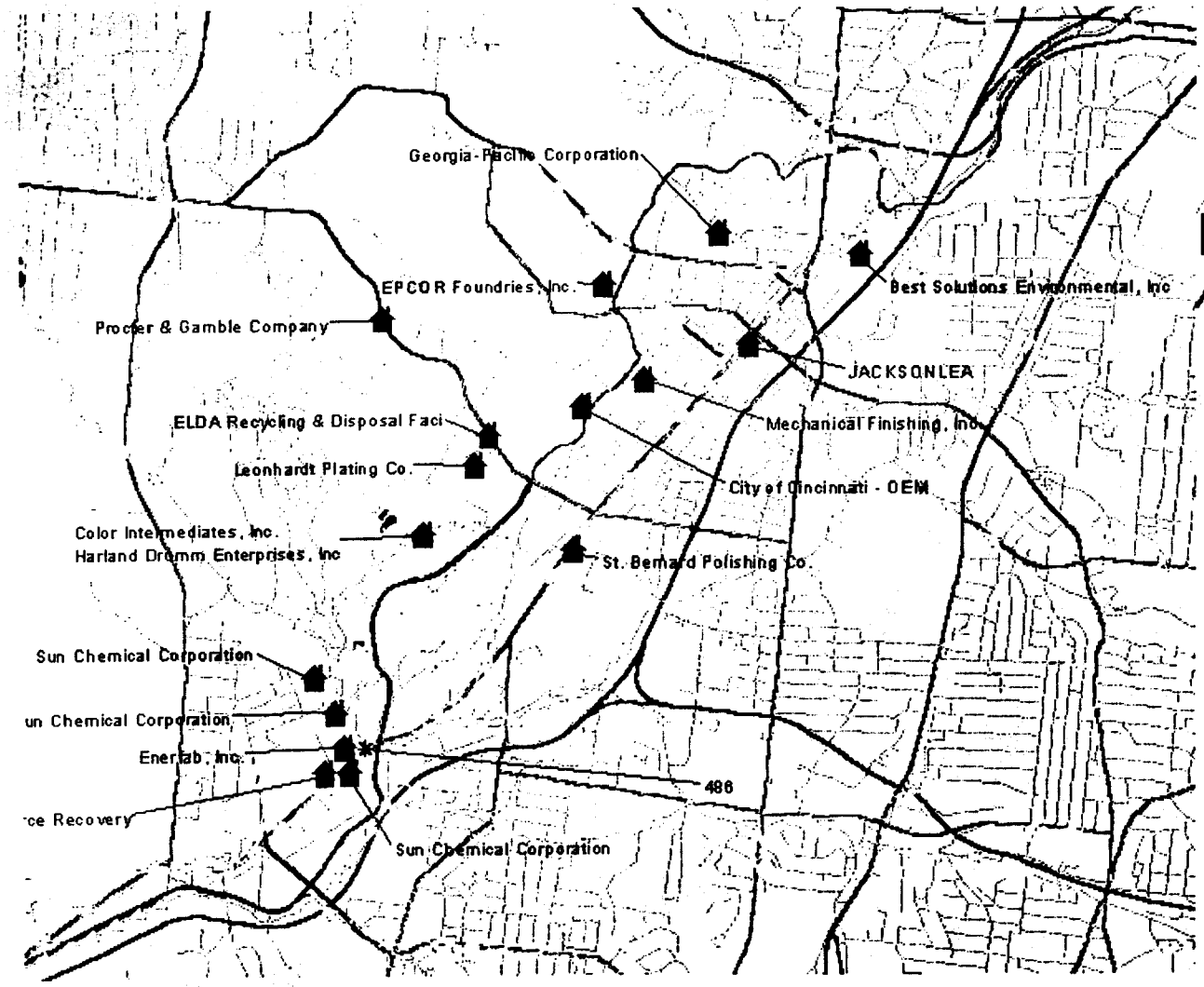


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W E
S

This map produced
6 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 486 (Sheet D)

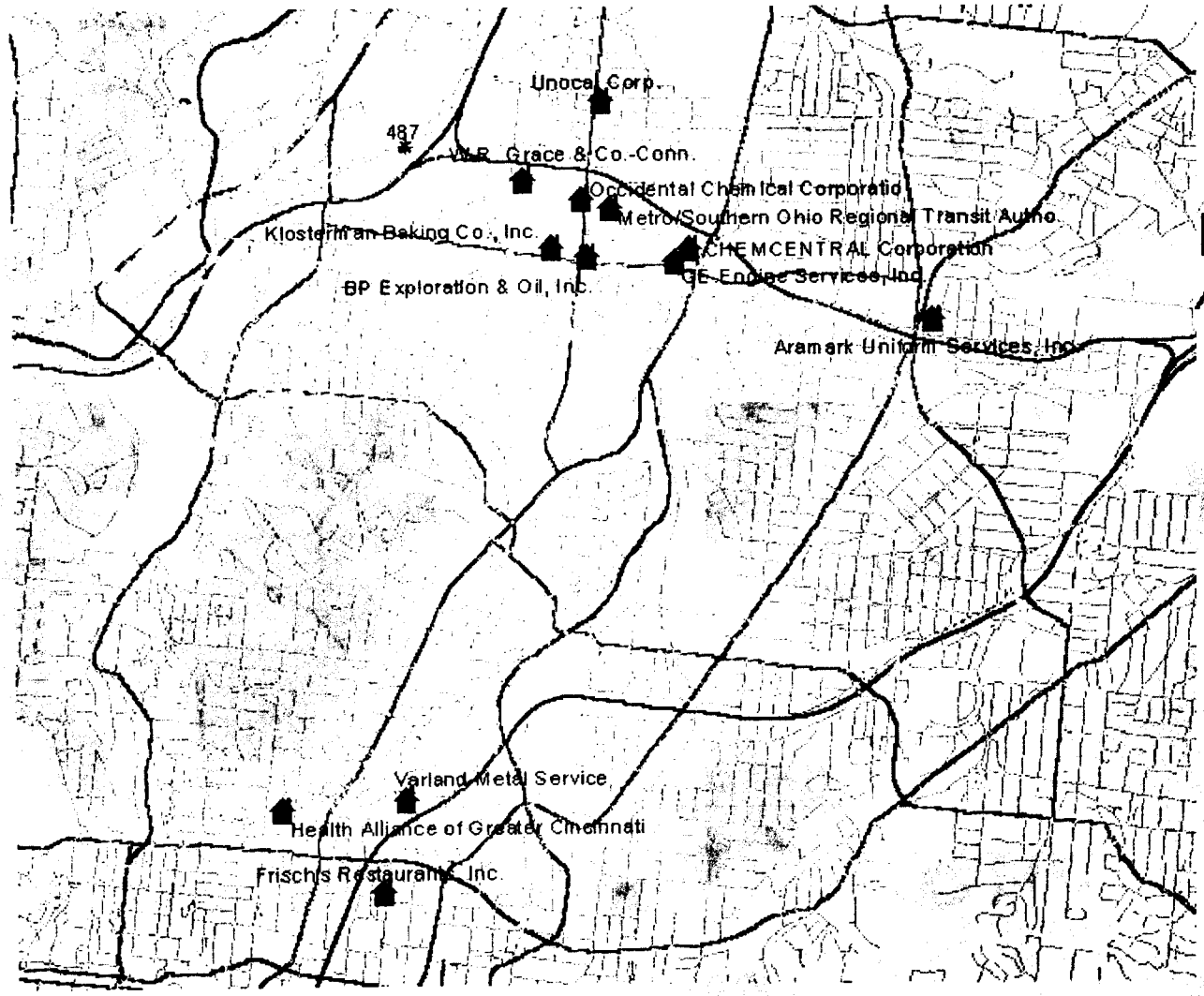


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W E
S

This map produced
6 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 487

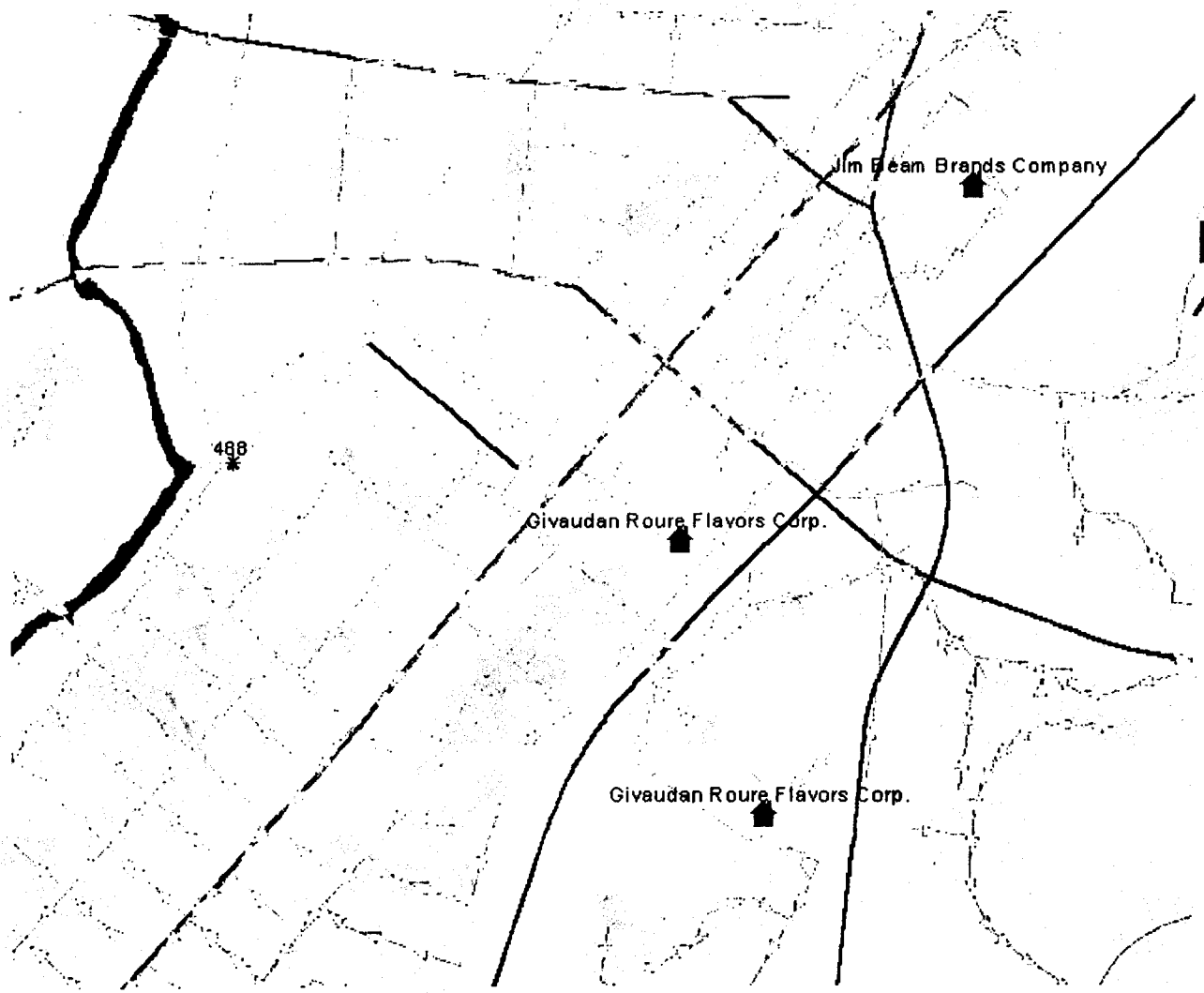


- Regulated Industry
- CSO
- MSD Sewers
- Rivers & Streams
- Primary Roads

N
W E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 488

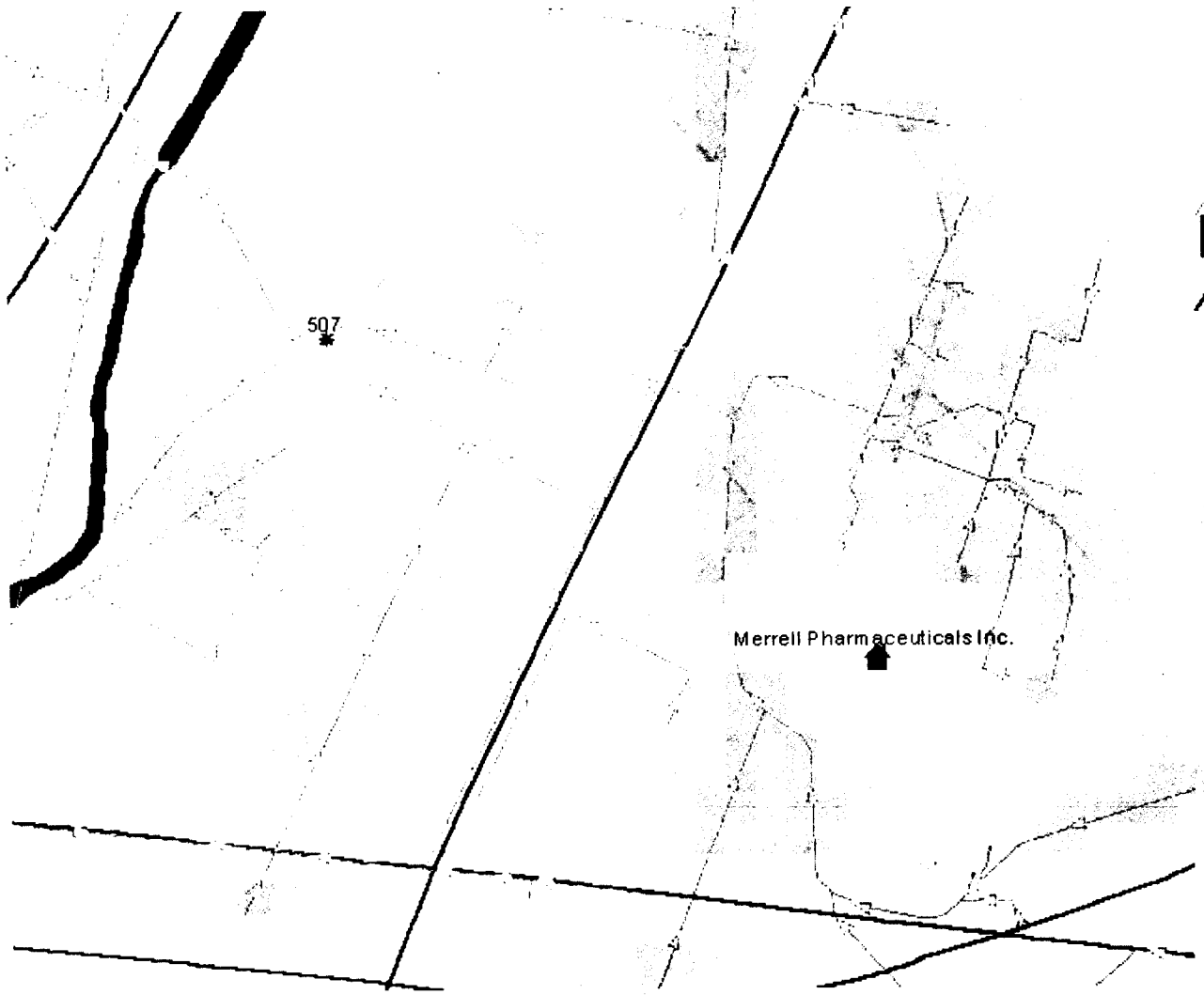


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 507

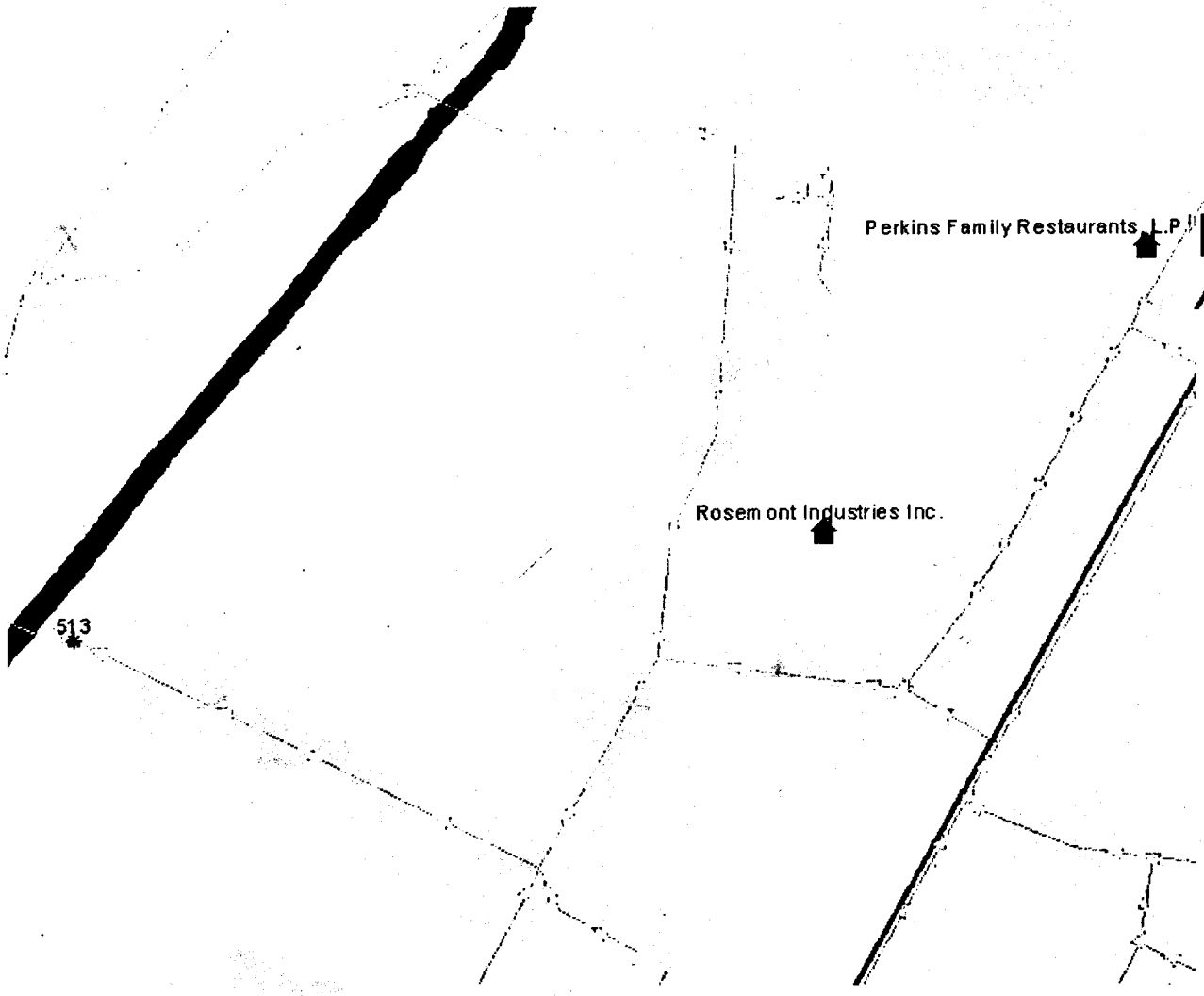


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 513

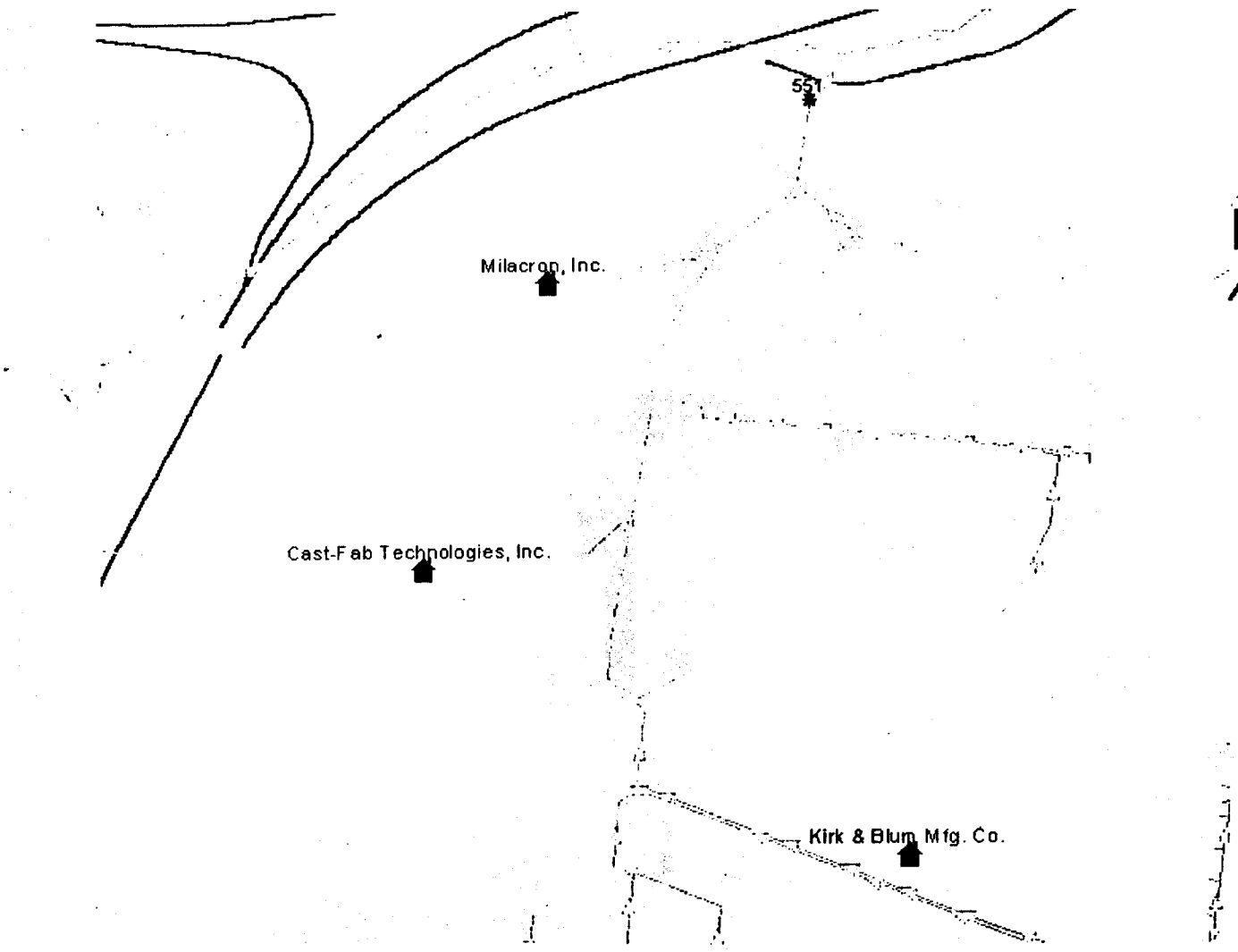


Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

N
W
E
S

This map produced
3 Aug 2001
by M. Nalley
(MSD-IT)
using data from
CAGIS

CSO 551



Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

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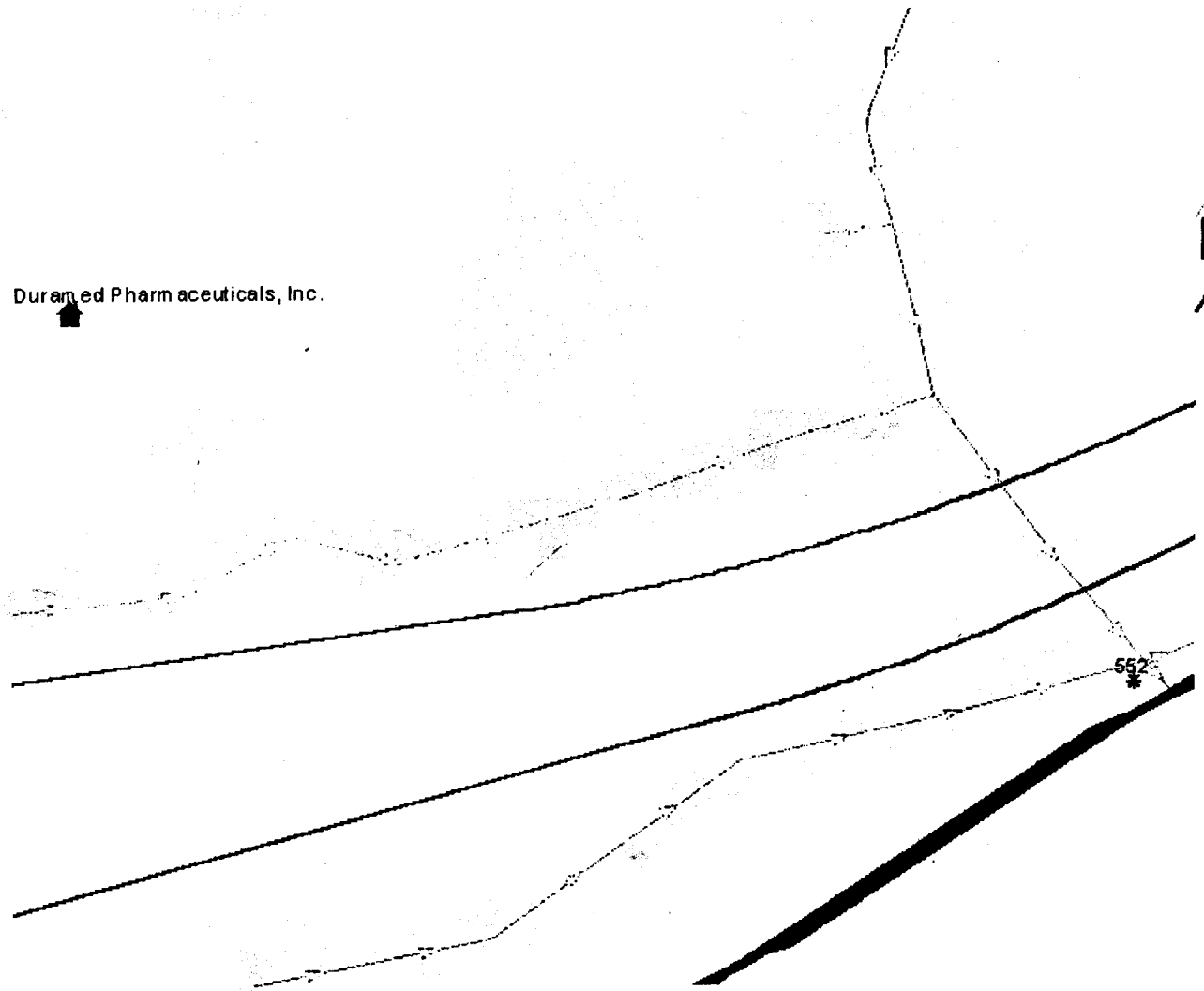
CSO 552



Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

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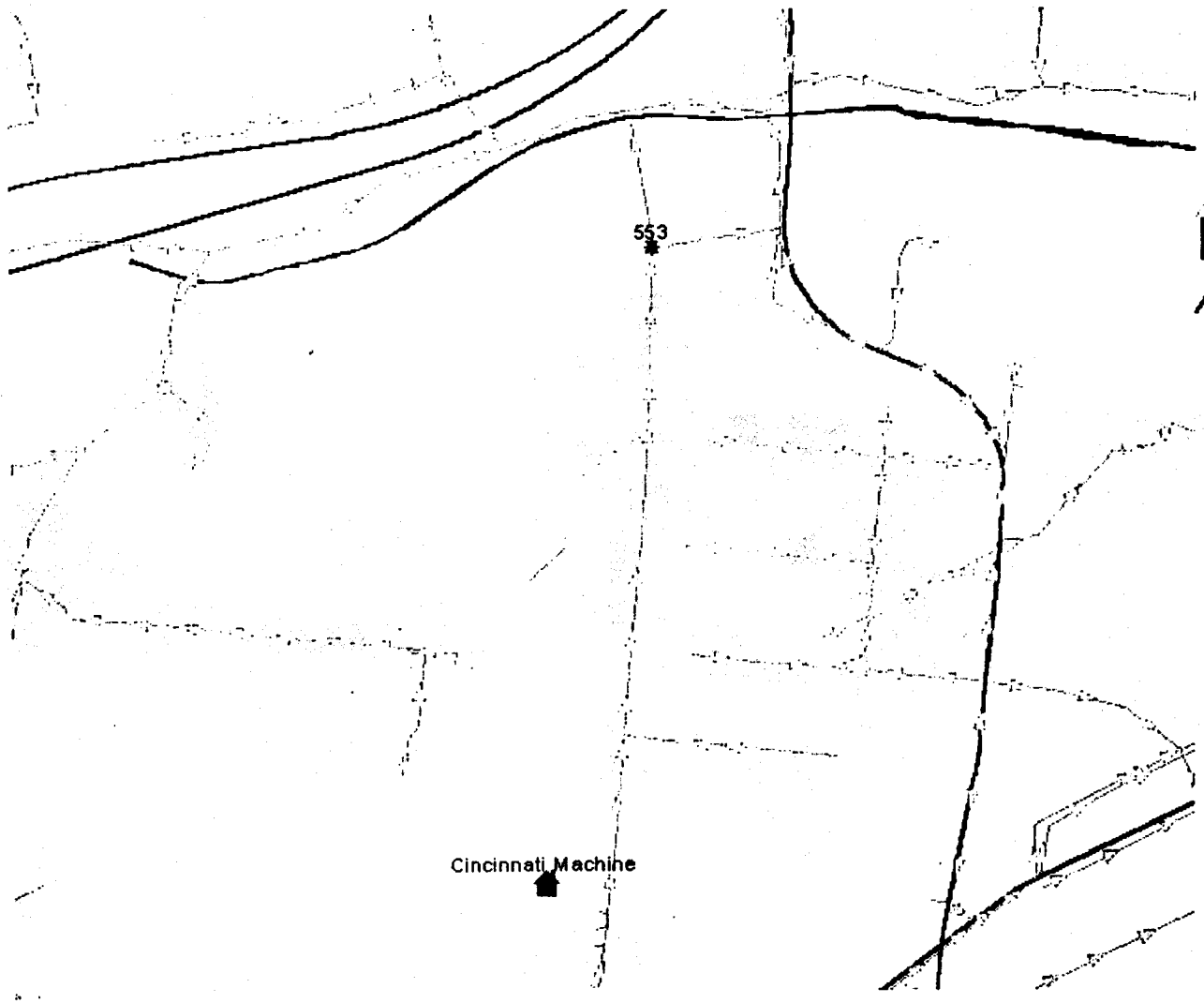
CSO 553



Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

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CSO 654

Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

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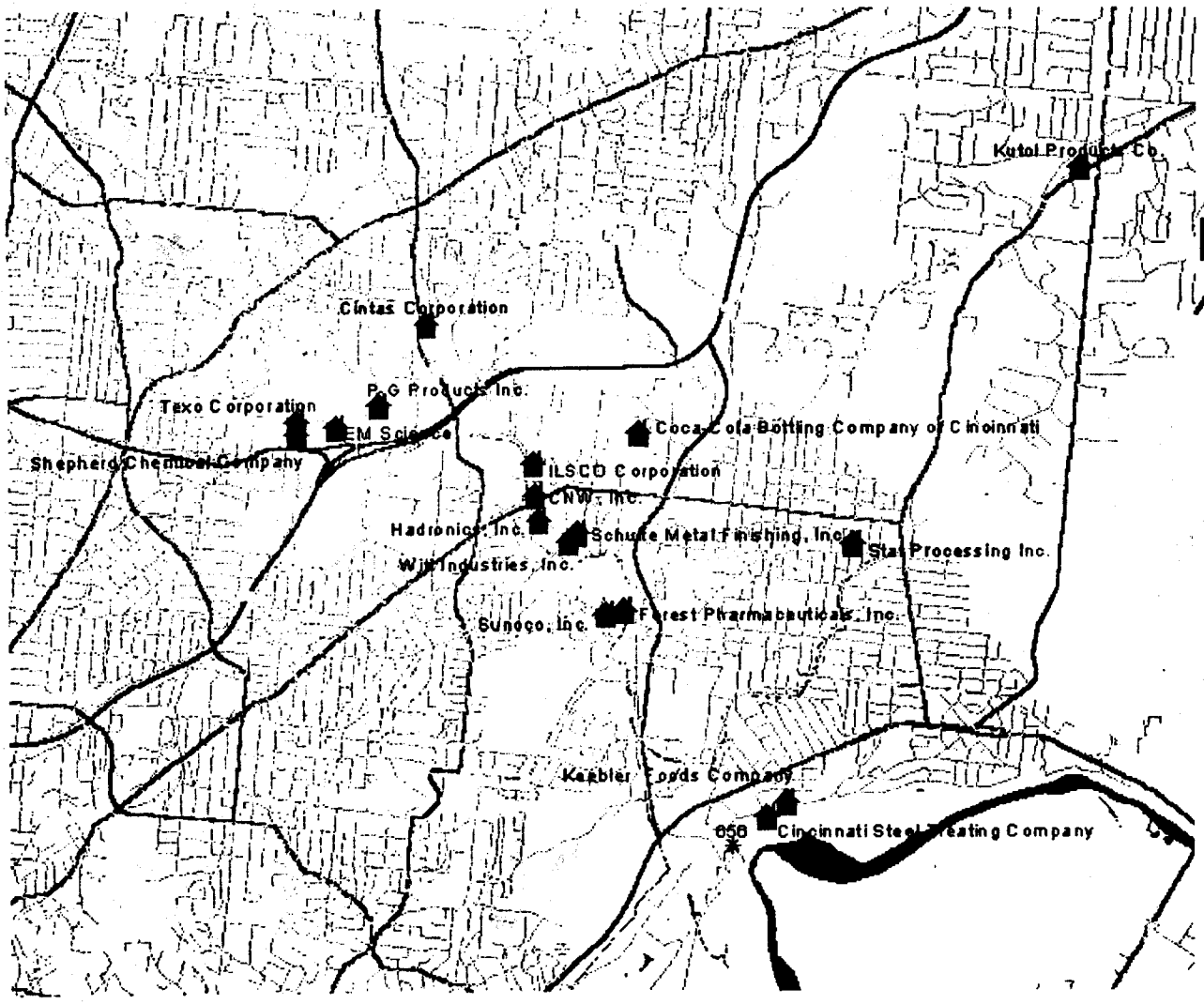
CSO 656



Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

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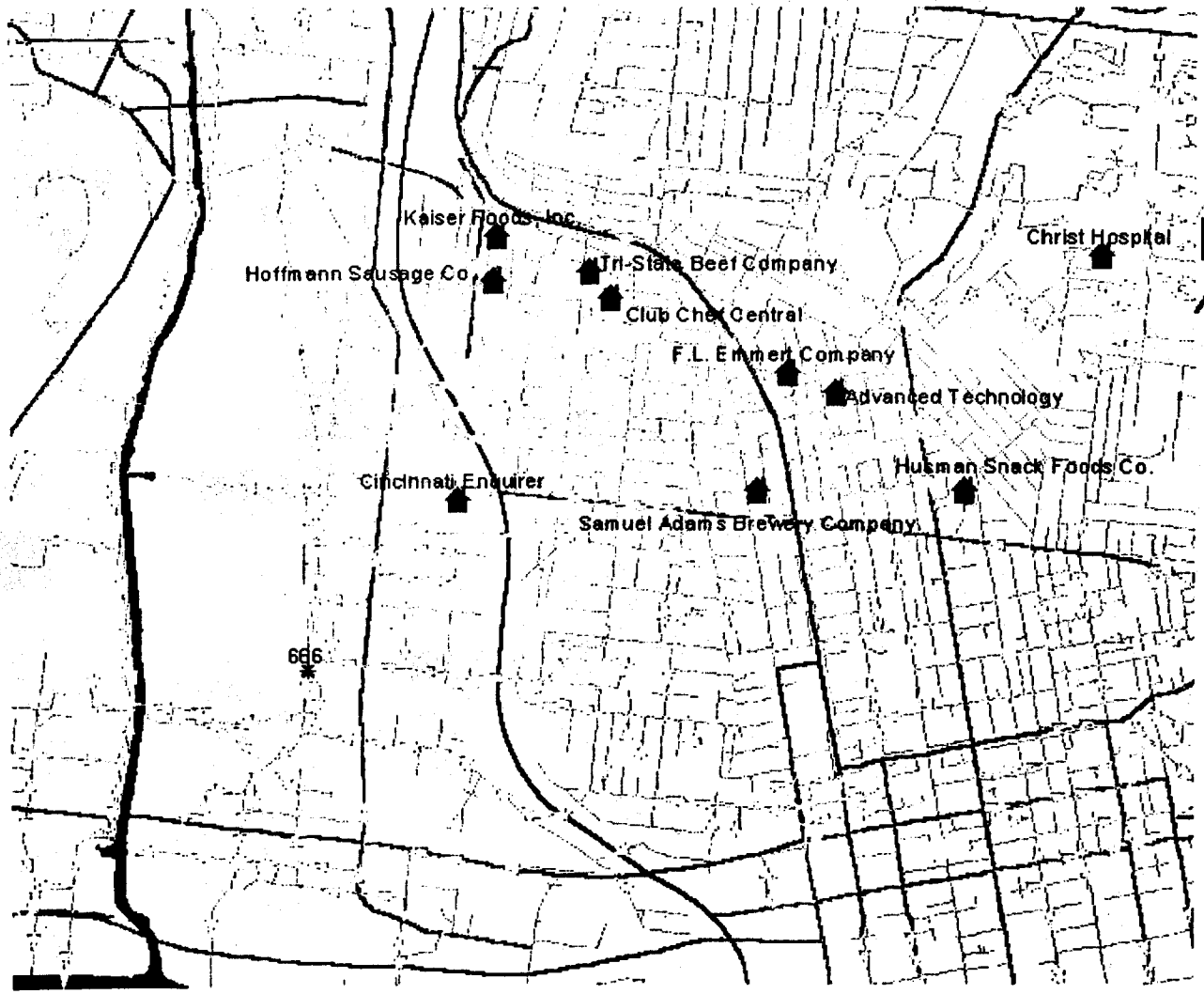
CSO 666



Regulated Industry
CSO
MSD Sewers
Rivers & Streams
Primary Roads

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SSO Maps

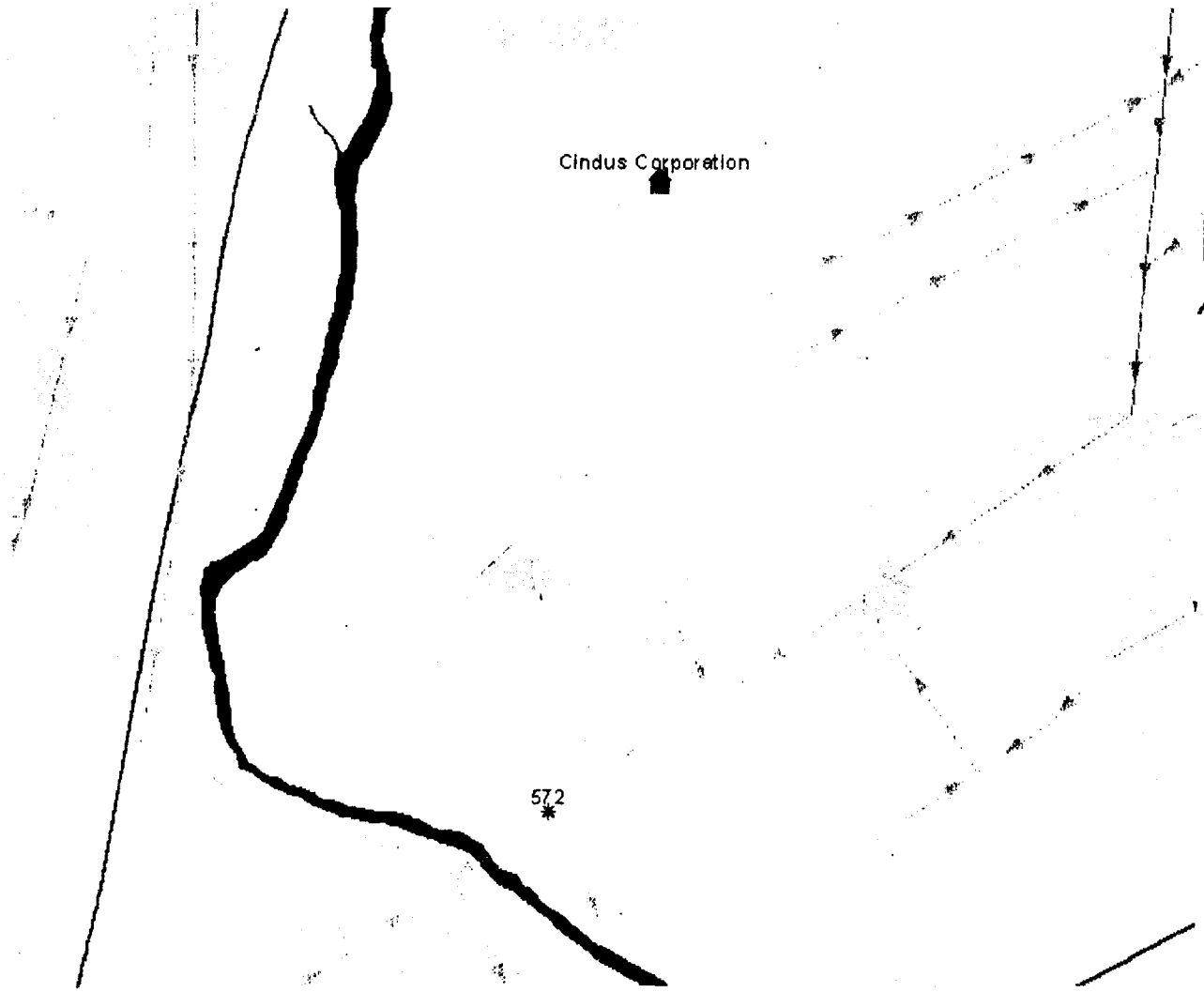
MSD Industrial User (IU) Facilities tributary to SSO (includes Significant Industrial User (SIU) Facilities)

Company Name	Premise Address	ZIP	Permit Type	IUN	Discharges to Sewer Segment	Contributes to CSO	Contributes to SSO
V-W-00-308-25 & 26 Items #34, #35, #36							
Stearns Technical Textiles Co.	100 Williams Street	45215	SIU	116	39902015-39902016	486	1009
Culligan Water Conditioning of Gr Cinc	10860 Millington Ct	45242	SIU	164	49305002-49305001	1052	
H.B. Fuller Company	4440/4450 Malsbary	45242	SIU	48	48306008-48311008	1052	
Jefferson Smurfit Corporation	9960 Alliance Road	45242	SIU	29	49509001-49509002	1052	
LSI Lighting Systems Inc.	10170 Alliance Road	45242	SIU	74	49516004-49401003	1052	
Xomox Corporation	4444 Cooper Rd.	45242-	SIU	200	48306009-48306008	1052	
Bethesda Hospital, Inc.	10500 Montgomery Ro	45242	nonSIU	10	54409008-54409013	1052	
Jewish Hospital	4777 E. Galbraith R	45236	nonSIU	255	48005012-48012005	1052	
Kutol Products Co.	7650 Camargo Road	45243	SIU	71	50011008-50011009	656	1053
Drew Graphics Division of CDR Pig & Di	11550 Gold Coast Dr	45249	SIU	369	53714006-53714005	565	
Green Bay Packaging Inc.	7660 School Road	45249	SIU	325	53810004-53810005	565	
Amano Cincinnati, Inc.	130 Commerce Blvd.	45140	nonSIU	263	58804010-59101001	565	
Combined Containerboard Inc	7741 School Rd	45249	nonSIU	628	53810007-53810006	565	
Cindus Corporation	515 Station Avenue	45215	nonSIU	340	38305012-40009002	486	572
Michelman, Inc.	9080 Shell Road	45236	SIU	156	48202009-48202008	486	603
Steelcraft Div. of Ingersoll-Rand Co	9017 Blue Ash Rd.	45242	SIU	117	48114004-48114003	486	603
Rumpke Sanitary Landfill, Inc.	10795 Hughes Rd.	45251	SIU	105	26501012-26501013	486	628
Japlar Acquistion Co	4500 Alpine Ave.	45242	nonSIU	249	48203003-48203002	486	682
DONISI MIRROR COMPANY	507 Loveland-Maderi	45140	SIU	34	60512011-60512012	690	
CEEMCO Inc.	5313 Robert Ave	45248	SIU	1470	20609006-20609005	198	692
International Industrial Services	10520 Chester Road	45215	SIU	77	20608001-20608002	198	692
Stegner Food Products Co. Inc.	3640 Muddy Creek Ro	45238	SIU	119	20607021-20607020	198	692
Victory Plating, Inc.	3814 Olivette Avenu	45211	SIU	132	23701028-23701029	198	692
Franciscan Hospital Western Hiills Ca	3131 Queen City Ave	45238	nonSIU	114	23908025-23908026	198	692
Allwaste Container Services, Inc.	10671 Evendale Driv	45241	SIU	382	43509001-43509002	486	700
Aluminum Extruded Shapes, Inc.	10549 Reading Road	45241	SIU	5	43505001-43504007	486	700
American Metal Cleaning of Cincinnati,	475 Northland Blvd.	45240	SIU	425	35610003-35610004	486	700
Astro Container	2795 Sharon Road	45241	SIU	7	43602008-43602011	486	700
Avon Products, Inc.	175 Progress Place	45246	SIU	8	39015006-39015005	486	700
Cargo Clean, Inc.	10300 Evendale Dr.	45241	SIU	1218	43501003-43416004	486	700
Celsus Laboratories, Inc.	12150 Best Place	45241	SIU	1279	43815004-43815001	486	700
Cincinnati Drum Service, Inc	400 Cavett Ave.	45215	SIU	20	39805002-39805001	486	700
DiverseyLever, Inc.	3630 East Kemper Rd	45241	SIU	38	44212001-44205002	486	700
Ethicon Endo-Surgery, Inc.	4545 Creek Road	45242	SIU	692	48505003-48505002	486	700
Floturn, Inc.	120 Progress Place	45246	SIU	332	39103001-39014001	486	700
Ford Motor Company	3000 Sharon Road	45241	SIU	44	43615019-43610013	486	700
Formica Corporation	10155 Reading Road	45241	SIU	46	43315006-43315004	486	700
GE Engine Services, Inc.	199 Container Pl.	45246	SIU	239	39101001-39101002	486	700
General Mills Operations, Inc.	11301 Mosteller Roa	45241	SIU	101	43702006-43615023	486	700
Gold Medal Products, Inc	10700 Medallion Dr.	45241	SIU	1302	43514001-43511001	486	700
Green Bay Dressed Beef, Inc.	3480 E. Kemper Road	45241	SIU	1479	44211010-44206001	486	700
John Morrell & Co.	801 East Kemper Roa	45246	SIU	30	39409006-39409007	486	700
Keco Industries, Inc.	11060 Kenwood Road	45242	SIU	289	49315004-49315003	486	700
Kroger Co.	11801 Chesterdale R	45246	SIU	69	39306005-39306004	486	700
Lehr Precision, Inc.	11230 Deerfield Roa	45242	SIU	1	53701007-53701003	486	700
Lehr Precision, Inc.	11495 Deerfield Rd.	45242	SIU	143	53709010-53709007	486	700
METLWEB Ltd.	3330 E. Kemper Road	45241	SIU	1464	44211004-44211003	486	700
Michelman, Inc.	3023 East Kemper Ro	45241	SIU	1500	44201007-44201005	486	700
Morton International, Inc.	2000 West Street	45215	SIU	84	39804011-39804010	486	700
National Starch and Chemical Compan	2960 Exon Ave	45241	SIU	85	43504003-43503010	486	700
Procter & Gamble Co	11510 Reed Hartman	45241	SIU	189	49215007-49210010	486	700

MSD Industrial User (IU) Facilities tributary to SSO (includes Significant Industrial User (SIU) Facilities)

Company Name	Premise Address	ZIP	Permit Type	IUN	Discharges to Sewer Segment	Contributes to CSO	Contributes to SSO
Sealtron, Inc.	9705 Reading Road	45215	SIU	109	43310012-43307021	486	700
Trans-Acc, Inc.	11167 Deerfield Rd.	45242	SIU	124	53616004-53701001	486	700
United Waste Water Services, Inc	11807 Reading Road	45241	SIU	413	44214002-44214001	486	700
Wornick Company	10825 Kenwood Road	45242	SIU	317	49307002-49307003	486	700
Amko Plastics, Inc.	12025 Tricon Rd.	45246	nonSIU	242	39103003-39103002	486	700
Ashland Chemical Company	2788 Glendale-Milfo	45241	nonSIU	356	43503011-43506005	486	700
Feintool Cincinnati Inc.	11280 Cornell Park	45242	nonSIU	252	49210006-49211001	486	700
International Paper Company	100 Progress Place	45246	nonSIU	171	39014002-39014003	486	700
Ralph J. Stolle Co.	6954 Cornell Road	45242	nonSIU	172	53701008-53701007	486	700
Riverwood International Corp.	10600 Evendale Dr	45241	nonSIU	102	43508002-43508001	486	700
Trinity Industries, Inc.	11861 Mosteller Rd	45241	nonSIU	190	43802011-43802007	486	700
Xtek, Inc.	11451 Reading Road	45241	nonSIU	271	44202006-44202005	486	700
Sunoco, Inc.	6745 Cornell Rd.	45242	LTD	415	53701001-49204011	486	700
Hater Industries, Inc.	240 Stille Drive	45233	SIU	54	19708011-19708010	654	701
Lindsey Motor Express, Inc.	3500 Southside Avenue	45204	SIU	75	24708005-24708004	416	701

SSO 572



Regulated Industry
SSO
MSD Sewers
Rivers & Streams
Primary Roads

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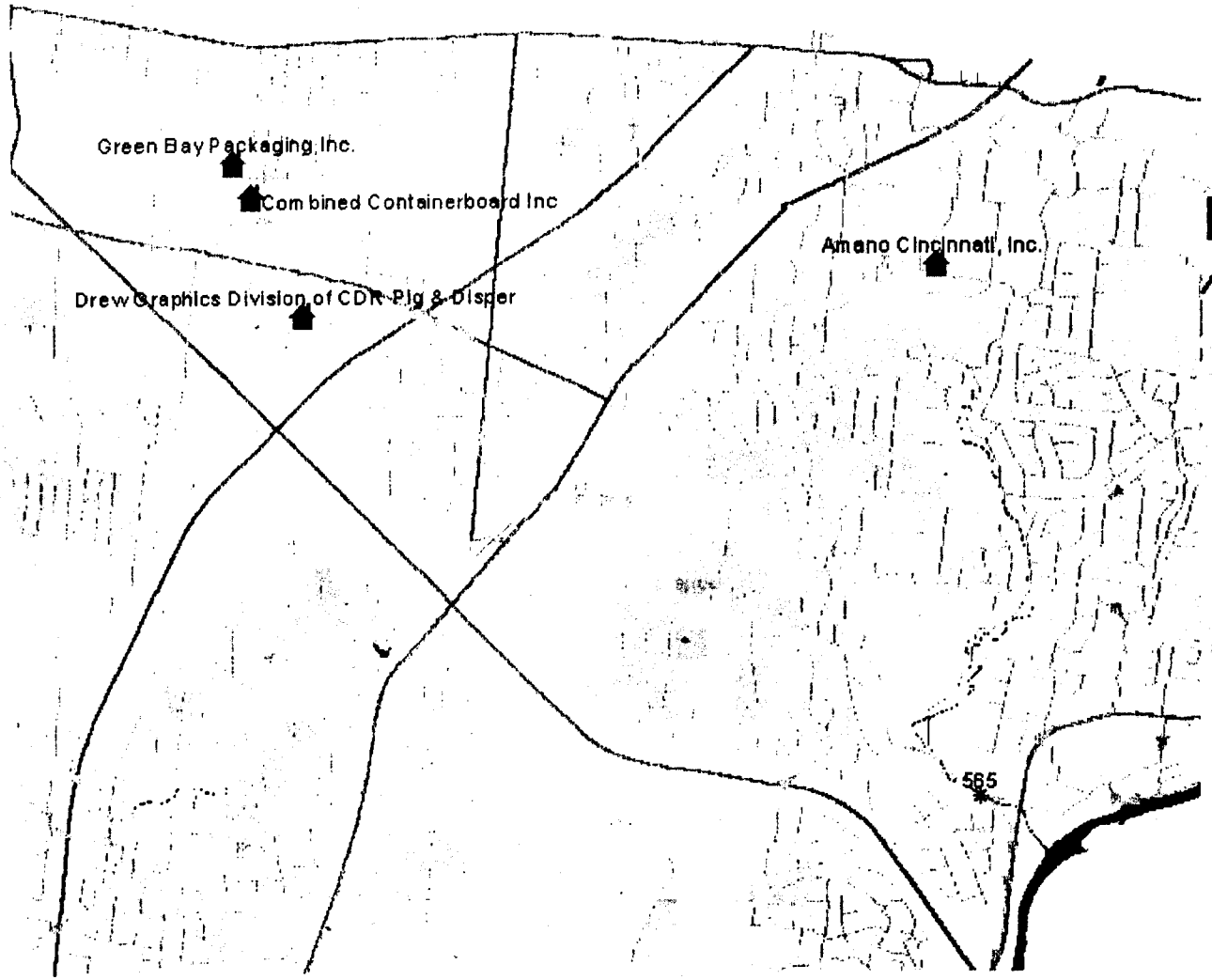
using data from
CAGIS

SSO 565



Regulated Industry
SSO
MSD Sewers
Rivers & Streams
Primary Roads

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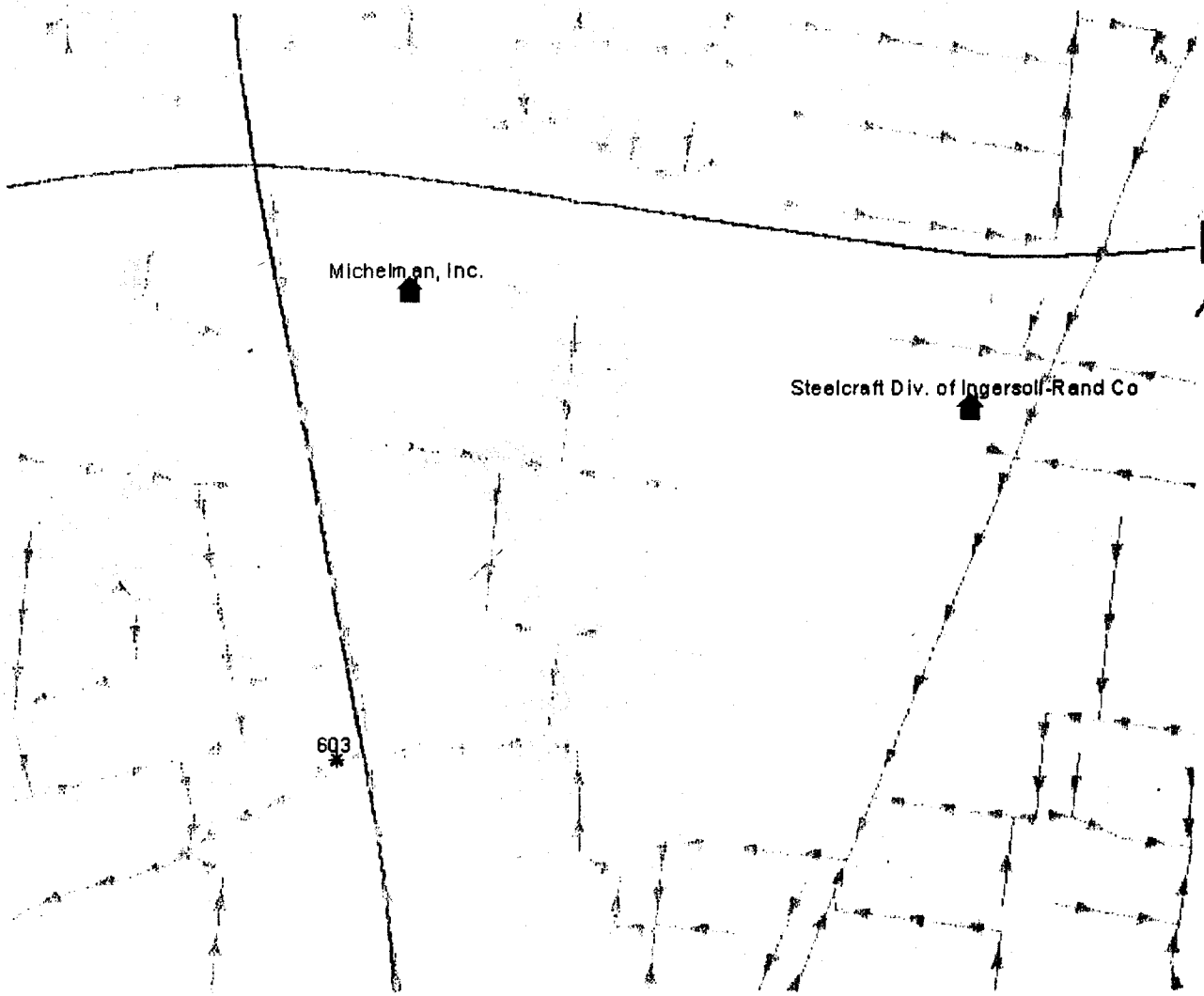
SSO 603



Regulated Industry
SSO
MSD Sewers
Rivers & Streams
Primary Roads

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SSO 690

Regulated Industry
SSO
MSD Sewers
Rivers & Streams
Primary Roads

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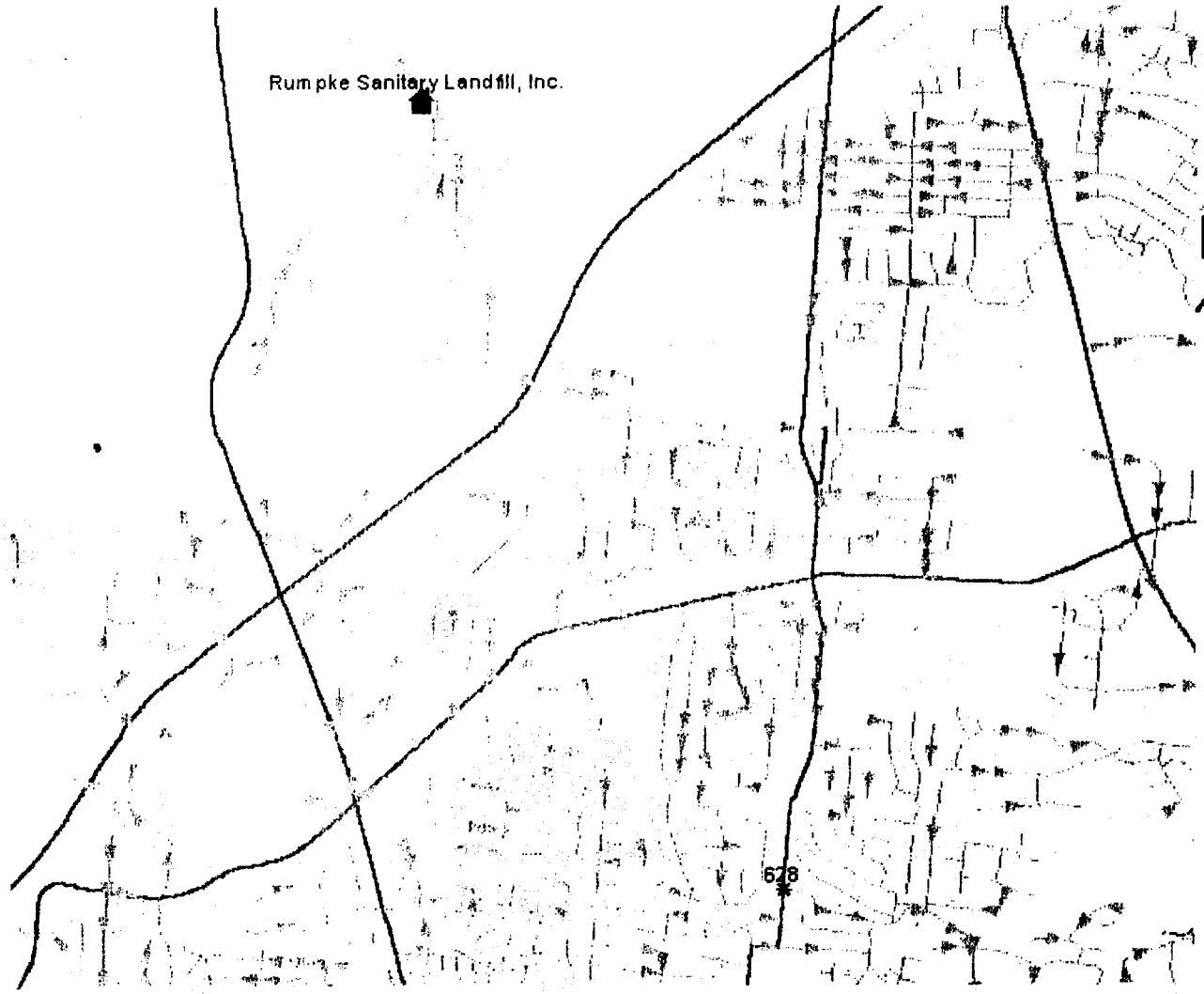
using data from
CAGIS

SSO 628



Regulated Industry
SSO
MSD Sewers
Rivers & Streams
Primary Roads

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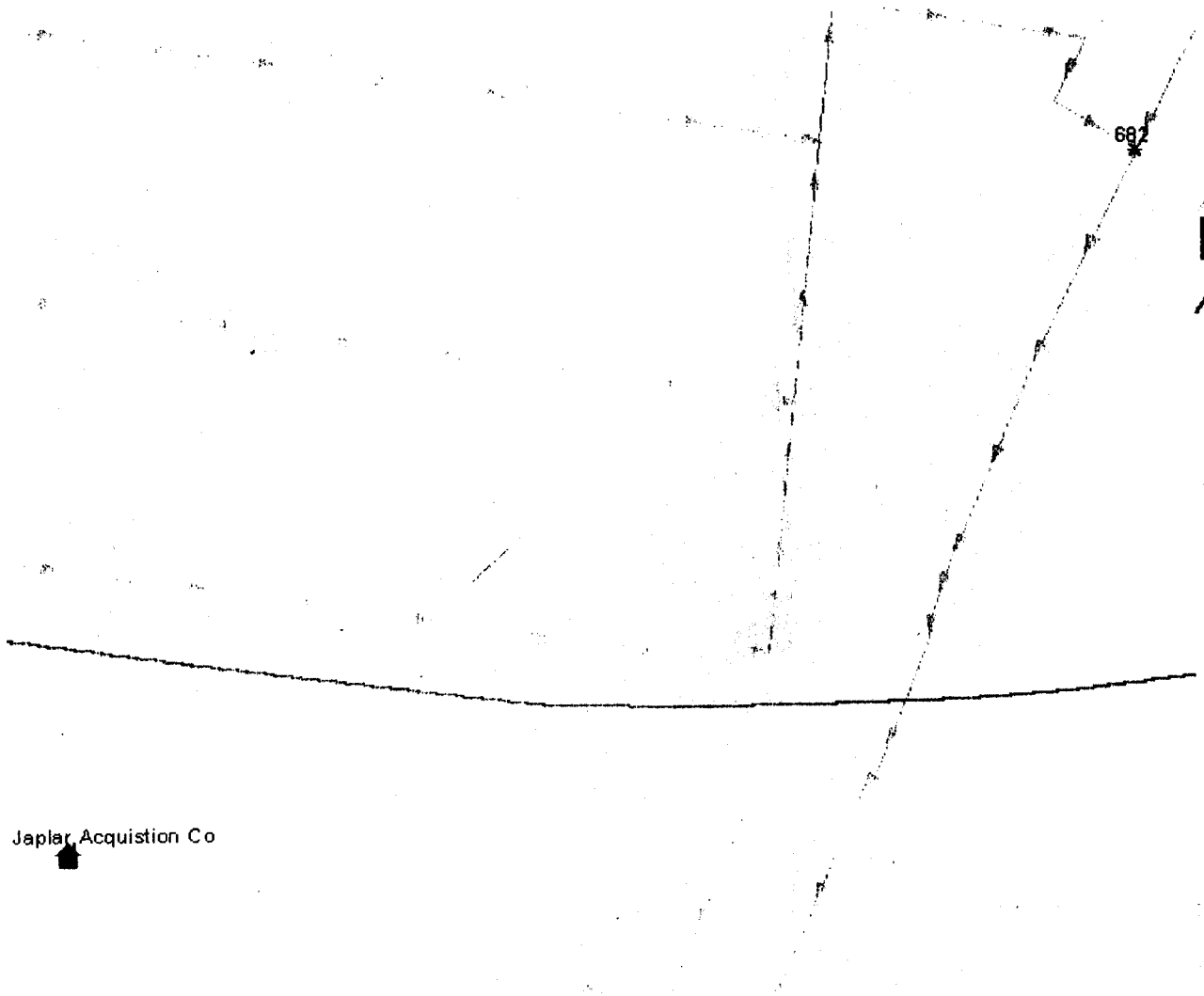
(MSD-IT)
using data from
CAGIS

SSO 682



Regulated Industry
SSO
MSD Sewers
Rivers & Streams
Primary Roads

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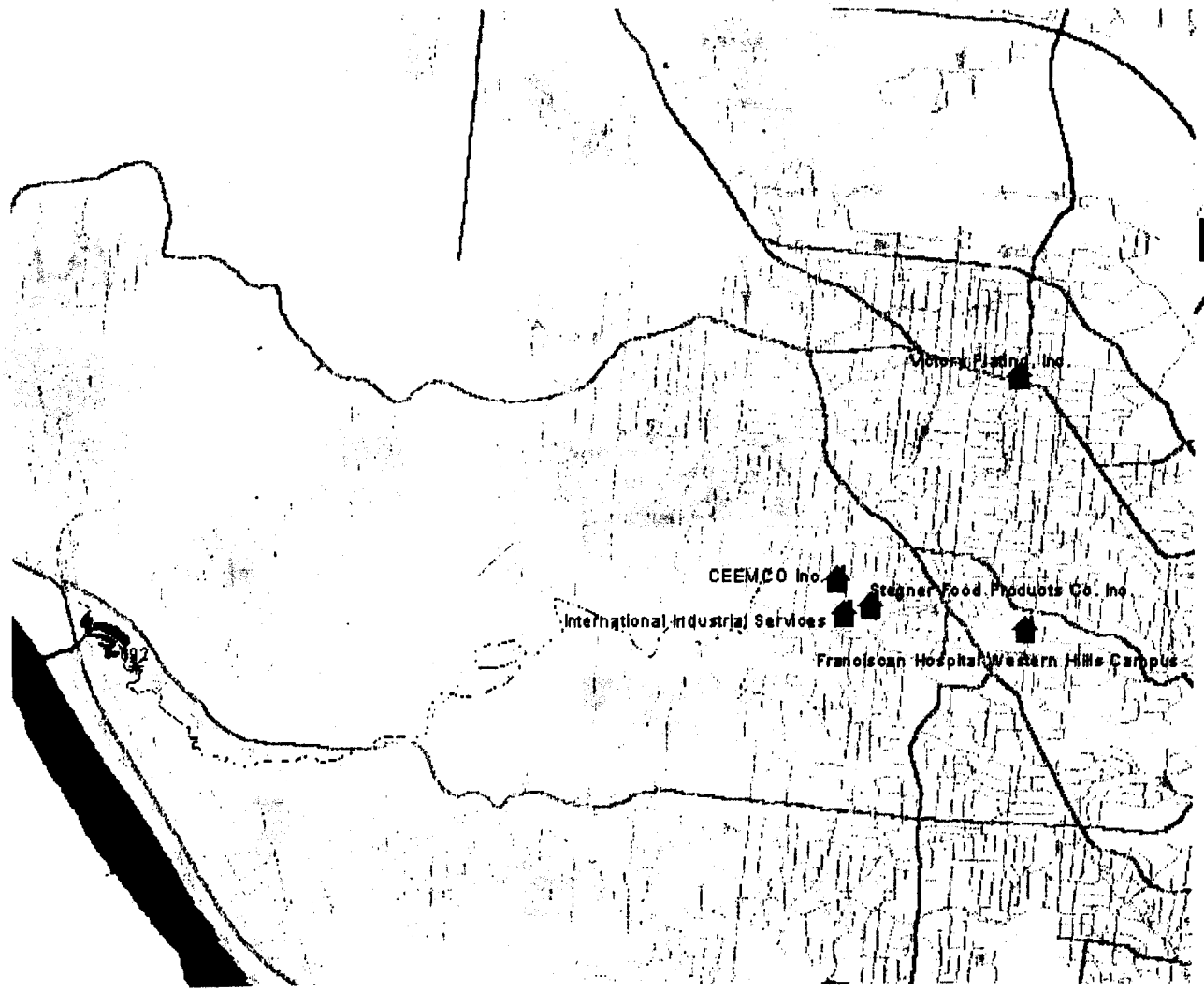
CAGIS

SSO 692



- Regulated Industry
- SSO
- MSD Sewers
- Rivers & Streams
- Primary Roads

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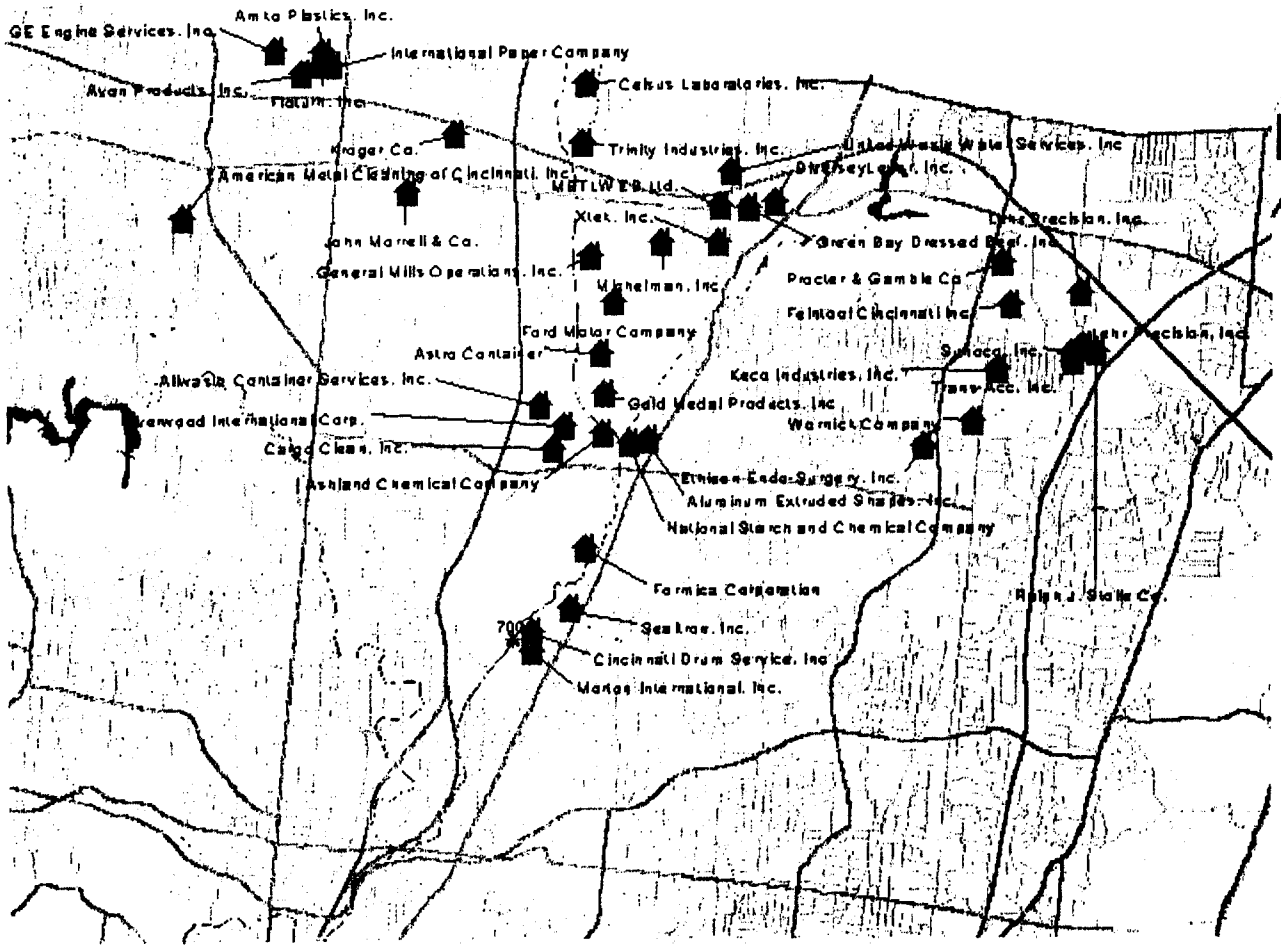
SSO 700



Regulated Industry

SSO

MSD Sewers

Rivers & Streams

Primary Roads

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(MSD-IT)
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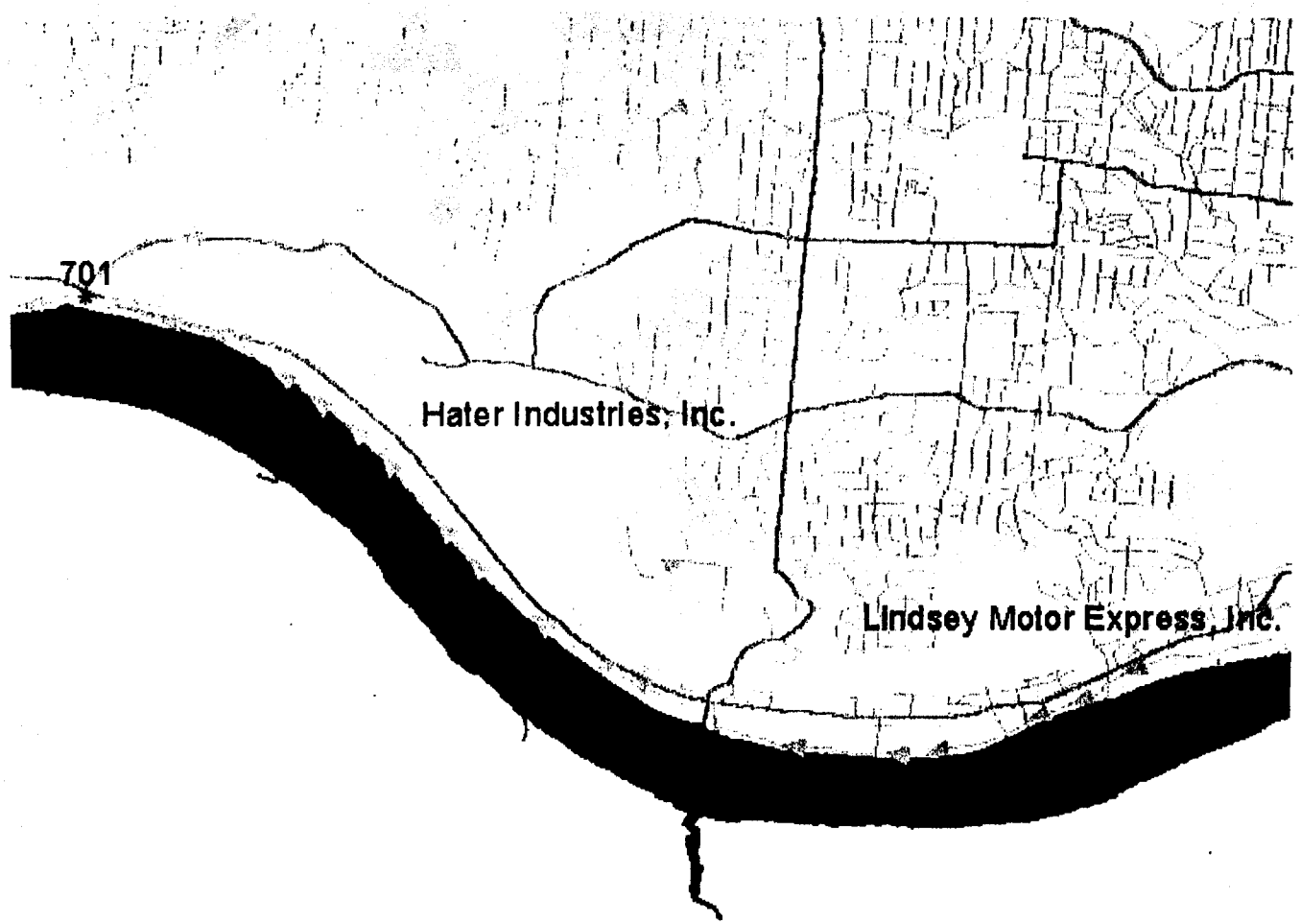
SSO 701



Regulated Industry
SSO
MSD Sewers
Rivers & Streams
Primary Roads

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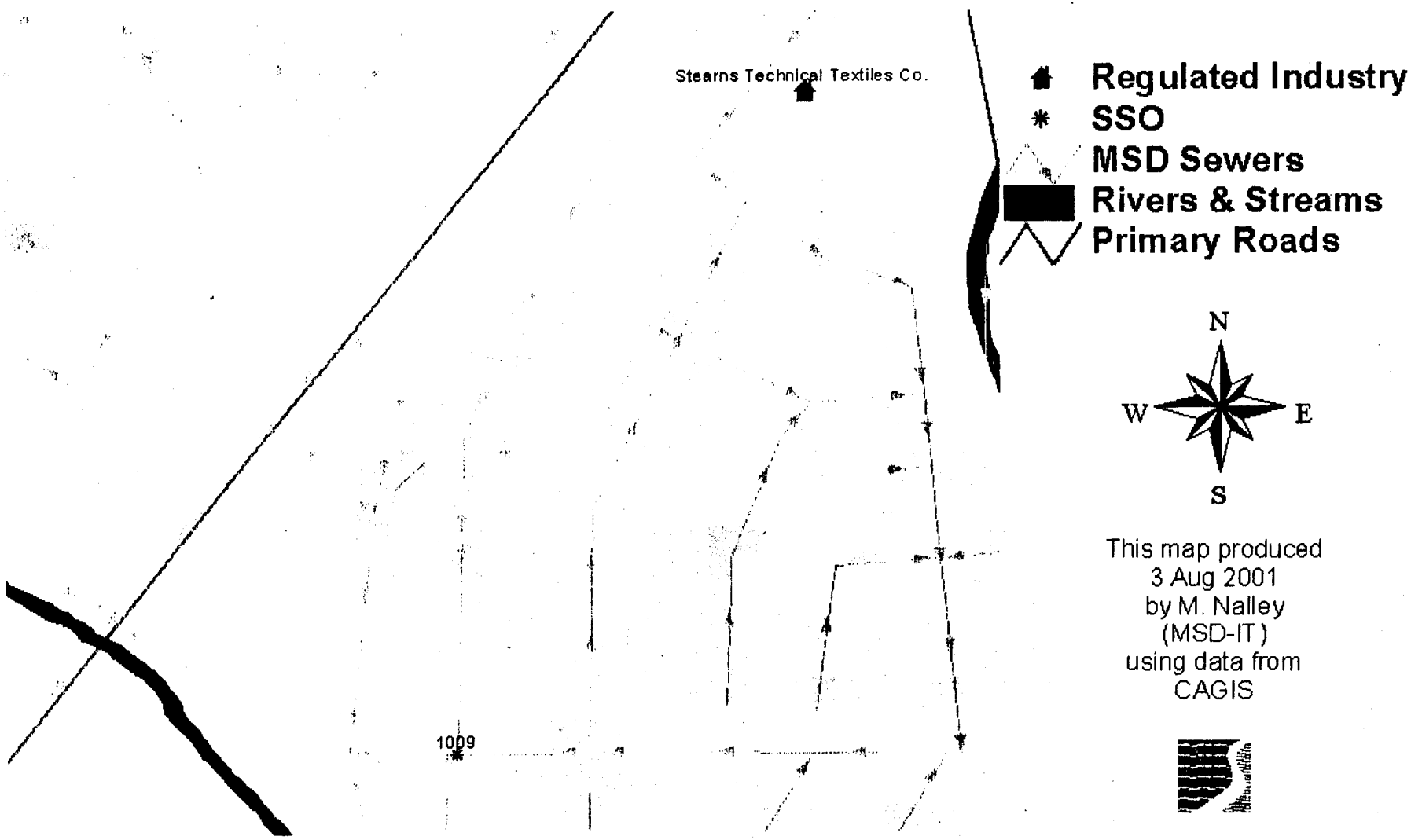
M S D

SSO 1009


Stearns Technical Textiles Co.
1009
Regulated Industry
SSO
MSD Sewers
Rivers & Streams
Primary Roads
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3 Aug 2001
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(MSD-IT)
using data from
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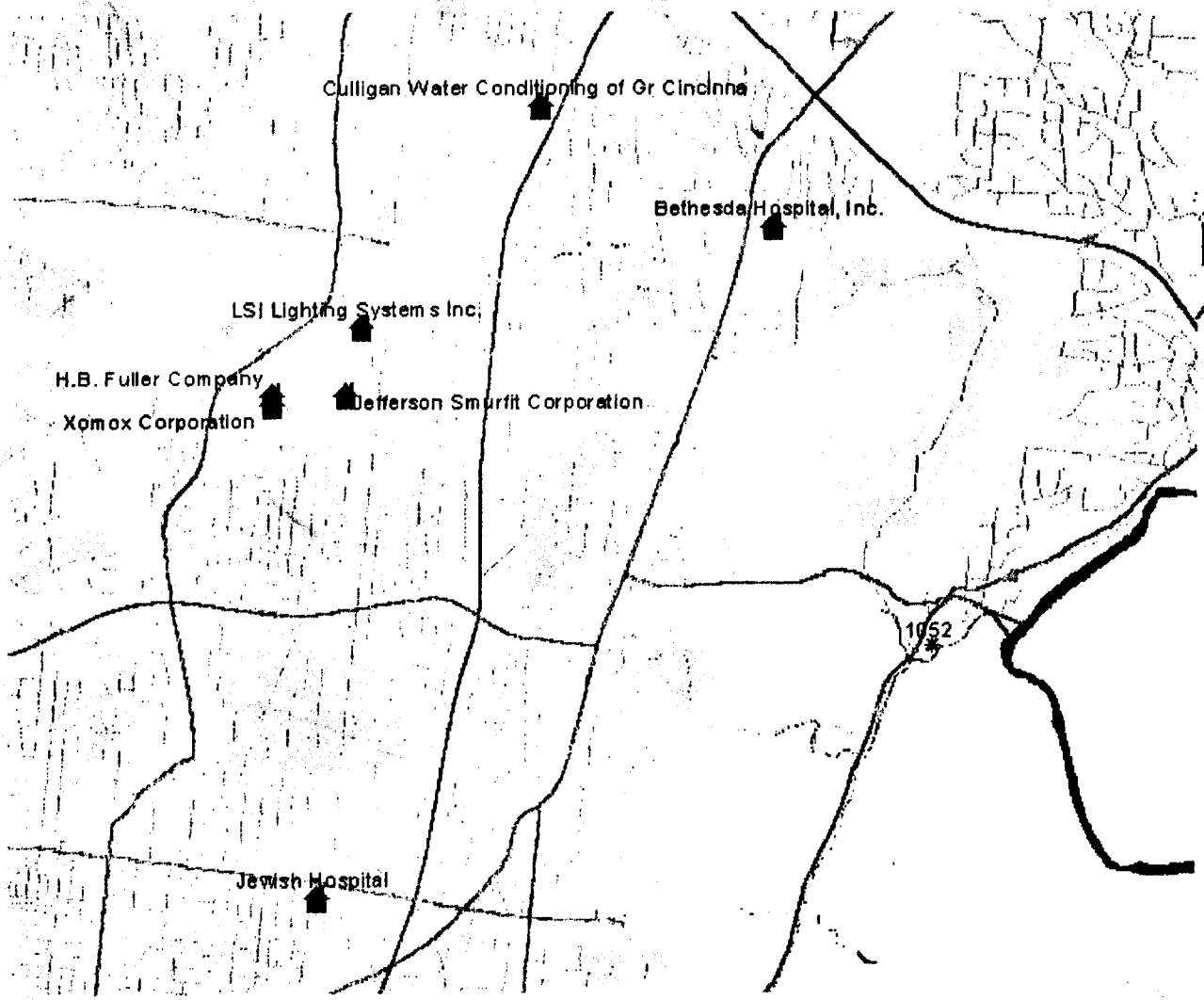
SSO 1052



Regulated Industry
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MSD Sewers
Rivers & Streams
Primary Roads

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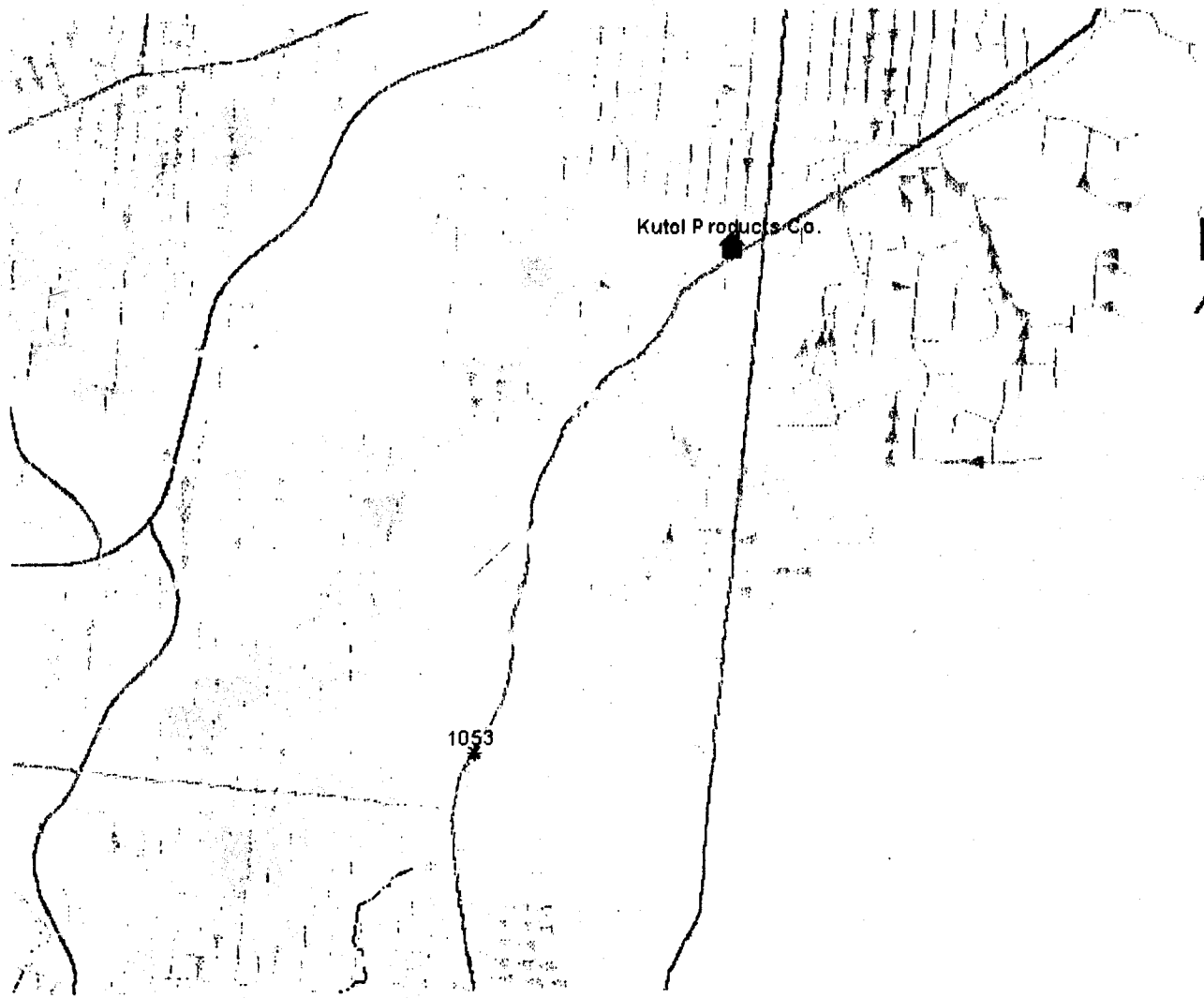
SSO 1053



Regulated Industry
SSO
MSD Sewers
Rivers & Streams
Primary Roads

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APPENDIX G

Surface Water Monitoring Sampling Locations

STREAM MONITORING PROGRAM
SUMMARY SHEET

Program Name:	SURFACE WATER MONITORING
Responsibility:	DIVISION OF INDUSTRIAL WASTE
Objective(s):	
To provide a baseline for assessing stream water quality during dry and wet weather conditions; To establish a database of historical data to be used as supporting information when evaluating limits established in mandated programs (NPDES discharge limits, TMDLs, water quality standards, Local Limits, etc.); To provide supporting documentation of the actual effectiveness/impact of the District's activities and programs on the environment; Provide information for responding to and resolving citizen's complaints; Identification of point and non-point sources that affect or have the potential to affect the water quality of the surface waters of Hamilton County to assist in special/investigative responses; Identification of illegal discharges to surface waters; Provide a baseline of data prior to extending sewer service to areas of Hamilton County;	
How long has this program been active?	Initiated in 1995
Program Activities:	• General description of activities • Where, how many sites? • Frequency of sampling? • Type of sampling (grab, composite, descrete)
The Division of Industrial Waste implemented a stream-monitoring program in late 1994. Full implementation was established in 1995. Sample locations on the major surface water sites in Hamilton County have been identified. The sample locations bracket known CSOs and SSOs in sewered areas; are located at the points where all water bodies enter and exit Hamilton County; may be located in areas identified as problems by the Division or other agencies; and upstream and downstream of the discharges of WWTP. At present, grab samples are taken in midstream at forty-six locations every three to four weeks. In 2001, sampling will be conducted monthly. Map of Sampling Locations attached.	
Analysis:	• Parameters • QA/QC Procedures (field, lab, assessment)
Samples are analyzed for metals, volatile and semi-volatile organics, phenols, oil and grease, and fecal coliform. Samples are included in the Division's established field and laboratory QA/QC program, which include field, trip, and sample blanks; precision and accuracy determination of at least 10% of all samples analyzed, etc.	
Data Management:	• Format (paper, electronic) • Is there historical data? • Where does the data resided? • Who has access?
At present data is maintained in both electronic and paper format in the Division of Industrial Waste's files and databases. Historical data dates back to 1995. Members of the Division's staff can access the data.	
Reporting:	• Who are you reporting too? Internal/External • Format • Frequency
Data is reported to the Superintendent of the Division of Industrial Waste if review reveals problems or distinct deviations from previous data. Investigations into causes generate follow-up activities that may include other divisions, local or state agencies. When data is required for follow-up of investigations involving other agencies, data is also reported to that agency, i.e. OEPA, in the format requested. Data has been published in the Department's Water Quality Report in 1998. Data has also been requested by a variety of groups, such as USGS, Green Acres Foundation, school programs, and several environmental organizations.	
Future Needs:	• Where is the program going? • Is there a need to expand/enhance? • When are these changes required • Are there regulatory needs coming?
The program is being expanded in 2001 to include the collection of physical and field data such as temperature, dissolved oxygen, conductivity, pH, and weather conditions. Also, due to previous staffing conditions, there is a preponderance of dry weather data. With the filling of a previously vacant position,	

plans are to increase the sampling frequency to include more wet weather sampling. Additional goals include the correlation of rainfall data with the sampling events; development of a model for tracing slug loadings in local surface waters; customization of the GIS to include improved functionality for accessing data on the sample locations; and more consistent review of the data to evaluate changes or additions to existing divisional programs and activities. Continuation of this program provides additional support for the proposed SSO rule, which includes an ambient water quality monitoring program in the CMOM requirements.

Comments: Map of Sampling Locations

1.1 Map of Sampling Locations

MSD/DIW SURFACE WATER SAMPLING LOCATIONS

MSD/DIW OF GREATER CINCINNATI OHIO
SURFACE WATER SAMPLING LOCATIONS

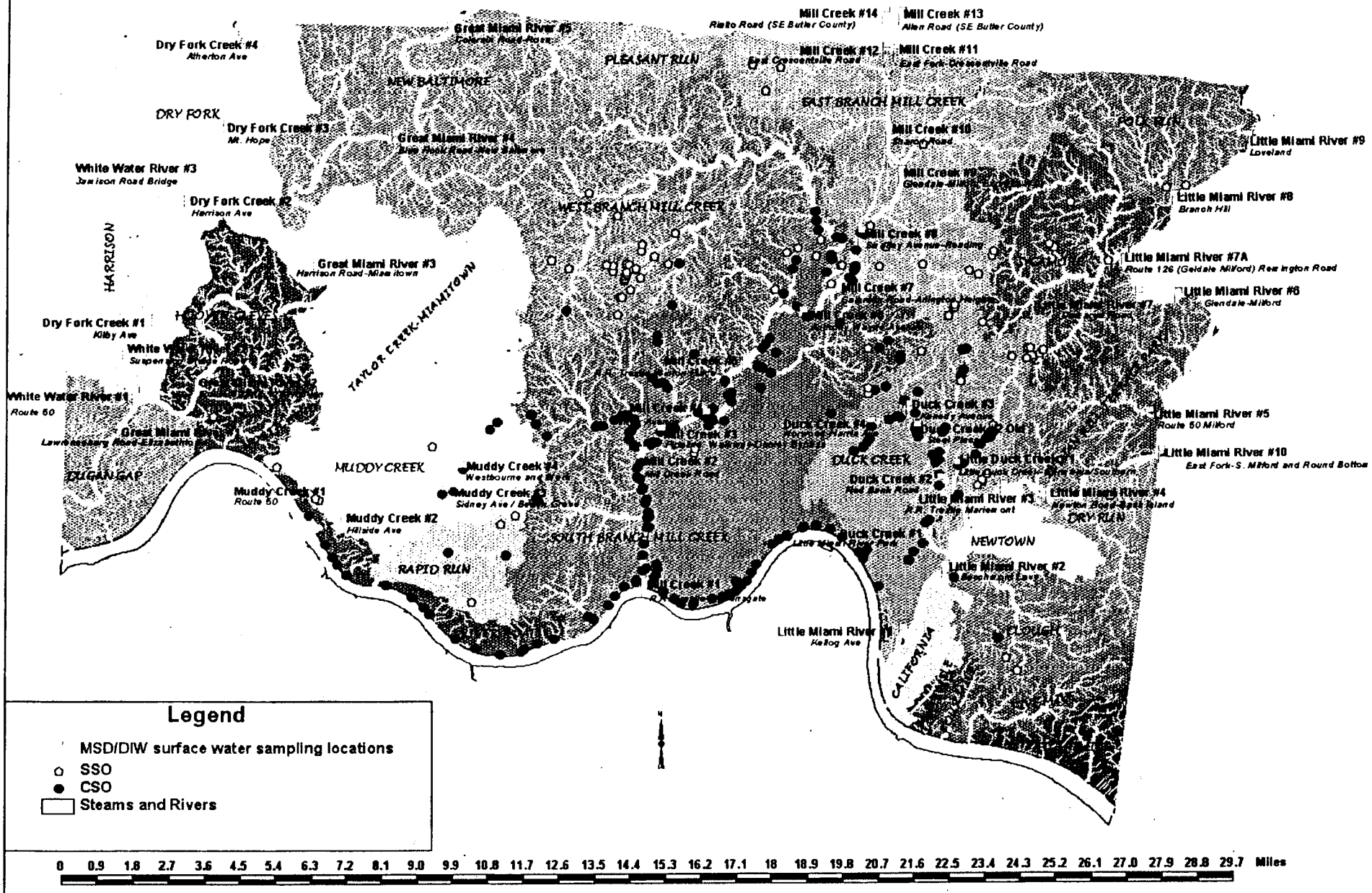
RIVER MILE	LOCATION CODE	SURFACE WATER LOCATION NAME	ADDRESS
0.52	DRY-CR	Dry Fork Creek #1	Kilby Ave
4.32	DRY-CR	Dry Fork Creek #2	Harrison Ave
6.95	DRY-CR	Dry Fork Creek #3	Mt. Hope
9.98	DRY-CR	Dry Fork Creek #4	Atherton Ave
5.45	GM-RV	Great Miami River #1	Lawrenceburg Road/Elizabethtown
8.40	GM-RV	Great Miami River #2	Route 50 and 128/Hooven
15.34	GM-RV	Great Miami River #3	Harrison Road/Miamitown
21.30	GM-RV	Great Miami River #4	Blue Rock Road/New Baltimore
26.14	GM-RV	Great Miami River #5	Colerain Road/Ross
1.07	LD_CR	Little Duck Creek #1	Little Duck Creek-Germania/Southern
1.10	LIT-RV	Little Miami River #1	Kellog Ave
3.32	LIT-RV	Little Miami River #2	Beechmont Levy
6.83	LIT-RV	Little Miami River #3	R.R. Trestle/Mariemont
8.15	LIT-RV	Little Miami River #4	Newton Road/Bass Island
12.98	LIT-RV	Little Miami River #5	Route 50 Milford/Water Street
17.41	LIT-RV	Little Miami River #6	Glendale-Milford
18.40	LIT-RV	Little Miami River #7	Camargo Road
19.40	LIT-RV	Little Miami River #7A	Route 126 (Glendale Milford) Remington Road
21.62	LIT-RV	Little Miami River #8	Branch Hill
24.18	LIT-RV	Little Miami River #9	Loveland
11.60	LIT-RV	Little Miami River #10	East Fork-S. Milford and Round Bottom
0.05	MIL-CR	Mill Creek #1	R.R. Trestle-Queensgate
3.50	MIL-CR	Mill Creek #2	Mill Creek Road
4.25	MIL-CR	Mill Creek #3	Pipeline Walkway/Dooley Bypass
5.52	MIL-CR	Mill Creek #4	Clifton Avenue
7.45	MIL-CR	Mill Creek #5	R.R. Trestle Winton Place
10.00	MIL-CR	Mill Creek #6	Anthony Wayne Avenue
11.30	MIL-CR	Mill Creek #7	Galbraith Road/Arlington Heights
12.88	MIL-CR	Mill Creek #8	Smalley Avenue/Reading
14.80	MIL-CR	Mill Creek #9	Glendale-Milford Express Way
16.00	MIL-CR	Mill Creek #10	Sharon Road
18.20	MIL-CR	Mill Creek #11	East Fork-Crescentville Road
18.20	MIL-CR	Mill Creek #12	East Crescentville Road
19.10	MIL-CR	Mill Creek #13	Allen Road (SE Butler County)
19.10	MIL-CR	Mill Creek #14	Rialto Road (SE Butler County)
0.16	MUD-CR	Muddy Creek #1	Route 50
1.95	MUD-CR	Muddy Creek #2	Hillside Ave
6.10	MUD-CR	Muddy Creek #3	Sidney Ave/Beech Grove
6.95	MUD-CR	Muddy Creek #4	Westbourne and Werk
0.17	WW-RV	White Water River #1	Route 50
1.52	WW-RV	White Water River #2	Suspension Bridge Road
8.30	WW-RV	White Water River #3	Jamison Road Bridge
0.80	DU_CR	Duck Creek #1	Little Miami River Park
2.45	DU_CR	Duck Creek #2	Red Bank Road
4.58	DU_CR	Duck Creek #2 Old	Steel Place
5.00	DU_CR	Duck Creek #3	Kennedy Avenue
6.10	DU_CR	Duck Creek #4	Norwood/Harris Ave

01/31/2002

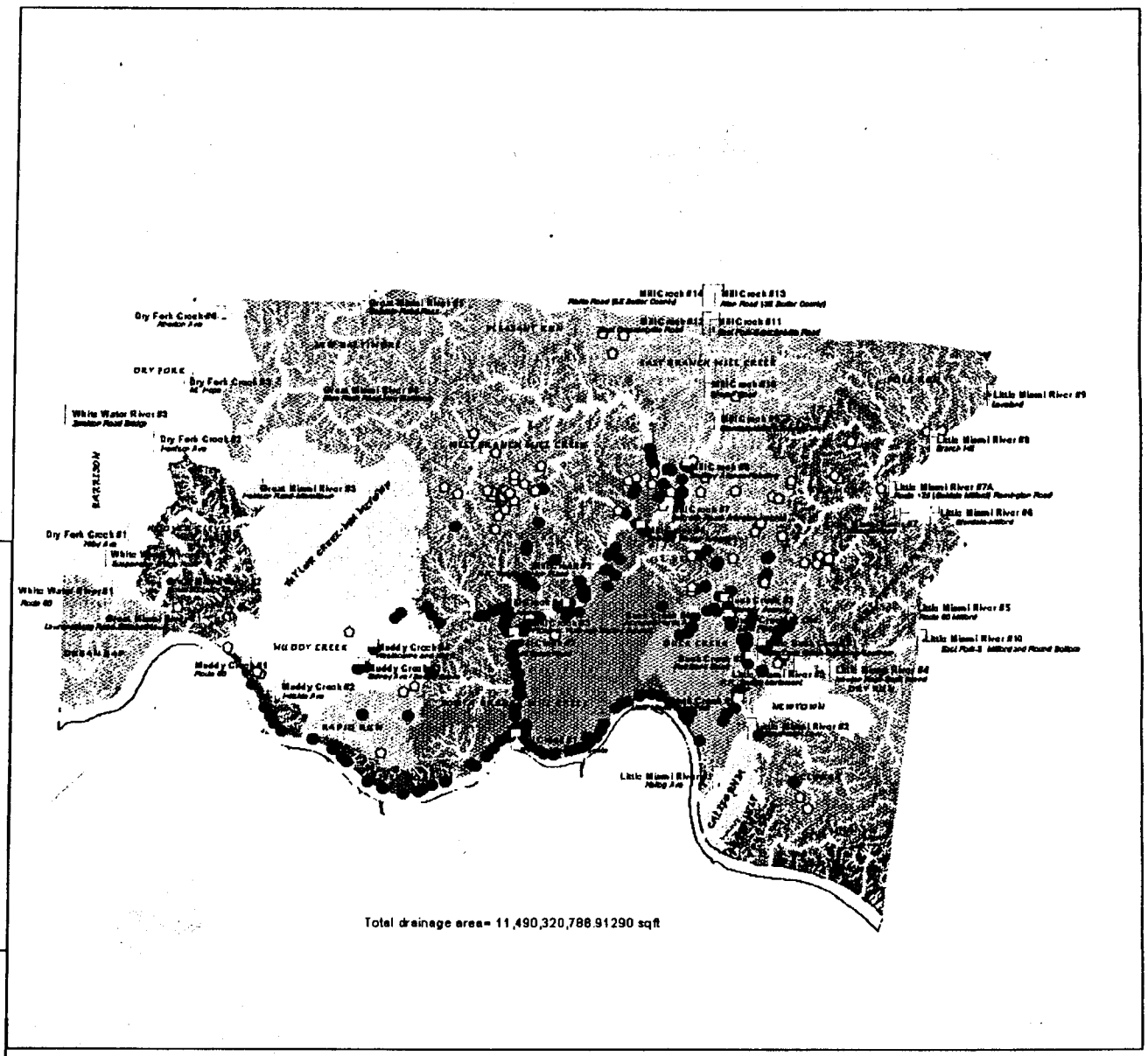
by Evring A. Francis
MSD/DIW/S+S

YEAR 2001

Hamilton County Ohio Drainage Basin and Waterways



Hamilton County drainage basins



Legend

MSD/DIW surface water sampling locations

- SSO
- CSO
- Steams and Rivers

0 1.5 3 4.5 6 7.5 9 10.5 12 13.5 15 16.5 18 19.5 21 22.5 24 25.5 27 28.5 Miles

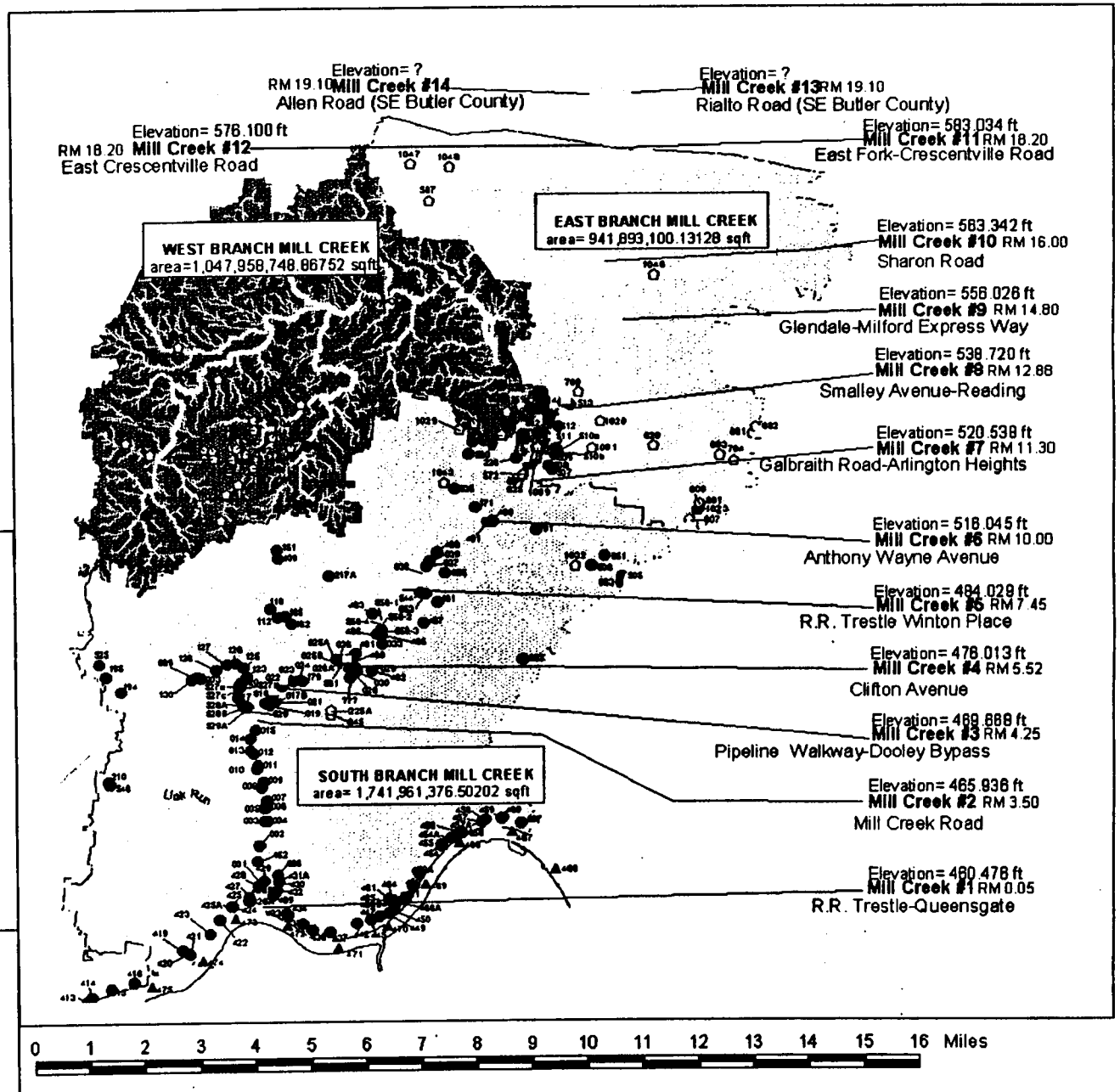
A product of MSD from CAGIS data

M S D
Greater Cincinnati Hamilton County

map by
Craig A. Fausch
MSD/DIW/B&S
September 2004

Mill Creek drainage basin

NOTE: EAST BRANCHMILL CREEK extends futher north into Butler County across the Hamilton County boundary line.
Therefore, drainage area into the Mill Creek from Butler County is not represented on this map.



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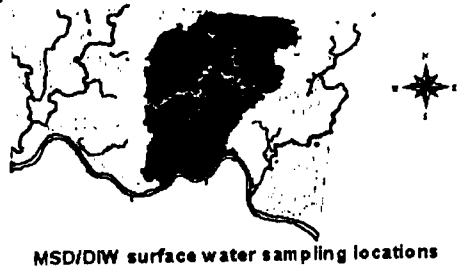


MSD/DIW surface water sampling locations

- SSO
- CSO
- Ohio River mile mark
- Streams and Rivers

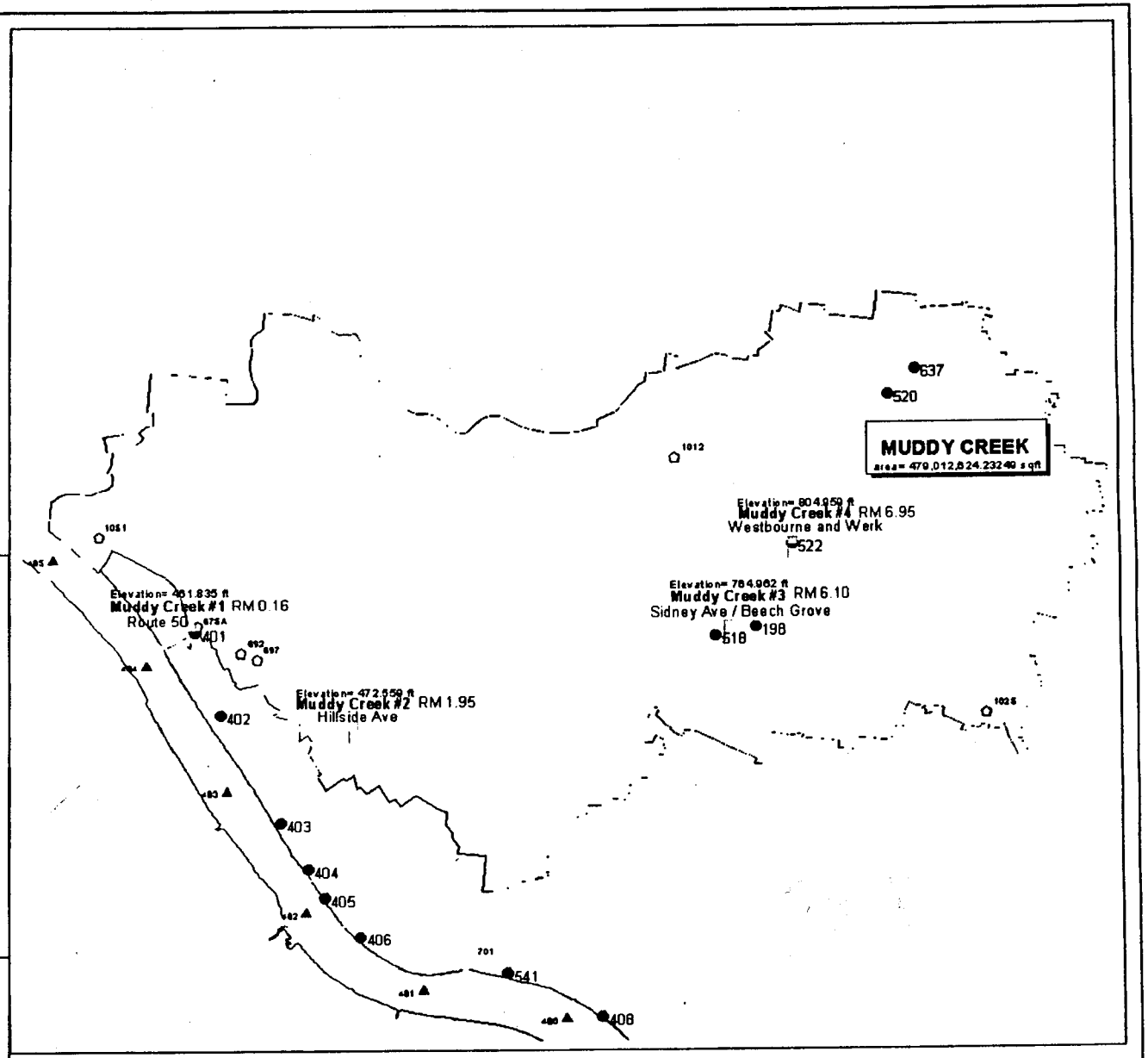
total basin acreage= 85,670.6 acres

M S D
Greater Cincinnati Hamilton County

A product of MSD from CAGIS data

map by Craig A. Fessler MSD/DIW September 2000

Muddy Creek drainage basin



Legend

- MSD/DIW surface water sampling locations
- SSO
- CSO
- Ohio River mile mark
- Streams and Rivers

total basin acreage= 10,996.6 acres

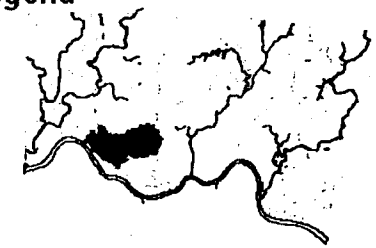
M S D
Greater Cincinnati Hamilton County

A product of MSD from CAGIS data

map by Irving A. Francis MSD/DIW September 2000

Muddy Creek 3D drainage basin

Legend



MSD/DIW surface water sampling locations

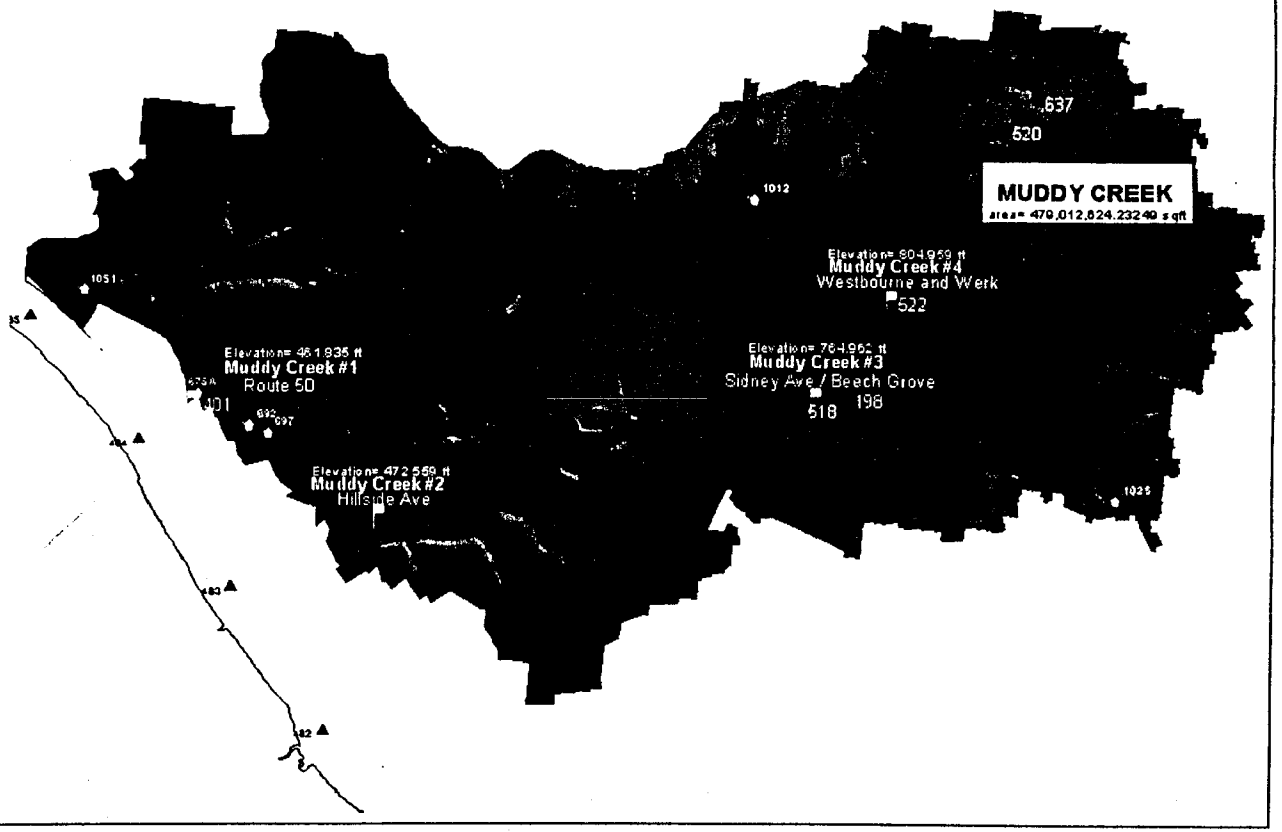
- SSO
- CSO
- Ohio River mile mark

Muddy Creek basin TIN

Elevation Range

- 896.667 - 950
- 843.333 - 896.667
- 790 - 843.333
- 736.667 - 790
- 683.333 - 736.667
- 630 - 683.333
- 576.667 - 630
- 523.333 - 576.667
- 470 - 523.333
- Streams and Rivers

total basin acreage= 10,996.6 acres



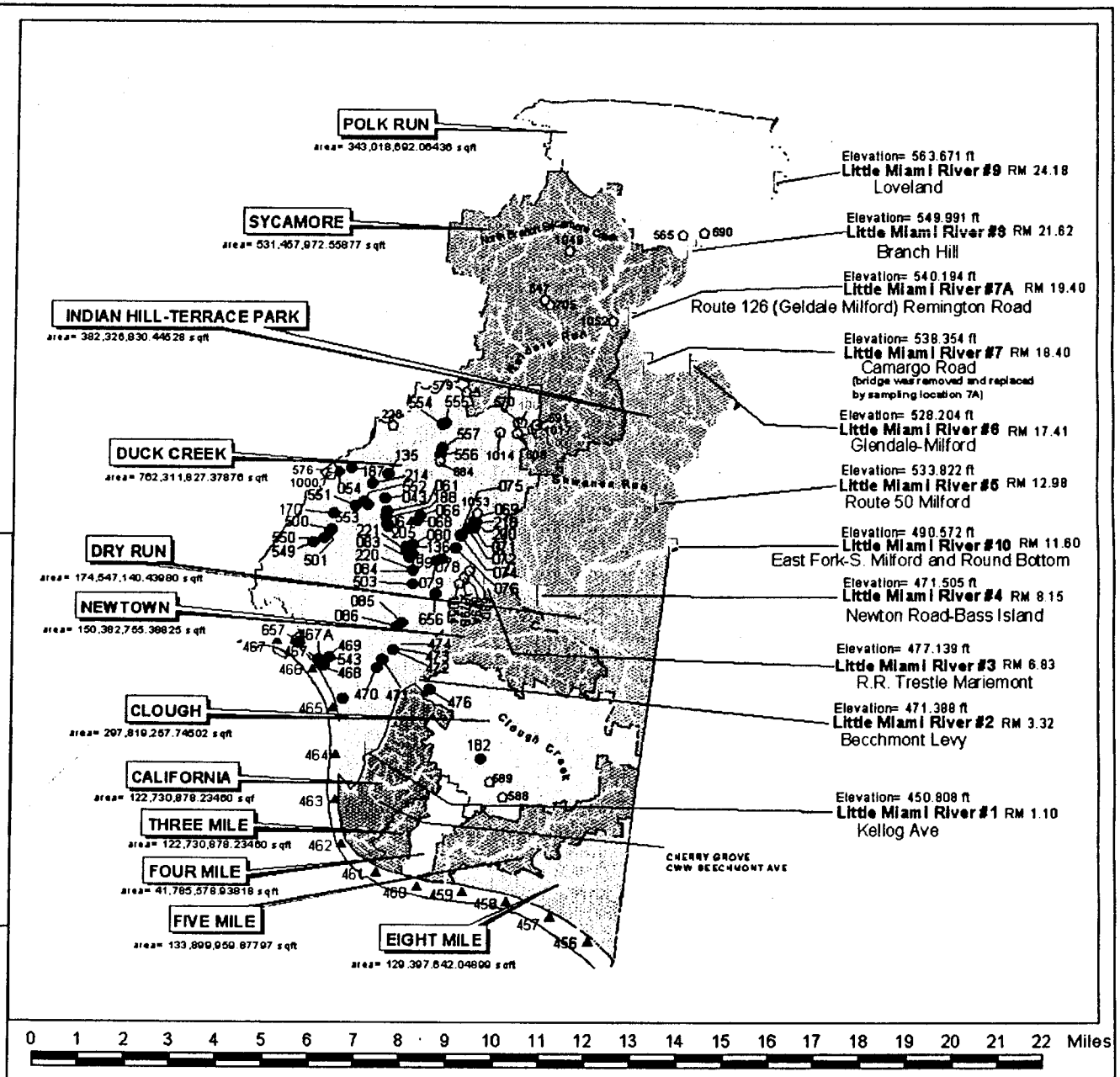
0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5 6 6.5 7 Miles

M S D
Greater Cincinnati Hamilton County

A product of MSD from CAGIS data

Little Miami drainage basins

NOTE: DUCK CREEK drainage basin surface water sampling locations is not included.



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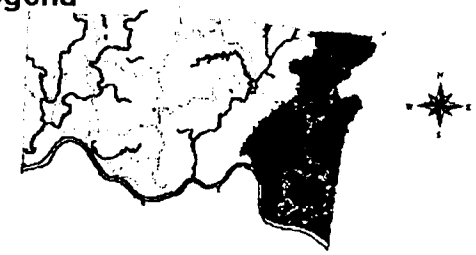


- MSD/DIW surface water sampling locations
- SSO
- CSO
- Ohio River mile mark
- Streams and Rivers

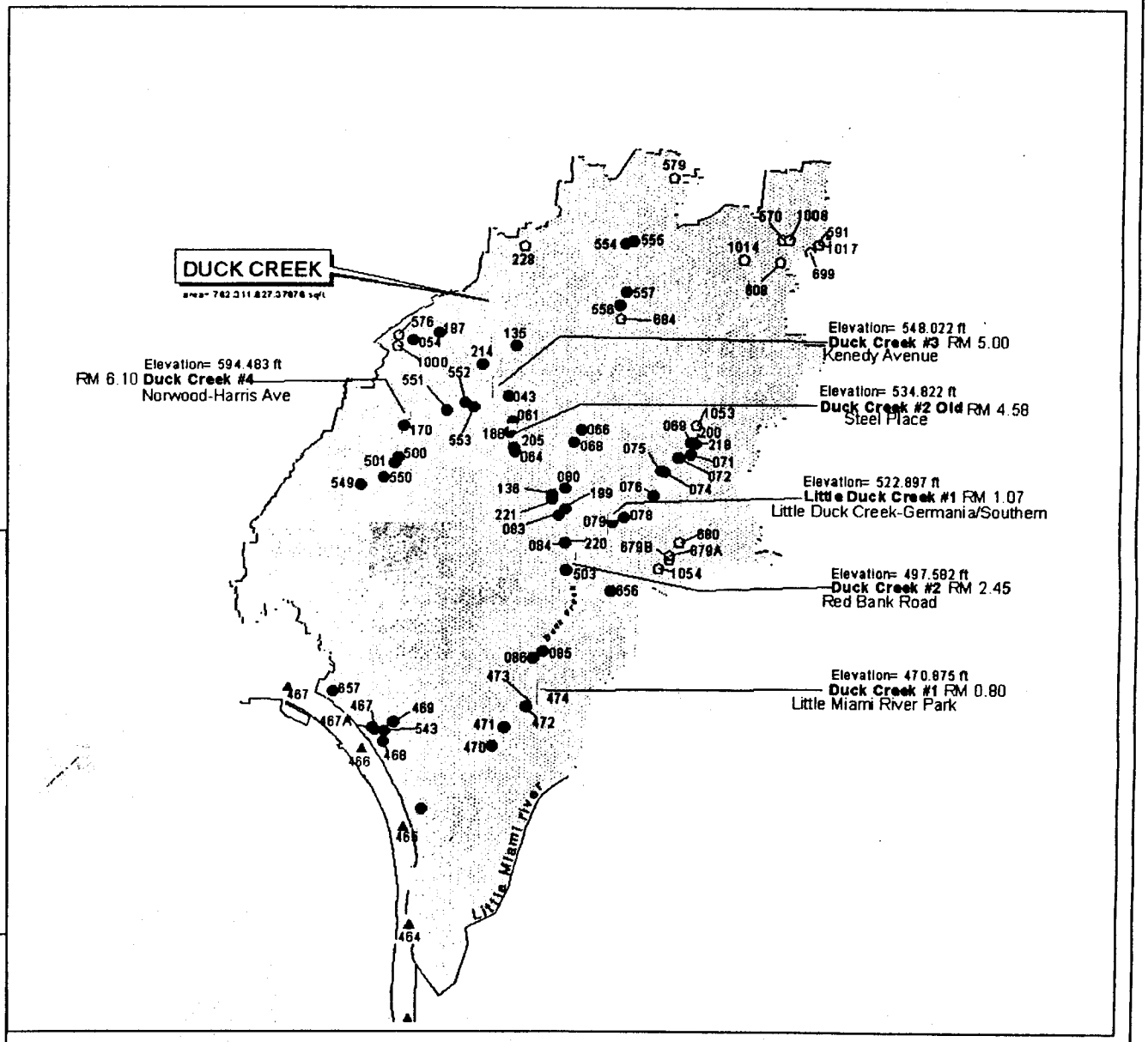
total basin acreage= 68,255 acres

M S D
Greater Cincinnati Hamilton County

A product of MSD from CAGIS data

map by
Irving A. Francis
MSD/DIW
September 2006

Duck Creek drainage basin



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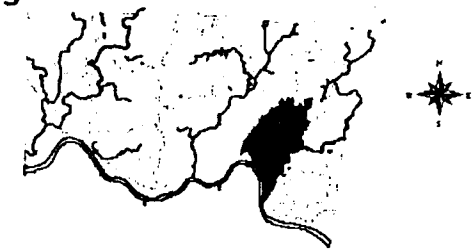


- MSD/DIW surface water sampling locations
- SSO
- CSO
- Ohio River mile mark
- Streams and Rivers

total basin acreage= 17,500.3 acres

M S D
Greater Cincinnati Hamilton County

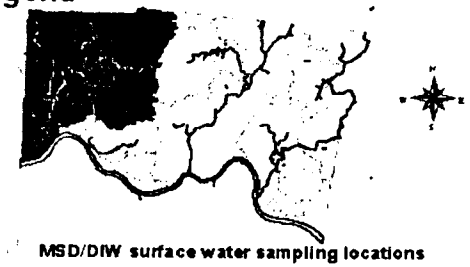
A product of MSD from CAGIS data

map by Irving A. Fassin MSD/DIW/S&S September 2000

Great Miami drainage basin

This basin includes Dry Fork Creek
Which drains into White Water River
Which drains into the Great Miami River
at the DUGAN GAP basin before
entering the Ohio River.
*Great Miami extends further into
adjacent SW Butler and north into
neighboring counties.

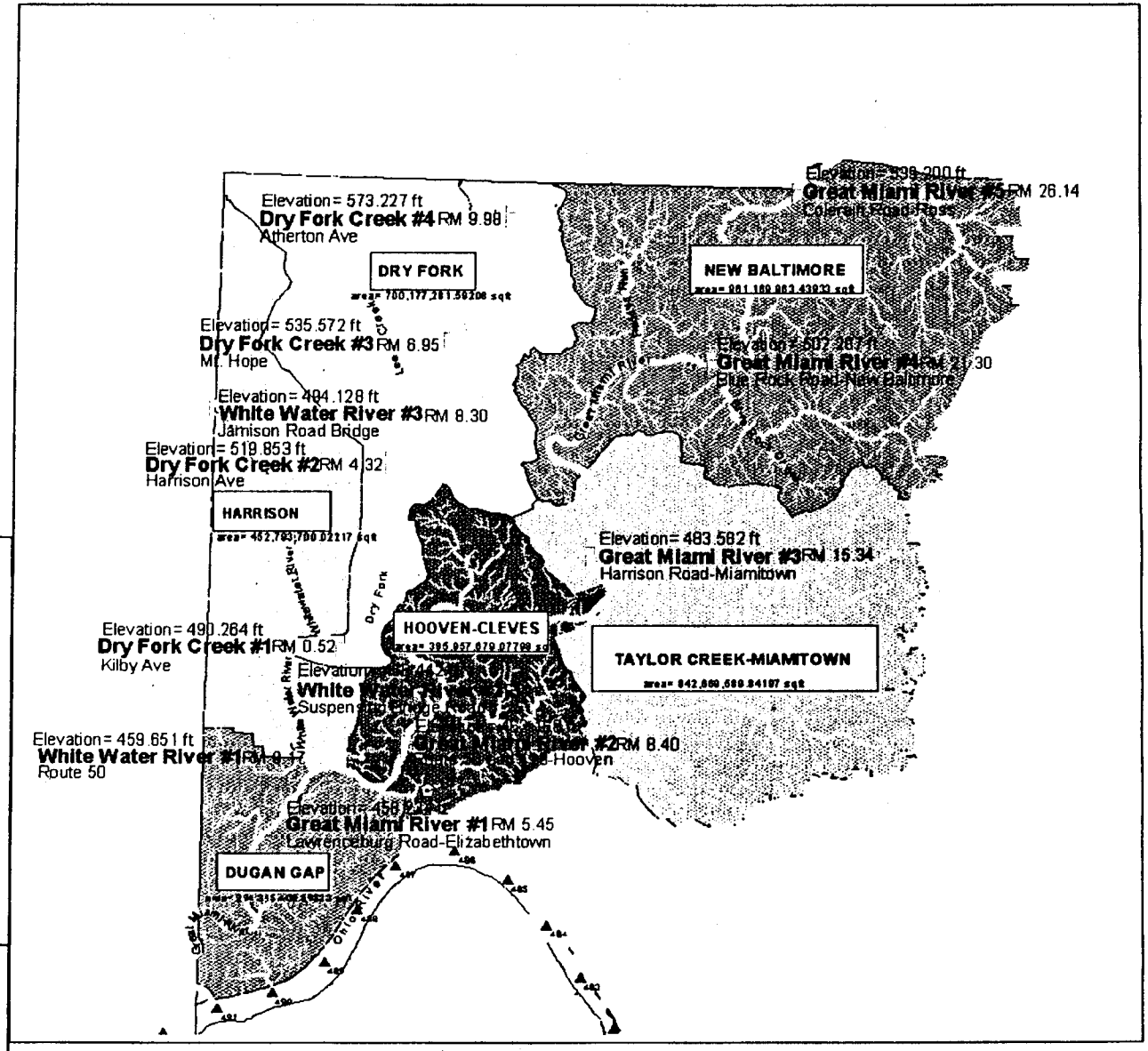
Legend



MSD/DIW surface water sampling locations

- SSO
- CSO
- Ohio River mile mark
- Streams and Rivers

***total basin acreage= 83,496 acres**



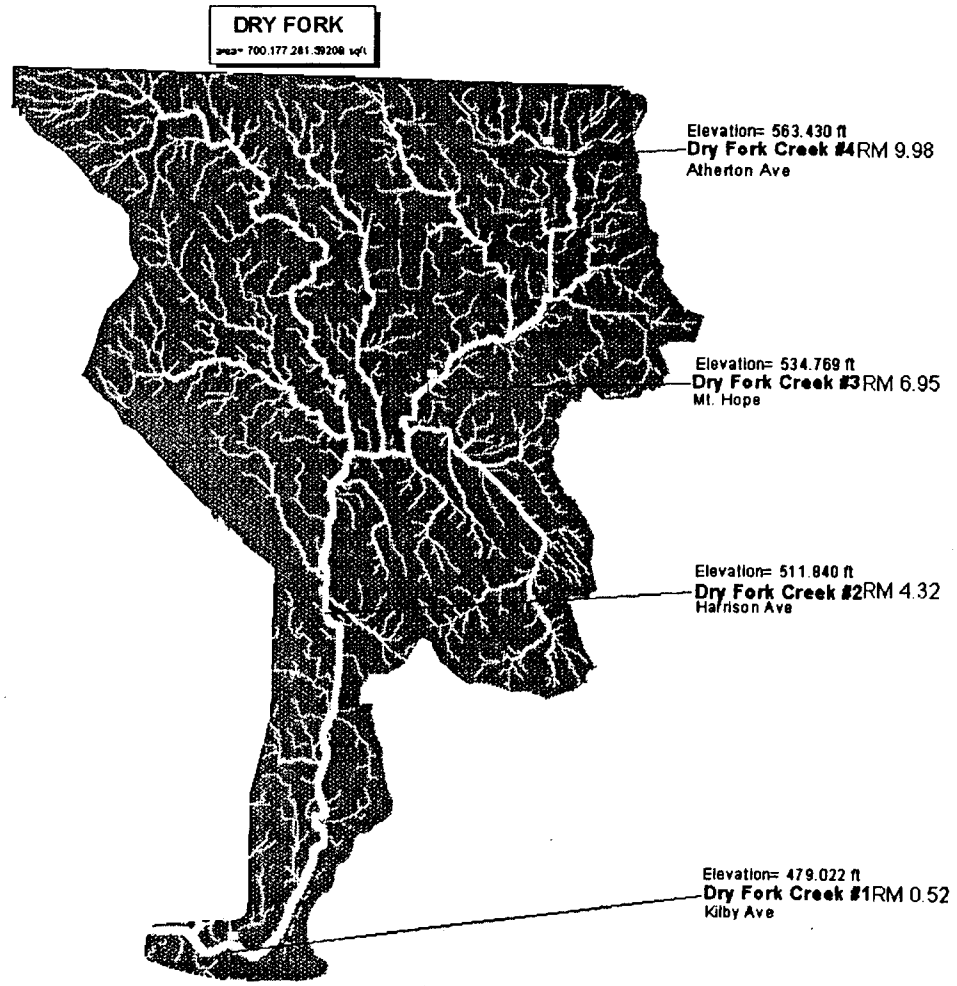
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 Miles

A product of
MSD
from
CAGIS
data

M S D
Greater Cincinnati Hamilton County

Dry Fork drainage basin

NOTE: Dry Fork drainage basin does not have any SSOs or CSOs.



0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5 6 6.5 7 7.5 8 8.5 9 9.5 10 Miles

Legend

MSD/DIW surface water sampling locations

- ⬠ **SSO**
- ● **CSO**

total basin acreage= 16,073.9 acres

M S D
Greater Cincinnati Hamilton County

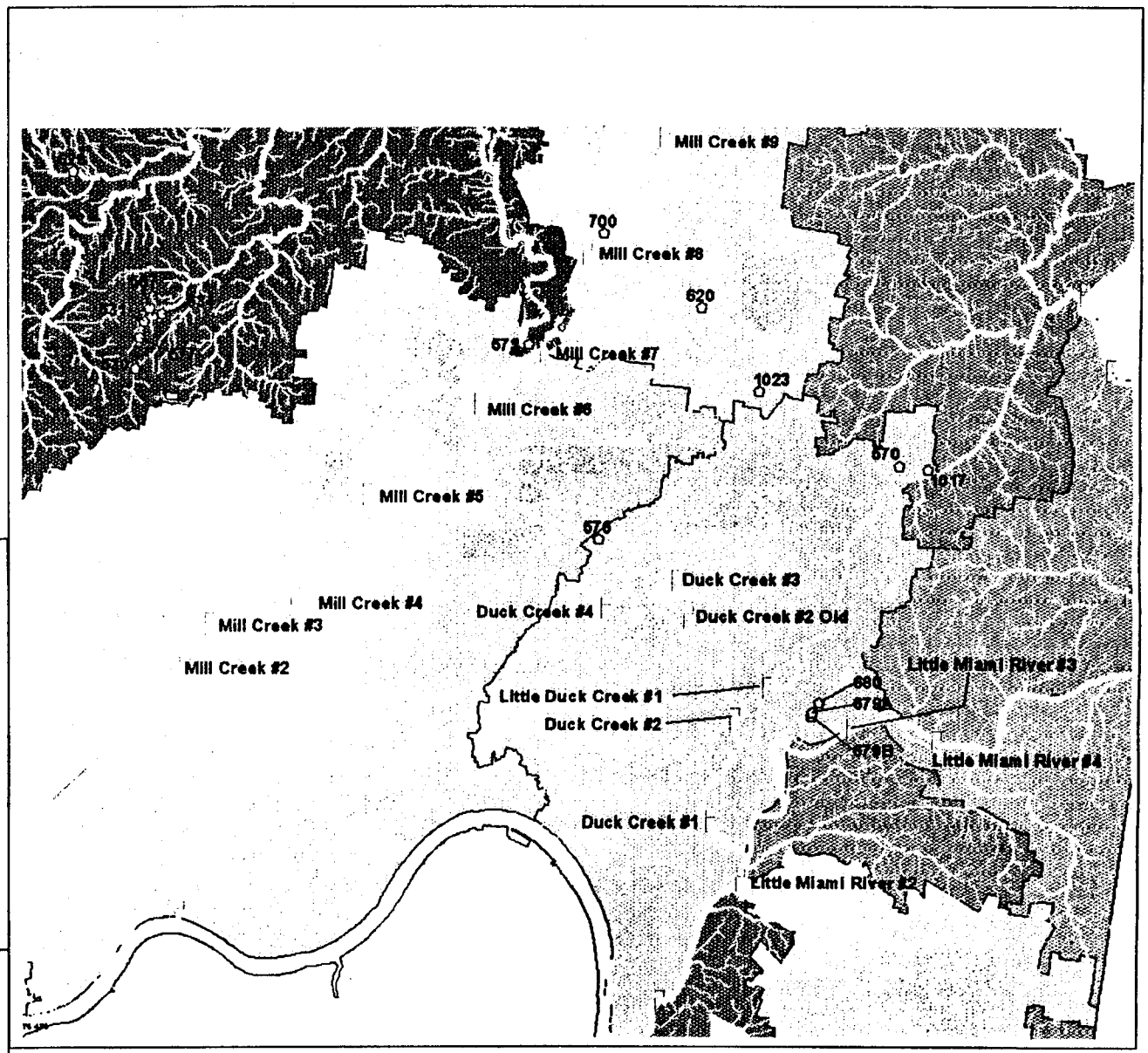
A product of MSD from CAGIS data

2001 SSOs

SSOs

NOTE: MSD's most highly active SSOs within Hamilton County, Ohio

SSO#:
530, 531, 567, 570, 572, 576, 620, 628, 634, 679A, 679B, 680, 700, 1017, 1023.



0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 Miles

Legend

MSD/DIW surface water sampling locations
SSO
Streams and Rivers

M S D
Greater Cincinnati Hamilton County

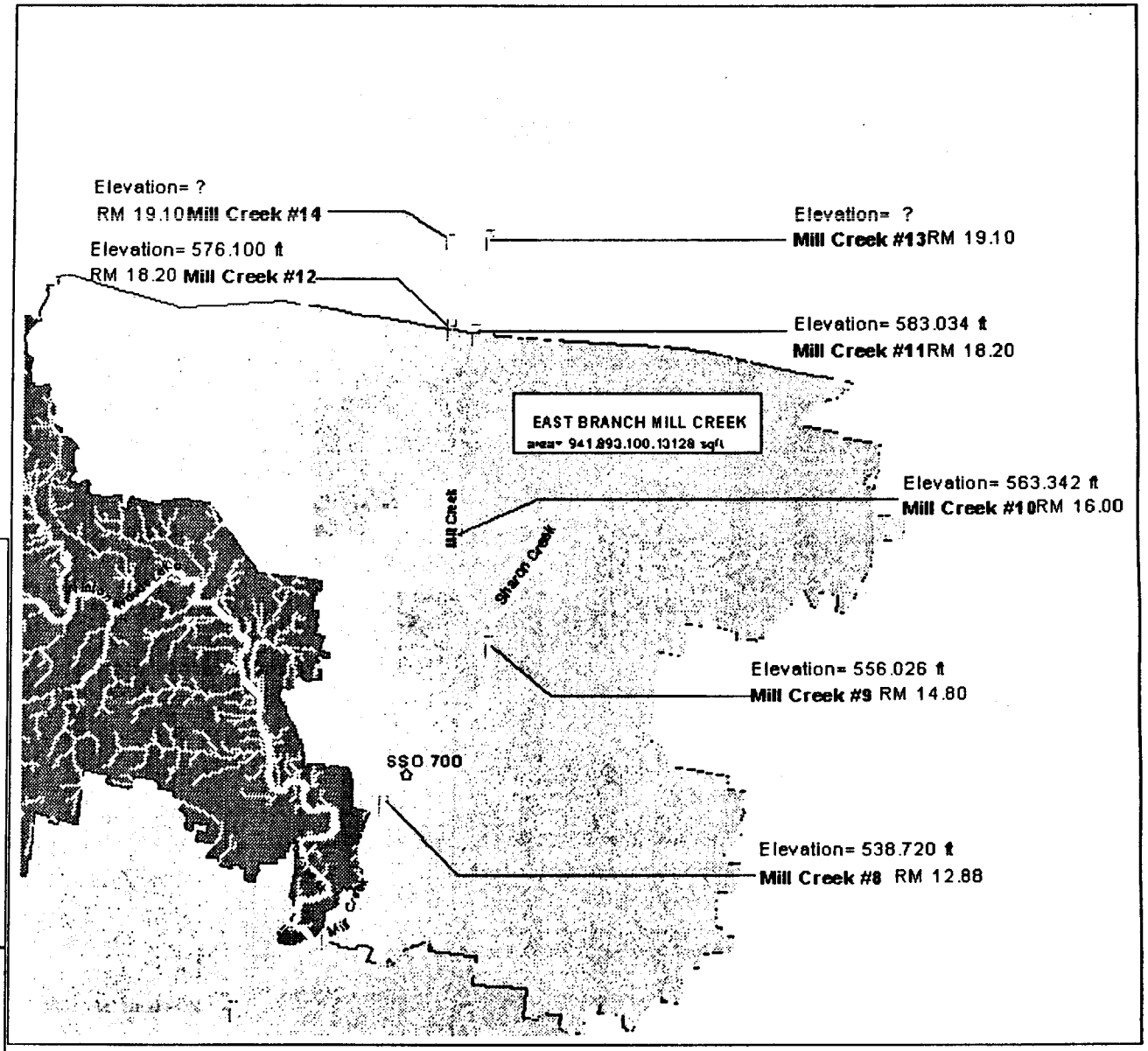
A product of MSD from CAGIS data

map by Doring A. Francis MSD/DIW/S&S September 2000

SSO 700

in relations to MSD/DIW
surface water sampling locations

NOTE: This SSO is within the
EAST BRANCH MILL CREEK
drainage basin.



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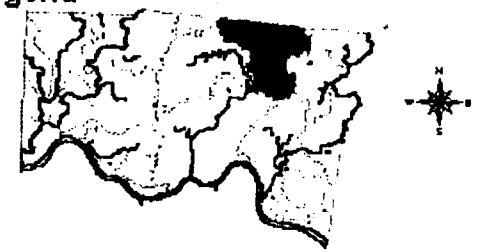


- MSD/DIW surface water sampling locations
- SSO
- Streams and Rivers

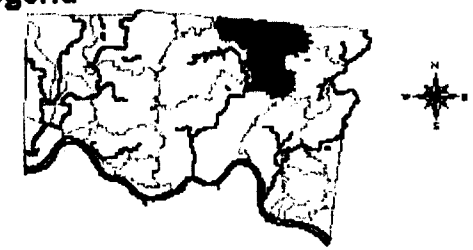
A product of
MSD
from
CAGIS
data

M S D
Greater Cincinnati Metropolitan Sewer District

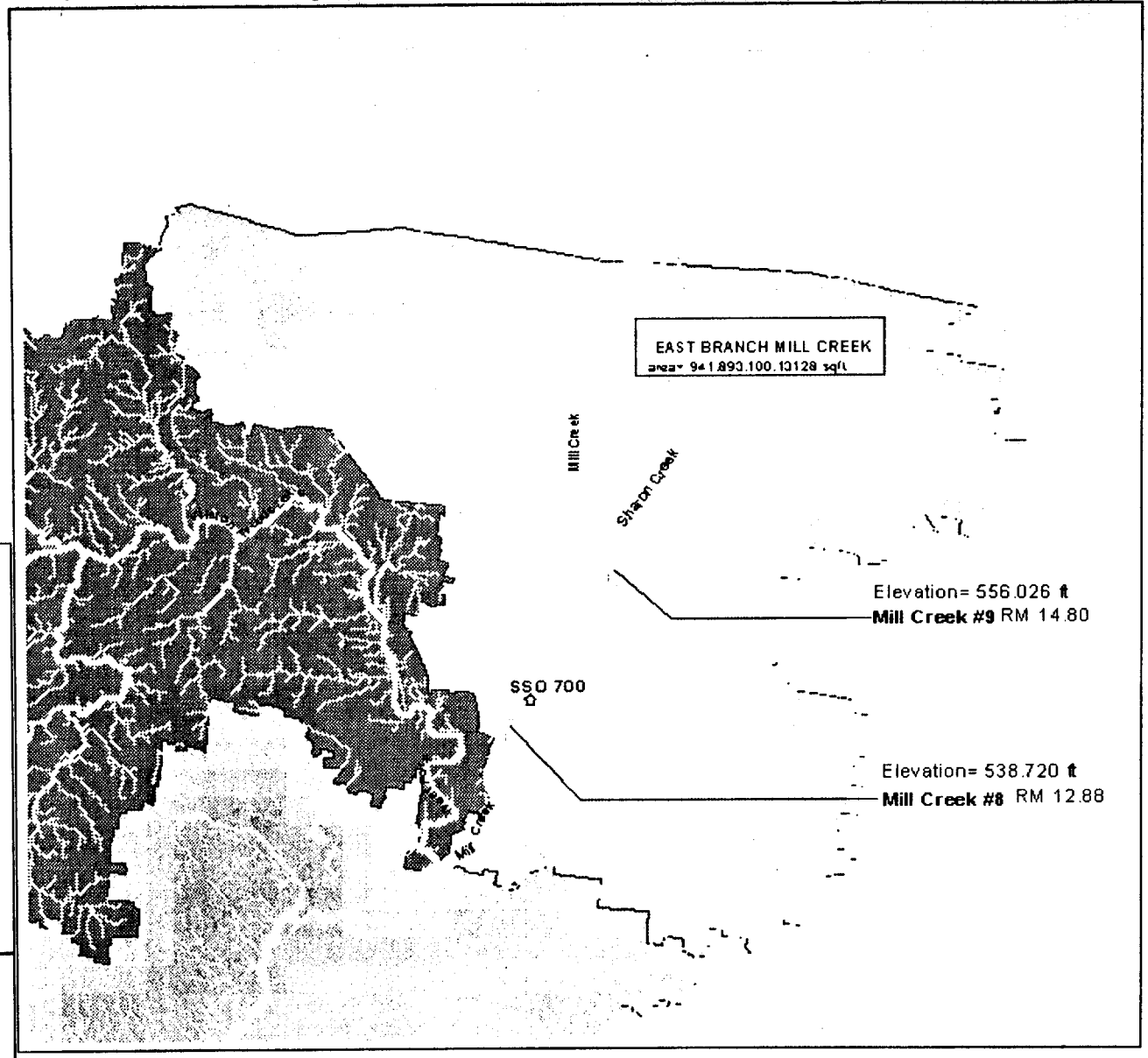
SSO 700

NOTE: This SSO is within the EAST BRANCH MILL CREEK drainage basin.

Legend



- MSD/DW surface water sampling locations
- SSO
- Streams and Rivers



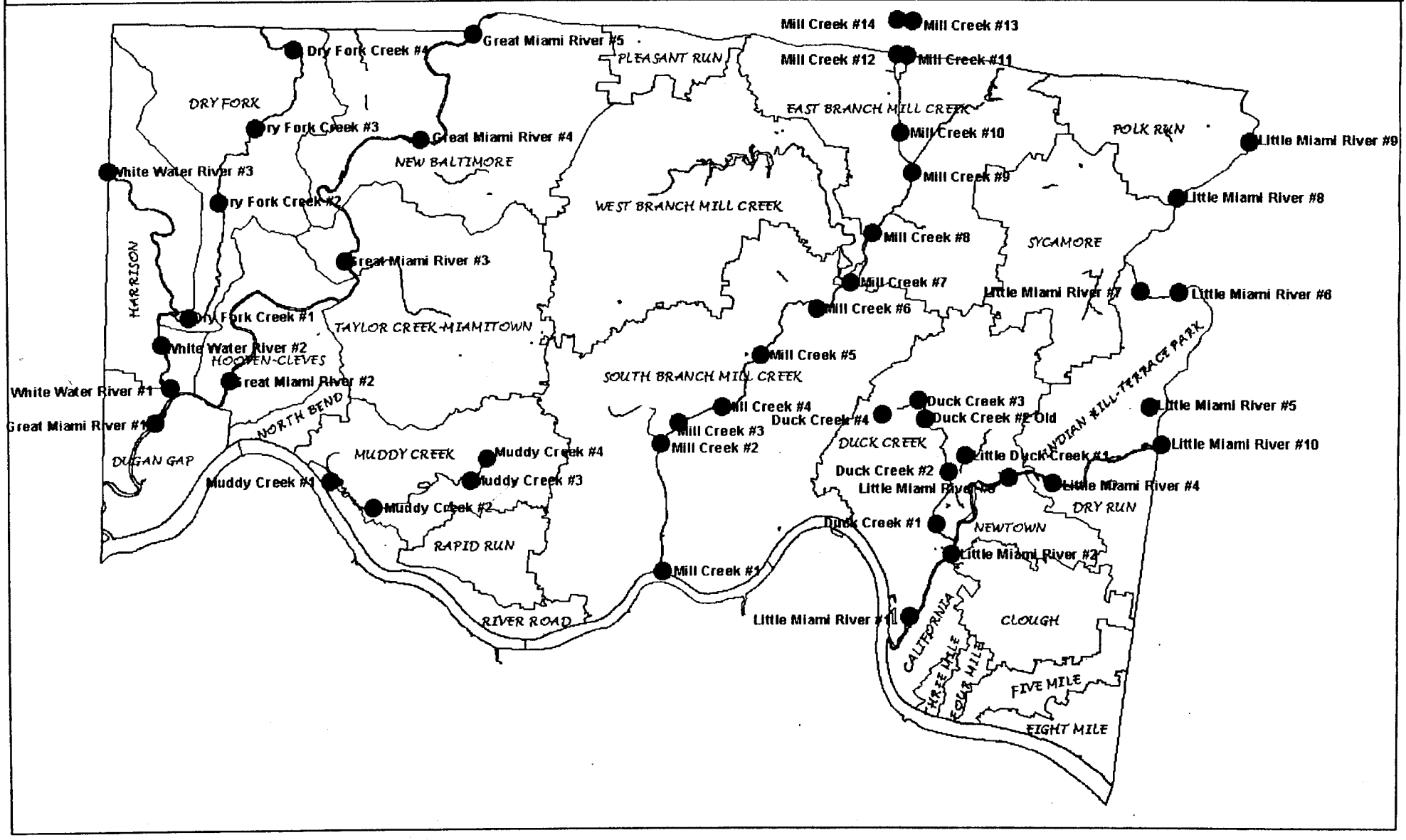
0 0.7 1.4 2.1 2.8 3.5 4.2 4.9 5.6 6.3 7.0 7.7 8.4 9.1 9.8 Miles

MSD

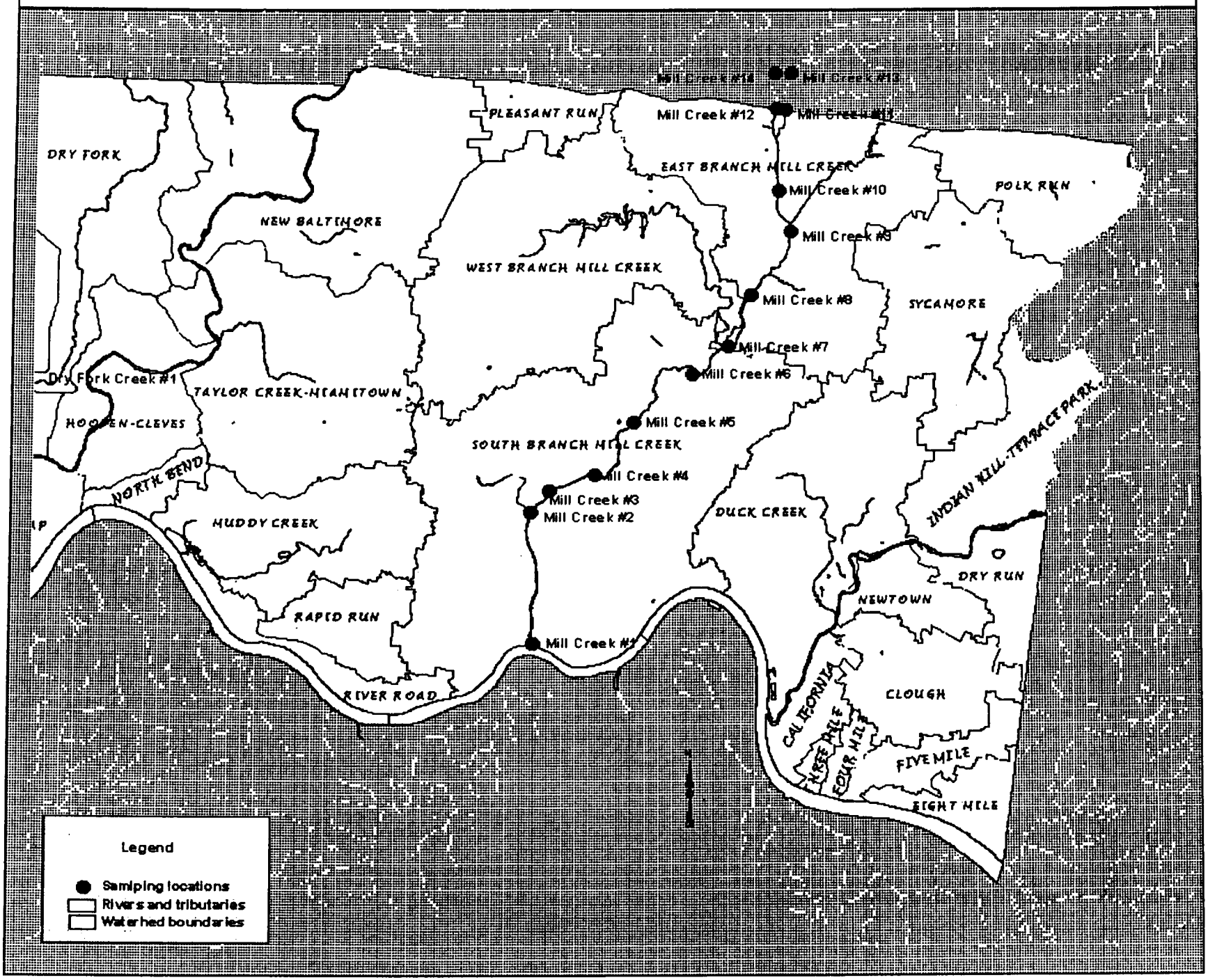
A product of MSD from CAGIS data

YEAR 2000

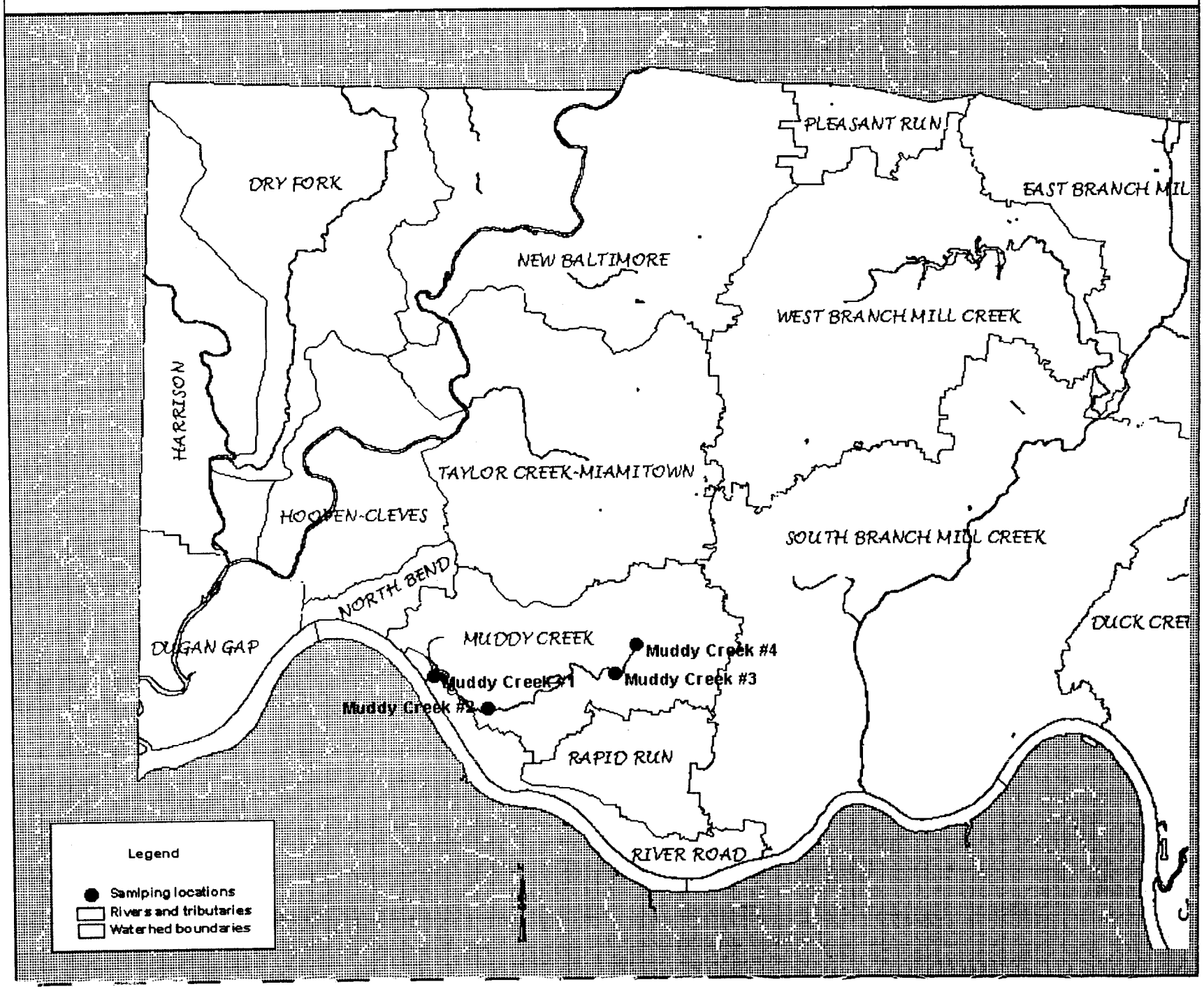
MSD/DIW SURFACE WATER SAMPLING LOCATIONS



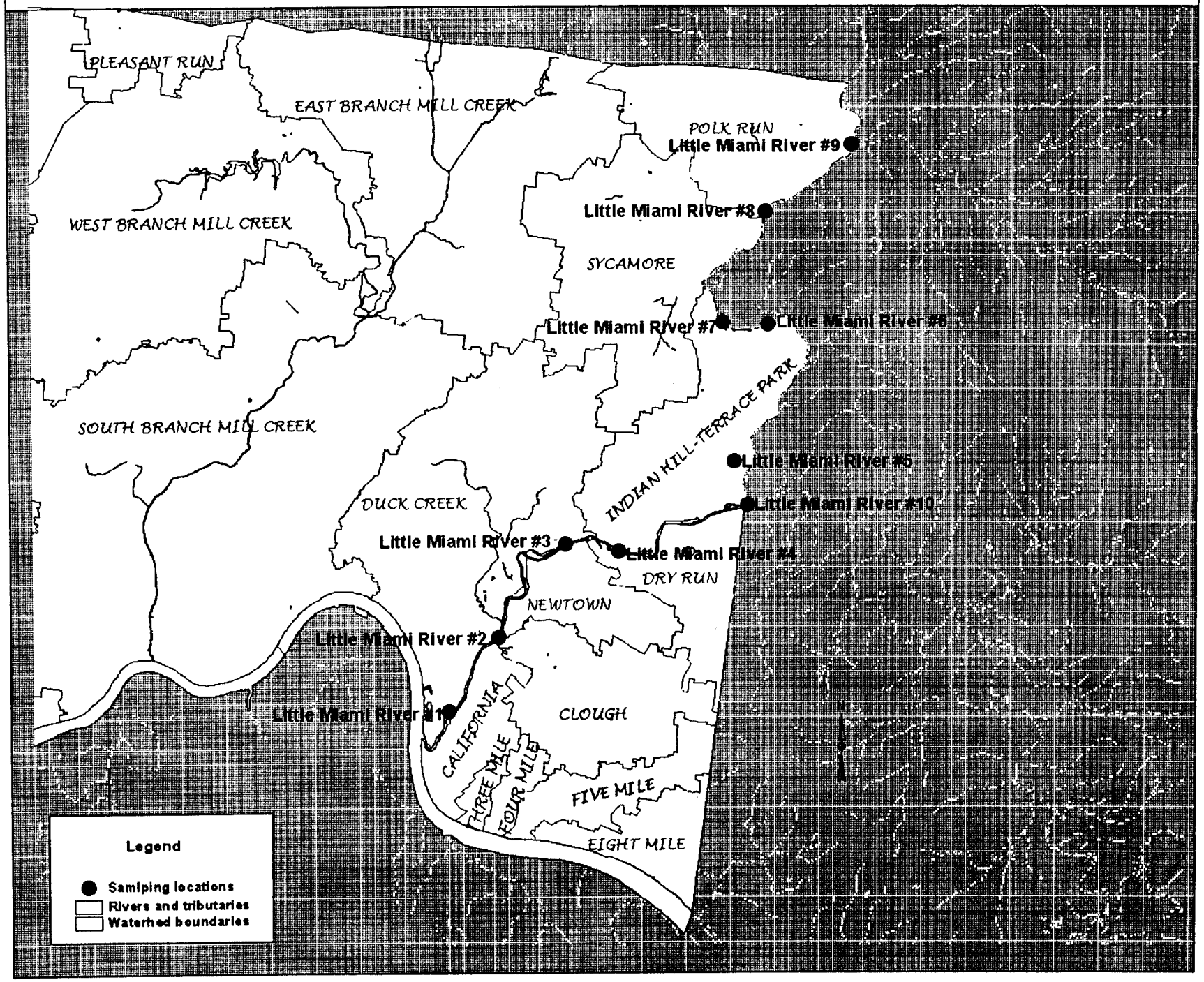
MSD/DIW SURFACE WATER SAMPLING LOCATIONS



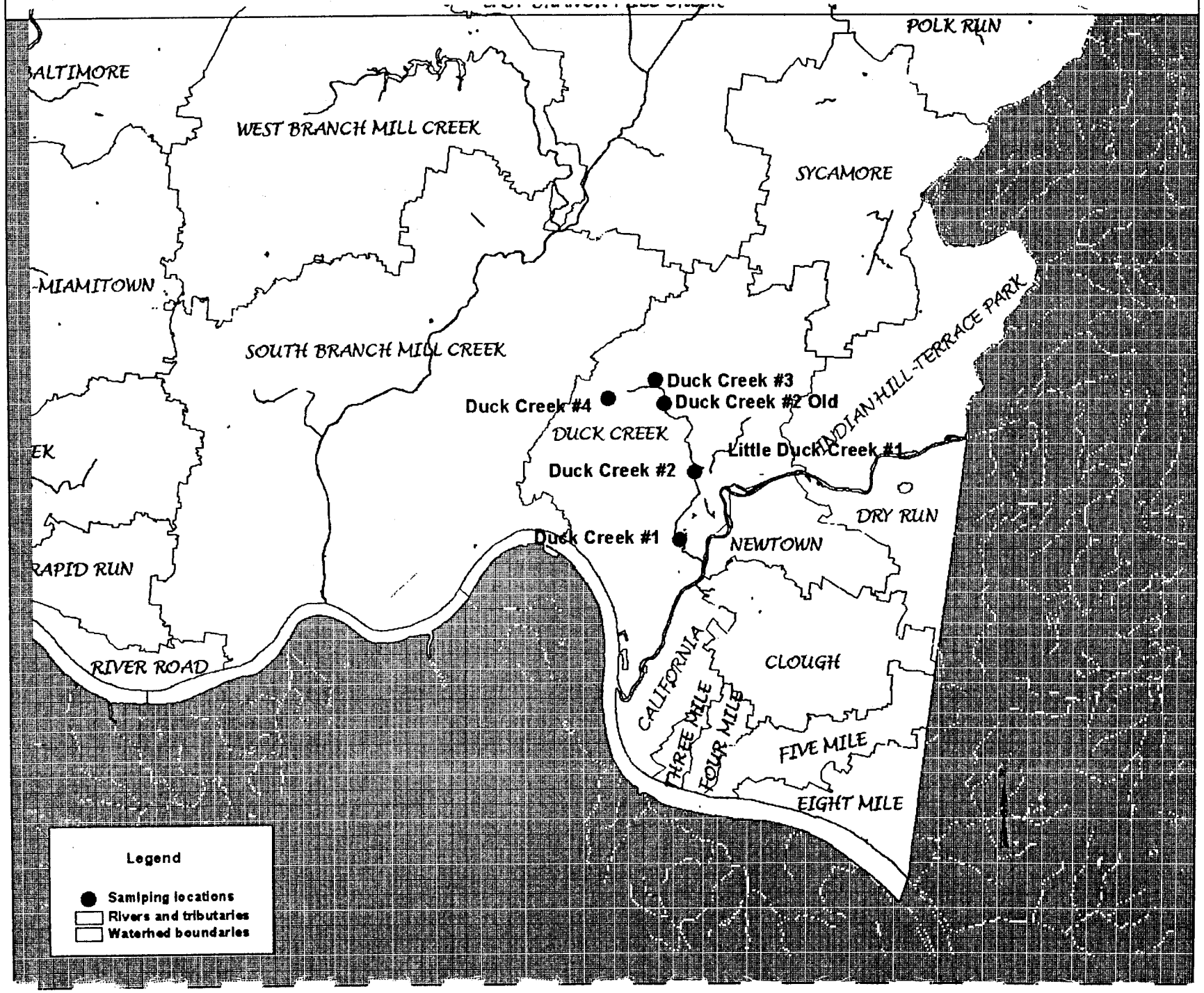
MSD/DIW SURFACE WATER SAMPLING LOCATIONS



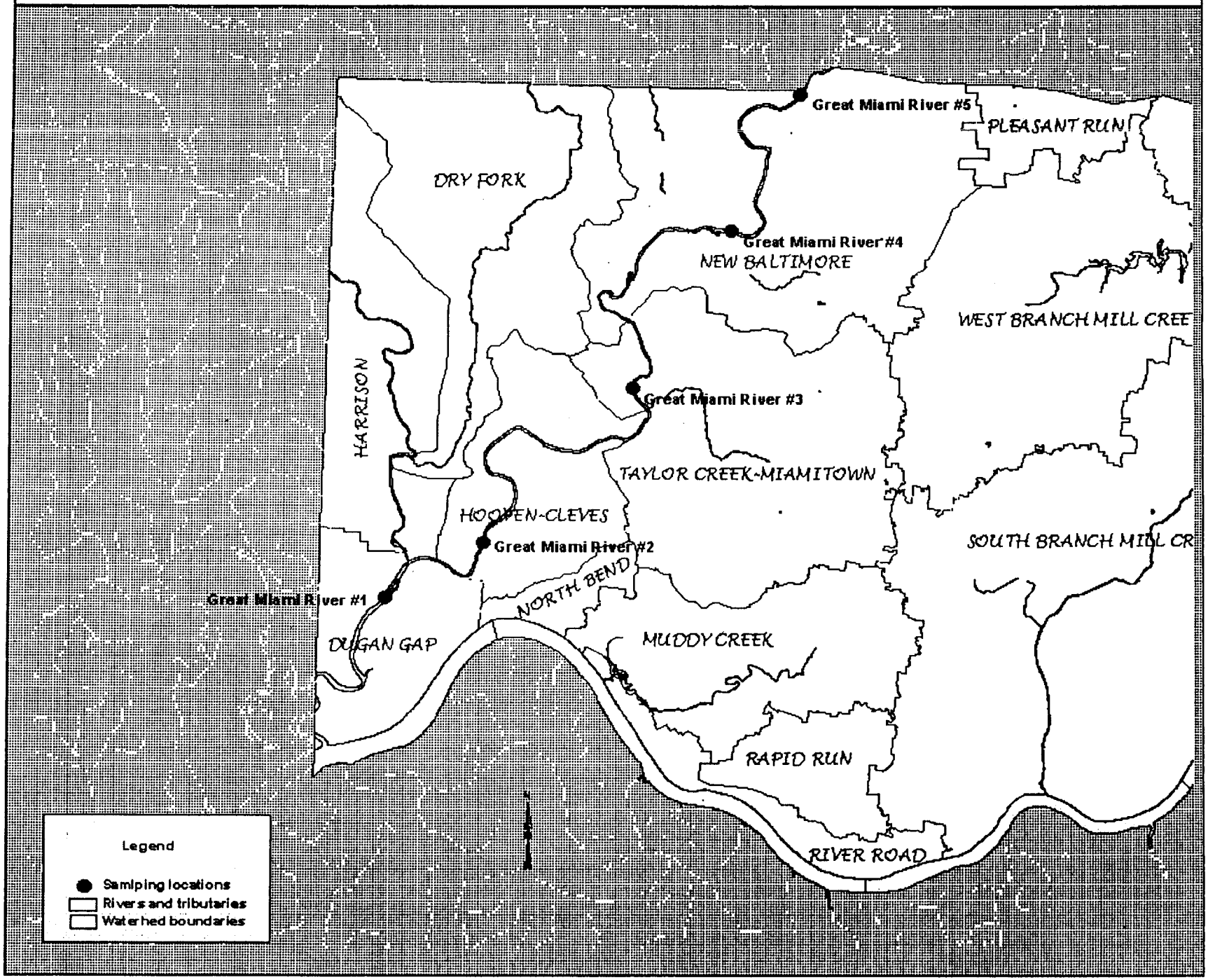
MSD/DIW SURFACE WATER SAMPLING LOCATIONS



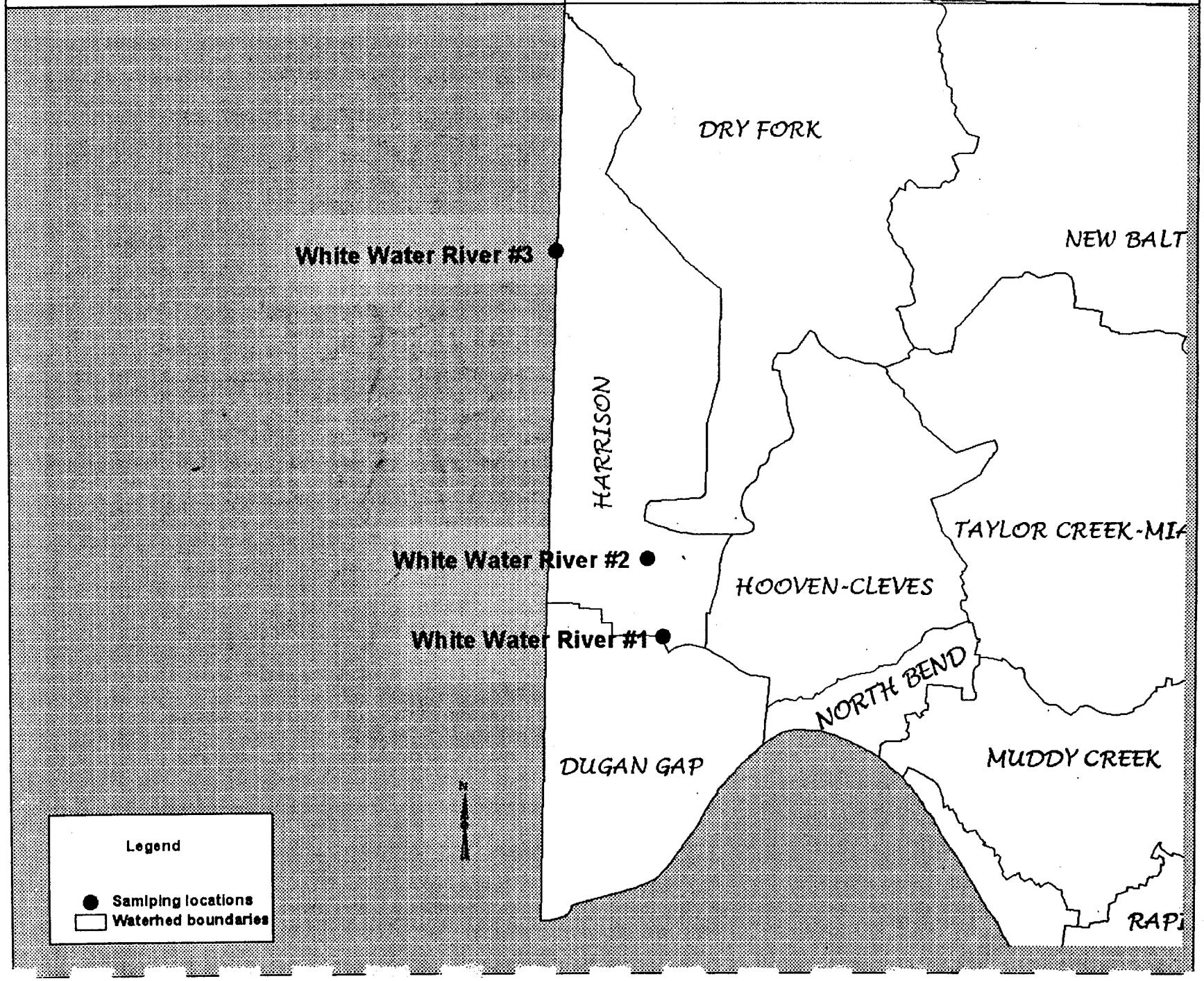
MSD/DIW SURFACE WATER SAMPLING LOCATIONS



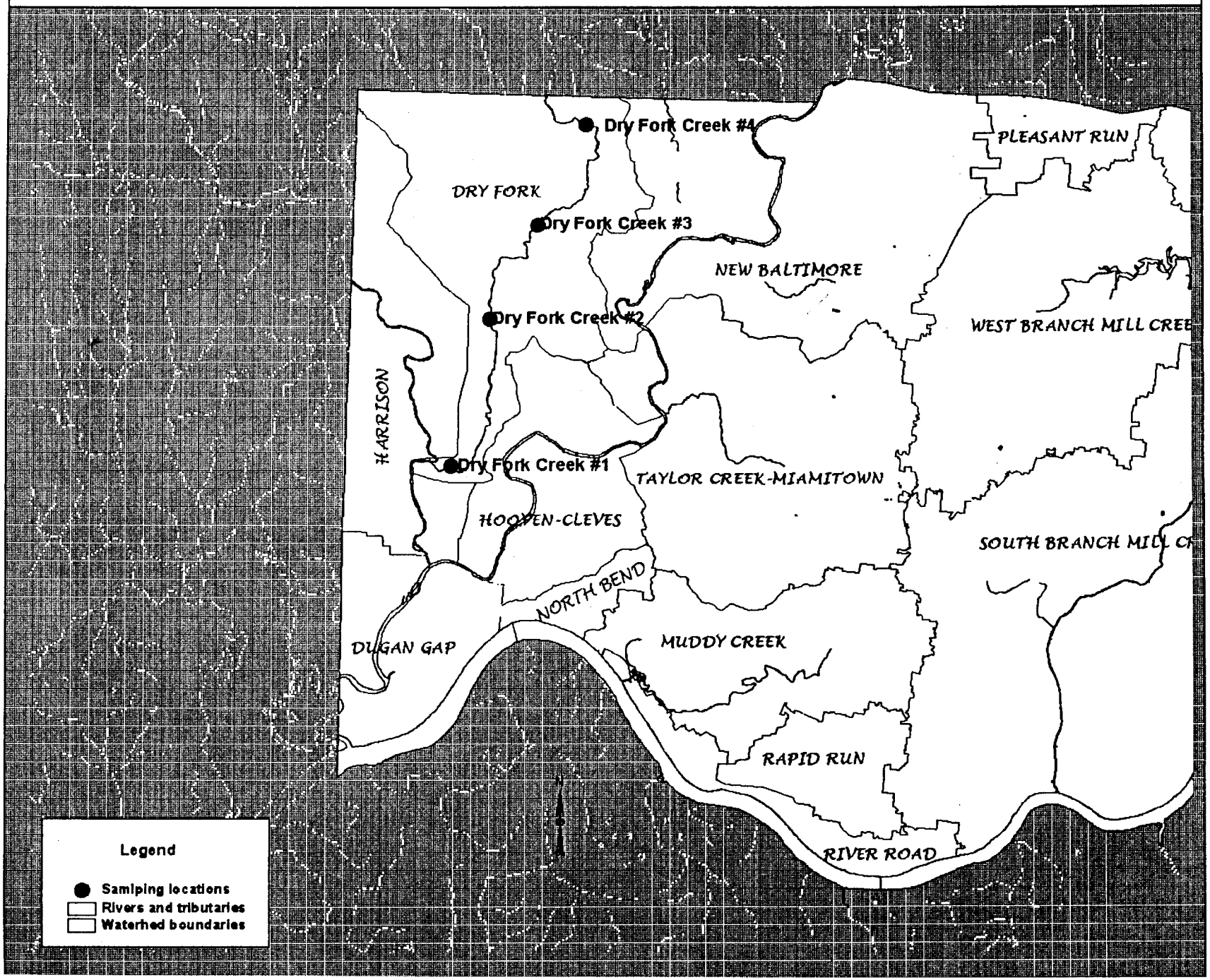
MSD/DIW SURFACE WATER SAMPLING LOCATIONS



MSD/DIW SURFACE WATER SAMPLING LOCATIONS



MSD/DIW SURFACE WATER SAMPLING LOCATIONS



APPENDIX H

Enforcement Response Plan

THE METROPOLITAN SEWER DISTRICT
of Greater Cincinnati

ENFORCEMENT RESPONSE PLAN

EFFECTIVE DECEMBER 1, 1994

Pretreatment Program Enforcement Response Plan

Introduction

The Clean Water Act of 1977 has set forth basic requirements to regulate the nature and quantity of industrial wastes discharged to publicly owned treatment works; such legislation is found in 40 CFR part 403. The United States Environmental Protection Agency has revised part 403 pursuant to sections 307(b) and 402(b)(8) of the Act. The most recent revision to part 403 resulted in the promulgation of a final rule on July 24, 1990. Contained within part 403.8(f)(5) are a list of minimum requirements for the development of an Enforcement Response Plan (ERP).

The actions required of the Metropolitan Sewer District of Greater Cincinnati, as outlined in this document, are intended to satisfy the Ohio EPA requirement for the development of an ERP.

The principles of the Plan identified below describe a process to identify, document and respond to pretreatment violations in a timely and equitable manner consistent with relevant State and Federal law and with the legal authority contained in the Rules and Regulations.[1] The principles establish a framework for the management of enforcement matters and emphasize flexibility in controlling the overall operation.

The key principles of the Plan include:

a) Establishment of responsibilities, procedures and time-frames that provide information to all levels of the organization;

b) Maintenance of an accurate and complete industrial user inventory;

c) A systematic plan devised to inspect and sample industrial users;

d) Development of an enforcement response guide and compliance screening mechanism;

e) Performance of an enforcement evaluation where necessary;

---

[1] Where mentioned, "Rules and Regulations" shall refer to the Rules and Regulations Governing The Design, Construction, Maintenance, Operation And Use Of Sanitary and Combined Sewers In The Metropolitan Sewer District Of Greater Cincinnati, Hamilton County, Ohio and Issued by the Board of County Commissioners of Hamilton County, Ohio.

f) Institution of an enforcement action and follow-up where deemed appropriate.

Many of these principles have heretofore been incorporated into the District's existing approved pretreatment program. The goal of this Plan is to describe the manner in which the District enforces its pretreatment program in light of Federal legislation. The existing general pretreatment requirements are contained within the Rules and Regulations.

Industrial User Inventory

The District maintains a current inventory of its industrial users. The inventory consists of the industrial waste survey, baseline monitoring reports, periodic compliance reports, records of facility inspections, enforcement documentation and miscellaneous correspondence. The responsibility for maintenance of industrial user inventories has been assigned to specific pretreatment staff. The flow of information is organized to ensure that all relevant data is directed to the proper individual.

The control mechanism utilized by the District to monitor industrial user (IU) discharges is the Wastewater Discharge Permit, as provided for in Article XV of the Rules and Regulations. The Permits contain specific requirements for each industrial user concerning discharge limitations and reporting frequency.

In addition to industrial user self-monitoring, industrial users are monitored by the District. Significant Industrial Users (SIU) are inspected and monitored by the District at least one day per annum. Discretion will be exercised in determining whether sampling is necessary by District personnel for all other Users not in the significant industrial user category. Monitoring by the District is classified as scheduled, demand, unscheduled, additional or surcharge depending on the following criteria.

Scheduled Monitoring Undertaken to demonstrate continued compliance.

Demand Monitoring Intended to establish whether a violation(s) has been corrected once it has been detected. This may consist of one or more consecutive sampling days.

Unscheduled Monitoring Undertaken as a further check on industrial user compliance status.

Additional Monitoring Undertaken to aid in the assessment of Significant Industrial

User (SIU) status. Normally consists of grab samples taken on a given day.

Surcharge Monitoring Undertaken to develop surcharge billing costs.

Industrial User Self-monitoring Undertaken by the industrial user in fulfillment of federal, state and local pretreatment requirements.

The District then receives, evaluates and retains the data to ensure their availability when needed to make decisions on compliance activities, and, if necessary, as evidence in enforcement proceedings.

The District endeavors to inform the industrial users of changes in pretreatment requirements, results of inspections and other relevant information. The industrial users shall also be apprised of the enforcement principles outlined herein and the generalized responses to non-compliant episodes.

Pretreatment Staff

The Division of Industrial Waste comprises a staff to sample, analyze, and assure compliance of industrial waste discharges. Sampling is carried out for the division exclusive of industrial user self-monitoring. Its pretreatment responsibility lies chiefly in conducting the necessary sampling and field inspections.

The Division's Laboratory performs in-house analysis of the effluent samples. EPA-approved QC/QA procedures are employed.

Evaluation of compliance with the Wastewater Discharge Permit includes screening the analytical data to match applicable permit limits. Evidence of a violation is compiled at the investigator level. These individuals are then responsible for completing the initial notice of noncompliance covering the specific violation. The supervisor performs a cursory quality control check and then allows issuance. Level 1 notices of noncompliance, without proposed fines or penalties, are issued under the signature of the Superintendent of Industrial Waste; Enforcement actions with proposed fines or penalties require the Director's signature.

Compliance Review Process

The compliance review process includes review of all relevant data to screen out non-compliant industrial users for appropriate enforcement action.

The initial review confirms whether the discharge reports are submitted on time, encompasses the proper time period, are complete and properly signed. The secondary review assesses compliance with appropriate pretreatment standards (i.e. local or categorical) and any other information supplied by the industrial user in accordance with its Wastewater Discharge Permit.

To ensure a timely response the District will issue a form letter notice of noncompliance designated the NON. The NON is issued for all violations and forms the paper trail that is used to generate the quarterly Industrial User Violation Report; this report, which is updated frequently, is used for enforcement tracking and in assessing escalating enforcement.

Enforcement Evaluation

In general terms, the format used to enforce the Metropolitan Sewer District Rules and Regulations as they relate to pretreatment consists of the following:

a) All violations or permit occurrences outside limits disclosed by the District or industrial user monitoring are reviewed by appropriate staff;

b) The industrial user is notified by a form letter notice of noncompliance (NON) when an enforcement official becomes aware of a violation;

c) In the case of effluent violations, the industrial user is scheduled for demand monitoring. Generally, a facility inspection is also conducted;

d) Every notice of noncompliance requires the industrial user to take immediate action to prevent recurrence;

e) When necessary the notice of violation requires the industrial user to submit an explanation and/or plan to prevent recurrence;

f) The District will increase communications with the industrial user in response to violations. Additional inspections, meetings, and monitoring may be conducted;

g) If the violations persist or the explanation/plan submitted is inadequate, the District responds with escalating enforcement such as requiring commitments in the form of additional pretreatment equipment with a

construction plan/schedule;

h) The District will issue fines in accordance with the Rules and Regulations using a series of fine schedules and EPA guidance documents.

In more specific terms, the District uses a tiered response approach geared to a twelve month time cycle to enforce its pretreatment program. A first occurrence of a violation triggers the cycle and sets it in motion. Multiple occurrences within a twelve month period (not necessarily related to the same violation) carry an escalating form of enforcement and extend the cycle. After twelve months have elapsed from the most recent violation, the cycle concludes. Subsequent violations begin a new cycle. However, the District will consider the user's previous history dating back to five or more years in setting the initial response level at the beginning of each new cycle. A user's compliance history will be considered to determine whether any pattern or trend in violations exists. This information is to be used not only to aid in diagnosing the cause of the violation but also to assist in selecting enforcement options and in imposing fines and penalties.

It is recognized that some egregious or flagrant violations may warrant a response beyond Level 1 despite a first occurrence in twelve months. Depending on such factors as the number and severity of violations disclosed and impacts on human health and safety, the general enforcement levels are applied in accordance with the enforcement action tier.

Generally, the District will review industrial user reports within five days of receipt and for violations issue the form letter notice of noncompliance with in an additional seven days. Formal notices of violation will generally be issued within 30 days of the initial notice of noncompliance.

Follow-up compliance activities such as inspections and monitoring will generally begin within 30 to 45 days after the initial enforcement response is taken. Should these activities disclose continued noncompliance the District will escalate enforcement within 60 to 90 days.

The District is expected to diligently discharge these duties. Failure to serve any required notice in accordance with the time pèriods set forth herein shall not invalidate any proceeding or action of the District. However, any delay in issuing notices which causes an industrial user prejudice shall be considered in mitigation of any fine or other enforcement action of the District.

Pretreatment Program Enforcement Response Plan

Enforcement Action Tier

Frequency of Violation	Nature	Enforcement Action
First occurrence within twelve months	Moderate	Level 1
	Severe	Level 2
Second occurrence within twelve months	Moderate	Level 2
	Severe	Level 3
Chronic occurrence	Moderate	Level 3
	Severe	Level 4

Enforcement Action Characterization

Level 1 DIW issues a notice of noncompliance (NON) identifying the violation and its date of occurrence. It further requires a written response from the industrial user within 14 days of notification describing the cause of the violation and the corrective actions taken to prevent recurrence.

In order to monitor compliance, demand monitoring may be required. A follow-up investigation is conducted as necessary.

Level 2 A Compliance Attainment Meeting (CAM) is scheduled within which a Remedial Action Plan (RAP) or Interim Operating Procedures and Construction and Implementation Schedule (IOP/CIS) are developed within 30 days of the meeting. Included in the RAP as necessary will be increased self-monitoring and reporting; a Spill and Slug Control Plan (SSCP) within 30 days; Pretreatment system Operation and Maintenance/Standard Operating Procedures (SOP/O&M) within 60 days; and Pretreatment System Operator Training (POT) commitment within 60 days. Development of a Pollution Prevention Plan (PPP) at this level of enforcement may be required. Implementation of the plan may be required when it is a positive measure that protects environmental quality and is technically feasible. The Director has the discretion to modify this requirement to implement pollution prevention measures where the industrial user has demonstrated that the implementation will cause undue financial hardship and its proposed remedial

alternative will not harm the environment. The PPP will describe alternatives for reducing pollutants at the source through process or operational changes or any other means which permanently reduce the amount of contaminants to be disposed of into any environmental medium (e.g., whether through releases to the sewer system, air, ground, or surface water or any other method of discharge).

In order to monitor compliance, a follow-up investigation and monitoring event are conducted by DIW after a review of the adequacy of the RAP and/or IOP/CIS is made.

Level 3 Administrative Orders requiring any of the following: increased self-monitoring and reporting; Interim Operating Procedures and Construction and Implementation Schedule (IOP/CIS); selection or modification of pretreatment technology; prepare and submit a Permit-To-Install (PTI) application; development of and implementation of Pollution Prevention Plan (PPP); a temporary cease and desist order.

In order to monitor compliance, a follow-up investigation and monitoring event are conducted by DIW after a review of the adequacy of the RAP and/or IOP/CIS is made.

Level 4 Issuance of orders to cease and desist, revoke permit to discharge or terminate service, or refer to City Solicitor.

Enforcement Response Guide

One of the minimum criteria set forth in 40 CFR 403.8 (f)(5) is a description of all anticipated types of industrial user violations, the prescribed form of enforcement to be taken and the time-frame within which the industrial user is required to respond. A predetermination of all types of violations is clearly not possible; however, a range of responses have been developed for the more common occurrences. Violations that occur but which are not contained in the Guide will be responded to on a case-by-case basis.

For the determination of the level of response necessary for a given violation or an occurrence outside permit limitations the District will carefully consider the number of occurrences in the current cycle and the Industrial User's history dating back five or more years, the number and severity of violations per occurrence and impacts on human health and physical structures, the presence of pretreatment technology and its adequacy for compliance, and the level of cooperation exhibited by the industrial user. The District's goal is ongoing compliance with all Rules and Regulations. To achieve this goal it is necessary

to be flexible, yet even-handed in the implementation of the Guide, in a manner consistent with the Rules and Regulations, such that the resolution of any form of noncompliance is expedient and decisive.

Table 1 presents the Enforcement Response Guide for the Metropolitan Sewer District of Greater Cincinnati. The Guide incorporates the tiered approach to enforcement and all provisions set forth in the Rules and Regulations.

As noted in the Enforcement Response Guide, there are four (4) basic levels of response. In general, Level 1 means that the discharger has no prior violations during the preceding year; Level 2 means that prior violations have occurred but that the discharger is working cooperatively with the District in complying with regulations; Level 3 implies a lack of good faith efforts by the discharger and escalating enforcement by the District; Level 4 means a failure to address the issues in the informal administrative process.

Escalation from Level 1 to Level 2 is automatic when a second violation occurs within twelve months of a previous violation. The step from Level 2 to Level 3 is made when the remedial actions taken or proposed by the industrial user are deemed by the District to be inadequate or inappropriate and the industrial user appears unwilling to fully resolve the issue. The District will consider factors such as threat to human health, potential damage to environment by interference or pass-through, damage to the sewer system, the duration, type and severity of noncompliance, deterrence, and additional costs to the District in determining the adequacy or appropriateness of the enforcement actions. Level 3 actions by the District will generally be taken unilaterally. For example, the District may issue a temporary cease and desist order to the industrial user pending implementation of interim operating procedures or until installation of pretreatment technology. Level 4 actions may be taken upon consultation with the City Solicitor.

Where pretreatment equipment is to be installed, the District will coordinate with other agencies in order to track and discourage cross media shift; for example, an air permit with The Hamilton County Department of Environmental Services or a Permit-to-Install with the Ohio EPA.

Pollution Prevention

The District is developing a pollution prevention program. Reducing pollution at its source is the preferable method of obtaining compliance with effluent limitations. The District will assist the industrial user with technology transfer and other available means to reduce, at the source, pollutants in the user's process operations.

A strong preference will be given to remedial alternatives which achieve compliance through pollution prevention by means of source reduction. However, the shifting of emissions from one environmental medium to a different environmental medium in order to achieve compliance may be considered as an acceptable alternative only after all other processes have been investigated. A user will not be allowed to achieve wastewater compliance by causing a violation of any other environmental law.

Compliance Schedule Policy

In certain cases the District may negotiate with an Industrial User regarding occurrences outside of permitted limitations when the following circumstances apply:

a) The Industrial User has agreed to construct a pretreatment facility, place it in operation and achieve compliance with all of the following: the industrial user's wastewater discharge permit; the Metropolitan Sewer District Rules and Regulations; Chapter 6111 of the Ohio Revised Code; Ohio Administrative Code 3745-3-12; and the General Pretreatment Regulations 40 CFR 403 and Subchapter N as may be amended; and such other laws, rules and regulations that may apply; and

b) Where the Industrial User has demonstrated that the occurrences outside limitations do not pose a threat of pollution to the environment and/or jeopardize health, safety, welfare, and property; and

c) Where the Industrial User has demonstrated that the occurrences outside limitations, do not pose a threat of interference and pass through or damage to the POTW; and

d) Where no Alternative Interim Measures are available to reduce the discharges below permit limits. In such event, the agreement negotiated will include Alternative Interim Measures which minimize the amount by which the discharges exceed permit limits; and

e) Where the Industrial User has agreed to pay an assessment based on an economic benefit analysis.

The agreement negotiated shall include the Industrial User's adoption of Alternative Interim Measures to prevent or minimize the exceeding of limitations during the interim period.

The District and the Industrial User may agree upon a fine schedule for the interim occurrences outside limitations. The agreement shall include a time frame for the following: completion of a treatability study of the Industrial User's wastewater; selection of pretreatment technology; completion of pretreatment specifications; submission of a complete application for a permit to install including detailed plans and specifications for the installation of pretreatment facilities to the Ohio EPA; submission of purchase orders for the approved pretreatment equipment; beginning date for construction; date for completion of construction; and date for demonstration of compliance to the District.

Prior to entering into a compliance schedule which allows the discharge of contaminants beyond permit limits, the District will consider Alternative Interim Measures. These Alternative Interim Measures are temporary measures which reduce discharges into the sewer system below permits limits pending the implementation of the final remedy, such as the construction of a pretreatment facility.

Such Alternative Interim Measures may include temporary process or operational changes, or temporary volume reduction (i.e. reduction in production output). Such measures may also include off-site disposal or on-site holding or a temporary alternative pretreatment operation. Measures that involve media shifting will be discouraged and a preference will be given to measures which involve pollution prevention.

Cost Recovery

The user will be held liable for cleanup costs and/or damages resulting from discharges in violation of District limitations. These costs will be derived separate and distinct from imposed fines and are generally the actual cost of cleanup and/or repair/replacement.

In addition, a non-compliant user may be assessed the cost for increased inspection and monitoring events required by the District to evaluate the users's return to compliance.

Economic benefit of noncompliance may be assessed separate and distinct from imposed fines. The District will refer to State and Federal guidelines such as EPA's Guidance Manual for POTWs to Calculate the Economic Benefit of Noncompliance.

Significant Noncompliance

The "significant noncompliance (SNC)" concept shall also be utilized to set priorities for enforcement response. Article XV, Section 1512 contains a provision to publish the names of industrial users found in significant noncompliance with the Rules and Regulations

during the previous twelve (12) months. The term "significant noncompliance" applies to an industrial user meeting at least one of the following criteria:

Chronic violations of the Wastewater Discharge Permit as described in the Rules and Regulations; Technical Review Criteria (TRC) violations as described in the Rules and Regulations; Any other violation that the District believes has caused interference or pass-through phenomena; or has caused eminent endangerment to human health/welfare; d)Violations of construction and/or implementation schedule milestones contained in administrative orders; Failure to provide reports in the allotted time; Failure to accurately report noncompliance.

More severe enforcement actions will be taken against industrial users that frequently exceed pretreatment requirements as opposed to those that report isolated violations. In any case, if compliance is not achieved, escalated forms of enforcement will be taken to attain compliance in a timely fashion.

Fine Schedule

Monetary penalties will also be used as part of the enforcement program. USEPA guidance offers four criteria that will be reviewed before penalties are assessed:

a) Recover the cost to the District of the noncompliance.

b) Size penalty to deter future incidence of noncompliance.

c) Maintain a program of fairness, equity and consistency.

d) Provide a logical and systematic basis for penalty calculation.

To implement the recommended criteria in setting penalties the District has developed a series of fine schedules to use as a guide for establishing proposed penalties. These schedules are presented in the following tables.

Occurrences Outside Permit Concentration Limits - TABLE 2 This fine schedule is used to determine fines for violation of effluent limits. The fines increase as the percentage over the limit increases and as the facility wastewater flow increases. The schedule includes an adjustment for history of violations which directly relates to the enforcement level determined by the District. (Flow values used in this table are long term average total facility flows certified by the user and generally obtained through the wastewater discharge

permit process.)

Occurrences Outside Continuous pH Periods - TABLE 3 Discharge to the wastewater treatment system of wastewater in violation of Section 1518 (F) of MSD's Rules and Regulations (R&R) shall be subject to penalties for pH ranges and periods of flow as set forth in Table 3. Each occurrence for a range and period listed in Table 3 shall be a separate violation so long as the period for that occurrence contains no element of time in common with the period for any other occurrence charged as a violation in accordance with the standards of Table 3.

Occurrences Outside pH Excursion Limits - TABLE 4 Discharge to the wastewater treatment system of wastewater in violation of Section 1518 (F) of MSD's R&R shall be subject to penalties for pH excursion levels and frequencies of excursions greater than the frequencies set forth in Table 4. Excursion shall mean an occurrence wherein a wastewater pH changes in magnitude from a value within or closer to the range of 6.0 to 10.0 Standard Units to a value outside or further from that range, whether toward a lower pH or a higher pH. The frequency of excursion shall mean the number of excursions in any interval of eight consecutive hours. Violations of the standards for excursion set forth in Table 4 shall be cumulative even if containing common elements of time.

Late Report Filing - TABLE 5 These enforcement responses are applicable for late or incomplete filing of routine required reports (e.g., monitoring, permit application, permit renewals, etc.). Required enforcement reports (e.g., RAP, SSCP, SOP, POT, monthly progress or monitoring reports, IOP, CIS, etc.) that are late or incomplete, will accrue penalties from due date.

Other Violations - TABLE 6 As a number of other violations may be committed which warrant a fine but which cannot be easily quantified in a fine schedule this table is a guide to the District in setting fine levels based on deviation and seriousness.

Wastewater Discharge Permits

Wastewater Discharge Permits are issued to a specific User for specific operations, at a specific premise. A Wastewater Discharge Permit shall not be reassigned or transferred or sold to another owner, another User or different premises. A Wastewater Discharge Permit shall not be transferred to a new or significantly changed operation.

Pretreatment Program Enforcement Response Plan

TABLE 1
Enforcement Response Guide

I. SAMPLING, MONITORING & REPORTING VIOLATIONS

1. Noncompliance Item: Reporting Violation

a.	Circumstance:	Routine report improperly signed/certified
	Action:	Level 1
	Specific Response:	Phone call/documentation to file (IU Response due in 2 weeks)
b.	Circumstance:	Routine report improperly signed/certified after notification by District
	Action:	Level 2
	Specific Response:	NOV/CAM (IU Response due in 2 weeks)
c.	Circumstance:	Late submittal of routine report (less than or equal to 5 days)
	Action:	Level 1
	Specific Response:	NON, DIW issues telephone warning (IU Response due immediately)
d.	Circumstance:	Late submittal of routine report (greater than 5 days but less than 30 days)
	Action:	Level 2
	Specific Response:	NOV issued, IU informed of possible fines (IU response due immediately)
e.	Circumstance:	Late submittal of routine report (greater than 30 days)
	Action:	Level 3
	Specific Response:	NOV with fines of $100/day beginning with day 31 and accumulating until the report is received up to a maximum fine of $2,000 per late report. (IU response due immediately)
f.	Circumstance:	Incomplete submittal of routine report
	Action:	Level 1
	Specific Response:	Phone call/NOV (IU Response due in 2 weeks)

TABLE 1 (continued)
Enforcement Response Guide

g.	Circumstance:	Failure to submit any required report
	Action:	Level 3/4
	Specific Response:	NOV/AO and/or fine subject to hearing (IU Response due in 30 days)
h.	Circumstance:	Failure to report spill or permit violation - no impact
	Action:	Level 2
	Specific Response:	NOV/CAM (IU Response due in 2 weeks)
i.	Circumstance:	Failure to report spill or permit violation - impact present
	Action:	Level 2/3
	Specific Response:	NOV/CAM/AO and/or fine subject to hearing (IU Response due in 30 days)
j.	Circumstance:	Failure to report changed discharge - no impact
	Action:	Level 2
	Specific Response:	NOV/CAM (IU Response due in 2 weeks)
k.	Circumstance:	Failure to report changed discharge - impact present
	Action:	Level 2/3
	Specific Response:	NOV/CAM/AO and/or fine subject to hearing (IU Response due in 30 days)
l.	Circumstance:	Falsification of documentation
	Action:	Level 4
	Specific Response:	Referral to City Solicitor
m.	Circumstance:	Late submittal of required enforcement report
	Action:	Level 3
	Specific Response:	NOV with fines of $100/day beginning with day 1 and continuing until date report received up to a maximum of $2,000 per late report.
n.	Circumstance:	Failure to provide telephone notice within 24 hour of knowledge of a self monitoring violation.
	Action:	Level 2
	Specific Response:	NOV/CAM (IU Response due in 2 weeks)

TABLE 1 (continued)
Enforcement Response Guide

2. Noncompliance Item: Monitoring Violation

a.	Circumstance:	Failure to monitor all pollutants required by discharge permit
	Action:	Level 2
	Specific Response:	NOV/CAM (IU Response due in 30 days)
b.	Circumstance:	Failure to install monitoring equipment within specified time
	Action:	Level 3/4
	Specific Response:	NOV/AO and/or fine subject to hearing (IU Response due in 30 days)
c.	Circumstance:	Failure to maintain monitoring equipment
	Action:	Level 2/3
	Specific Response:	NOV/CAM/AO and/or fine subject to hearing (IU Response due in 30 days)
d.	Circumstance:	Denial of access
	Action:	Level 3/4
	Specific Response:	NOV/AO and/or fine subject to hearing Obtain search warrant

3. Noncompliance Item: Sampling/Analytical Violation

a.	Circumstance:	Improper sampling location
	Action:	Level 2
	Specific Response:	NOV/CAM (IU Response due in 2 weeks)
b.	Circumstance:	Improper analytical methods
	Action:	Level 2
	Specific Response:	NOV/CAM (IU Response due in 2 weeks)

II. PERMIT VIOLATIONS

1. Noncompliance Item: Exceeding Permit Effluent Limits

a.	Circumstance:	First occurrence - no impact
	Action:	Level 1
	Specific Response:	NOV requiring a return to compliance

TABLE 1 (continued)
Enforcement Response Guide

b. Circumstance: First occurrence - impact present
Action: Level 2/3
Specific Response: NOV/CAM/AO and/or fine subject to hearing (IU Response due in 30 days)

c. Circumstance: More than one occurrence in twelve month cycle
Action: Level 2/3/4
Specific Response: Dependent upon number of occurrences and their impact

2. Noncompliance Item: Dilution Of Wastestream As Substitute For Pretreatment

a. Circumstance: Willful or otherwise
Action: Level 3/4
Specific Response: NOV/fine subject to hearing/AO or referral to Solicitor (IU Response due in 30 days)

3. Noncompliance Item: Failure To Operate And Maintain Pretreatment Facilities

a. Circumstance: Willful or otherwise
Action: Level 2/3/4
Specific Response: NOV/CAM/AO and/or fine subject to hearing (IU Response due in 30 days)

4. Noncompliance Item: Violation Of Compliance Schedules

a. Circumstance: Late progress report (greater than 30 days)
Action: Level 3
Specific Response: NOV with fines of $100/day beginning with day 1 and continuing until date report received up to a maximum of $2,000 per late report.

5. Noncompliance Item: Violation of Periodic Reporting Requirements

a. Circumstance: Report interval exceeds 9 months
Action: Level 2
Specific Response: NOV/CAM (IU Response due in 30 days)

b. Circumstance: Late permit application
Action: Level 1
Specific Response: Phone call/documentation to file (IU Response due in 1 week)

TABLE 1 (continued)
Enforcement Response Guide

III. UNAUTHORIZED DISCHARGE:

1. Noncompliance Item: Discharge Prohibitions

a.	Circumstance:	No impact
	Action:	Level 1
	Specific Response:	NOV requiring a return to compliance
b.	Circumstance:	Impact present
	Action:	Level 2/3/4
	Specific Response:	NOV/CAM/AO and/or fine subject to hearing (IU Response due in 30 days)

2. Noncompliance Item: Expired Permit

a.	Circumstance:	Willful or negligent
	Action:	Level 1/2
	Specific Response:	NOV/Phone call (IU Response due in 2 weeks)

3. Noncompliance Item: Unauthorized bypass

a.	Circumstance:	Violates permit limits
	Action:	Level 2/3
	Specific Response:	NOV/CAM/AO and/or fine subject to hearing (IU Response due in 30 days)
b.	Circumstance:	Failure to notify District - no impact
	Action:	Level 2/3
	Specific Response:	NOV/CAM/AO and/or fine subject to hearing (IU Response due in 30 days)
c.	Circumstance:	Failure to notify District - impact present
	Action:	Level 2/3/4
	Specific Response:	NOV/CAM/AO and/or fine subject to hearing (IU Response due in 30 days)

4. Noncompliance Item: Slug load or accidental discharge

a.	Circumstance:	Failure to notify District - no impact
	Action:	Level 2/3
	Specific Response:	NOV/CAM/AO and/or fine subject to hearing (IU Response due in 30 days)

TABLE 1 (continued)
Enforcement Response Guide

b. Circumstance: Failure to notify District - impact present
Action: Level 3/4
Specific Response: NOV/CAM/AO and/or fine subject to hearing (IU Response due in 30 days)

5. Noncompliance Item: Operating Upset

a. Circumstance: Failure to notify District - no impact
Action: Level 2/3
Specific Response: NOV/CAM/AO and/or fine subject to hearing (IU Response due in 30 days)

b. Circumstance: Failure to notify District - impact present
Action: Level 2/3/4
Specific Response: NOV/CAM/AO and/or fine subject to hearing (IU Response due in 30 days)

IV. VIOLATIONS DETECTED DURING SITE VISITATION:

1. Noncompliance Item: Illegal Discharge

a. Circumstance: Failure to notify District - no impact
Action: Level 2/3
Specific Response: NOV/CAM/AO and/or fine subject to hearing (IU Response due in 30 days)

b. Circumstance: Failure to notify District - impact present
Action: Level 2/3/4
Specific Response: NOV/CAM/AO and/or fine subject to hearing (IU Response due in 30 days)

2. Noncompliance Item: Access to Records

a. Circumstance: IU refusal
Action: Level 2/3/4
Specific Response: NOV/CAM/AO and/or fine subject to hearing (IU Response due 30 days)

TABLE 1 (continued)
Enforcement Response Guide

3. Noncompliance Item: Accidental Discharge

a.	Circumstance:	Failure to notify District - no impact
	Action:	Level 2/3
	Specific Response:	NOV/CAM/AO and/or fine subject to hearing (IU Response due in 30 days)
b.	Circumstance:	Failure to notify District - impact present
	Action:	Level 2/3/4
	Specific Response:	NOV/CAM/AO and/or fine subject to hearing (IU Response due in 30 days)
c.	Circumstance:	Causes interference/pass-through
	Action:	Level 2/3/4
	Specific Response:	NOV/CAM/AO and/or fine subject to hearing (IU Response due in 30 days)

Note:... In certain non-compliant episodes where a POTW response may come from a choice of Action Levels (i.e. Level 2/3/4), the industrial user Response time given pertains to the highest Action Level taken. The District reserves the right to require industrial users to respond more quickly in the event of an emergency or during other such times as the District deems necessary. the District Rules and Regulations confer on the industrial user certain rights which authorize specific response times.

TABLE 2
Fine Schedule:
Occurrences Exceeding Permit Concentration Limits

Evaluation Criteria	Value	Fine Amount
A. Magnitude of Occurrence		
0% to 20% over limit	$0 to 100[a]	
21% to 50% over limit	100	
51% to 100% over limit	200	
101% to 200% over limit	400	
201% to 300% over limit	600	
301% to 400% over limit	800	
401% or more over limit	1,000	
B. Volume of Discharge (gpd)		
10,000 of less	$200	
10,001 to 50,000	500	
50,001 to 250,000	1,000	
250,001 to 500,000	2,000	
500,001 to 1,000,000	3,000	
Over 1,000,000	4,000	
Subtotal - Base Fine		
C. Adjustment for History of Violations	Base fine multiplier	
Level 1[b]	1	
Level 2[b]	1.5	
Level 3[b]	2	
Total Fine		

[a] Use zero for single grab or daily composite sample; use $100 if occurrence is computed from average of two or more samples.
[b] Refers to Enforcement Action Tier in the District's Enforcement Response Plan.

TABLE 3
Fine Schedule:
Occurrences Exceeding Continuous pH Periods

pH Range Standard Units	Continuous Period of Flow Minutes	Penalty Dollars
Less than 6.0	60	100
Less than 5.0	30	200
Less than 4.0	15	300
Less than 3.0	10	400
Less than 2.0	3	500
More than 10.0	120	100
More than 11.0	45	200
More than 12.0	15	300
More than 13.0	10	400

TABLE 4
Fine Schedule:
Occurrences Exceeding pH Excursion Limits

pH Excursion Level Standard Units	Allowable Frequency of Excursion Events in 8 Hours *	Penalty Dollars
Less than 6.0	No Limit	0
Less than 5.0	6	200
Less than 4.0	4	300
Less than 3.0	3	400
Less than 2.0	2	500
More than 10.0	No Limit	0
More than 11.0	4	200
More than 12.0	3	300
More than 13.0	2	400

TABLE 5
Fine Schedule:
Late Report Filing

Nature of Violation	Action
Level 1. Report late 1-5 days	Notice of Noncompliance issued
Level 2. Report late 6-30 days	Notice of Violation issued
Level 3. Report late 31+ days	Notice of Violation with fines of $100/day beginning with day 31 and continuing until date report received up to a maximum of $2,000 per late report.

TABLE 6
Fine Schedule:
Other Violations

Potential For Harm	Extent of Deviation		
	Major	Significant	Minor
Major	$10,000	$7,000	$4,000
Significant	6,000	3,500	1,500
Minor	2,000	1,200	300

APPENDIX I

Environmental Enhancement Action (EEA) Policy

ENVIRONMENTAL ENHANCEMENT ACTION

ENVIRONMENTAL ENHANCEMENT ACTION POLICY

Background

The Metropolitan Sewer District's (MSD), Division of Industrial Waste (DIW) is responsible for implementation of a Pretreatment Program. This program includes inspecting and sampling industrial users, reviewing monitoring results to determine compliance status, and taking enforcement actions. As required by the National Pretreatment Program, the Division of Industrial Waste developed an Enforcement Response Plan (ERP) in 1986. The ERP describes the process used by the District to identify, document, and respond to pretreatment violations in a timely and equitable manner as required by State, Federal, and local laws. In 1994, the District's Enforcement Response Plan was revised. The final approval was given by the Hamilton County Board of County Commissioners on July 13, 1994 and the document was given an effective date of December 1, 1994. A series of training seminars were provided for all Industrial Users in October and November of 1994. The full implementation of the revised ERP began December 1, 1994. Industrial Users under enforcement at the time were fazed into the new ERP tiered system.

The new ERP greatly enhanced opportunities to communicate between the IU and DIW concerning compliance issues. This is accomplished by requiring Compliance Attainment Meetings (CAM) be held and increasing inspections in response to enforcement. This increased communication has resulted in compliant discharges, greater accuracy in monitoring, protection against spills and implementation of pollution prevention measures by many. This plan and supporting policies developed to follow its guidance work well for the majority of our enforcement cases.

Prior to the development and implementation of the revised ERP, the potential problem an emphasis on fines and penalties alone would present and its impact on our primary goal was identified. Therefore a policy that would provide an impetus to insure compliance for the "long term" was needed. The ERP establishes the procedure to be used to determine fines and penalties to be assessed for violations of the conditions of the Pretreatment Program. It also allows for the use of innovation and creative solutions to environmental problems. As a result of the implementation of the revised ERP, MSD, DIW also developed the Environmental Enhancement Action (EEA) policy.

DIW's Environmental Enhancement Action policy uses, as its foundation, the USEPA's Supplemental Environmental Projects (SEP) policy. This allows for environmentally beneficial projects or activities that improve, protect or reduce risks to public health or the environment that are undertaken by the offending IU to be considered in settlement of enforcement actions to offset monetary penalties proposed by the DIW. The USEPA's SEP policy originally published in February 1991 was revised as of May 1, 1998. With this revision DIW's policy was also revised.

Procedure

As administered by the DIW, once a company reaches the ERP level that requires a fine, (In accordance with the ERP, a company is not fined on the first violation unless it is a reporting violation.) representatives are required to attend a Compliance Attainment Meeting (CAM). The purpose of this meeting is to identify the violation and begin to take steps to address and

ENVIRONMENTAL ENHANCEMENT ACTION

eliminate the cause of the violations. Once these actions have been identified, an Administrative Order is issued that specifies the portion of the total fine amount that is to be paid immediately, a compliance schedule, and any other SEP projects that must be completed. The remaining portion of the fine is held in abeyance until the project/projects are completed. In many cases, the elimination of the violations is not a quick or inexpensive solution. Fines and penalties may be added during this time if violations continue to occur. The user is required to implement measures that will minimize these occurrences while identifying a strategy for "long term compliance." The user may be required to bear the cost of a study and installation of pretreatment equipment, additional monitoring (by MSD or self), study and implementation of pollution prevention practices, and/or funding an environmental project. Additionally, a user must demonstrate compliance after implementation of the solution. Once the installation or project has been completed, documentation of the costs incurred by the user must be submitted. In determining the final amount to be paid, the costs incurred as well as the length of time it took the company to become complaint is taken into consideration. The attached chart provides a description of the procedure followed when an enforcement action results in allowing for an EEA.

ENVIRONMENTAL ENHANCEMENT ACTION

ENVIRONMENTAL ENFORCEMENT ACTION

MSD LETTERS	NON/NONs	NOV/CAM	NON/NOV/A0	NON/NOV	NON/NOV	NON/NOV	NON/NOV
FINES ASSESSED			25%	25%	50%	75%	100%
FINES HELD			75%	75%	50%	25%	0%
ENFORCEMENT TIME			0 MONTHS	>>>>>>>>>	12 MONTHS	18 MONTHS	>24 MONTHS **level 3

Once CS and items of the Order are complete, total remaining fines and make decision on what to assess according to expenses for compliance projects (assess 25% and evaluate 75%)

* If the length of AOs exceeds 12 months, heavier penalties may be sought.

* If like violations occur that should be resolved by the IU's existing AO/CSA then these would require no separate enforcement document but would proceed as part of the current Order, fines being assessed with that document timeline. However, if violations not related or resolved by current actions then a separate CSA would need to be agreed on and attached to the existing Order.

* MSD must be able to justify actions taken to offset fines. Inspections, files that identify costs for compliance items, and cost summaries from the IU as documentation of actions implemented which may include but are not limited to, purchase orders and invoices will be required prior to termination of the order.

* EEAs offset a maximum of 75% of the proposed fines. MSD may term these projects EEAs-Environmental Enhancement Actions. Examples of EEAs are P2, Pretreatment, Audits (IAMS, consultant, internal), monitoring, construction/modification of a sample location.

** At ERP Level 3 MSD may examine the benefit of non-compliance

* The timeline for enforcement actions shall be explained in the CAM. Conditions pertaining to escalated enforcement actions are included in the Administrative Order.

APPENDIX J

Sampling/Field Investigation Capabilities

SURVEILLANCE CAPABILITY OF DIW

600, 700 ,800 SERIES SAMPLERS CAN BE USED FOR TREATMENT PLANTS AND SOME INDUSTERIAL USERS THAT REQUIRE A SIMPLE SET UP

600 5 AVAILABLE
700 1 AVAILABLE
800 11 AVAILABLE
800 7 AVAILABLE (STORM WATER SAMPLERS)

900 MAX SAMLPERS ARE USED FOR THE MORE INTERCATE SET UPS. THEY HAVE THE CAPABILITY TO DOWN LOAD THEIR DATA. THEY CAN MONITOR FLOW, PH, RAIN GAUGE ,AND SAMPLE .

900 MAX 10 AVAILABLE COMPOSIT,DISCRETE,PH/ORP,FLOW.
900 MAX 12 AVAILABLE COMPOSIT, DISCRETE, PH/ORP, FLOW, RAIN GUAGE

81002 SERIES BUBBLER FLOW METERS CAN ONLY BE USED FOR FLOW MEASUREMENT AND INITIATING A SAMPLER TO SAMPLE

81002 8 AVAILABLE

950 THIS BUBBLER FLOW METERS CAN ALSO MONITOR FOR Ph/ORP,TEMP, TRACK A RAIN GAUGE AND INITIATE A SIGNAL TO A SAMPLER TO TAKE SAMPLES.

950 **15 BUBBLER , FLOW, PH**
13 BUBBLER, FLOW, PH, RAIN GAUGE

STREAM MONITORING & SPECIAL STUDIES

960 FLOW METERS HAVE BUBBLER, AREA VOLICITY,ULTRA SONIC, MEASUREMENT. THEY CAN MONITOR FOR pH/ORP,TEMPATURE ,DISOLVED OXYGEN/CONDUCTIVITY, AND TRACK A RAIN GAUGE. THEY ALSO HAVE A MODEM WITH PHONE AND CAN BE PLACED AT A HAZERDOUS LOCATION AND BE MONITORED IN REAL TIME AT A REMOTE LOCATION USING COMPUTER LINKS

960 **5 AVAILABLE with PHONES**

DATASONDE 4/ MINISOND
HYDRO LABS ARE USED TO MONITOR RECEIVING STREAMS FOR PH ,DO TURBIDITY,TEMPATURE AND CONDUCTIVITY

MODEL 4 1 AVAILABLE

YSI MODEL 50 DISOLVED OXYGEN METER DO TESTING

50 MODEL 1 AVAILABLE

ORION MODEL 115 CONDUCTIVITY METER CONDUCTIVITY TEST

115 1 AVAILABLE

GX-86, STM2100,AND TMX412 GAS METERS ARE USED TO MONITOR FOR ,LEL, O2, H2S, CO. NOT ONLY ARE THEASE USED FOR CONFINED SPACE, THEY LET THE USER KNOW IF THEY MOVE INTO A DANGEROUS ATMOSPHERE OR IF THR ATMOSPHERE CHANGE S AT ANY LOCATION. SOME (STM2100) ARE USED TO MONITOR ATMOSPHERES IN SEWWERS OVER A PERIOD OF TIME, DATA CAN BE DOWN LOADED TO A COMPUTOR

GX-86	**9 AVAILABLE**
STM2100	**4 AVAILABLE**
TMX412	**4 AVAILABLE**

APPENDIX K

Analytical Capabilities

Metropolitan Sewer District
Division of Industrial Waste – Laboratory Section
Waste Water Analyses

Analysis

Alkalinity
Ammonia
Chromium hexavalent
Carbonaceous Oxygen Demand (COD)
Biochemical Oxygen Demand (BOD)
Cyanide, total
Cyanide, free
Cyanide, amendable
Fecal
Hardness
Metals
  Mercury
Metals GFAA
  Arsenic
  Selenium
  Lead
  Thallium
Metals ICP
  Cadmium
  Chromium
  Copper
  Nickel
  Lead
  Zinc
  Silver
  Barium
  Beryllium
  Cobalt
  Manganese
  Antimony
  Selenium
  Thallium
  Iron
  Aluminum
  Magnesium
  Arsenic
Nitrate
Nitrite
Oil & Grease
Volatile Organics (624)
  Bromochloromethane
  Chloromethane
  Vinyl Chloride
  Bromomethane
  Chloroethane
  Trichlorofluoromethane
  Acrolein

1,1-Dichloroethene
Acrylonitrile
Methylene Chloride
Trans-1,2-Dichloroethene
1,1-Dichloroethane
Chloroform
2-Bromo,1-Chloropropane
1,2-Dichloroethane
1,1,1-Trichloroethane
Carbon Tetrachloride
Benzene
Trichloroethene
2-Chloroethylvinylether
1,2-Dichloropropane
Bromodichloromethane
cis-1,3-Dichloropropene
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Dibromochloromethane
Bromoform
1,4-Dichlorobutane
Tetrachloroethene
1,1,2,2-Tetrachloroethane
Toluene
Chlorobenzene
Ethylbenzene
Bromofluorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,2-Dichlorobenzene

Semi-Volatiles (BNA 624)

n-Nitrosodimethylamine
2-Fluorophenol
Phenol
Bis(2-chloroethyl)ether
2-Chlorophenol
Bis(2-chloroisopropyl)ether
n-Nitrosodi-n-propylamine
Hexachloroethane
Naphthalene
Nitrobenzene
Isophorone
Decafluorobiphenyl
2-Nitrophenol
2,4-Dimethylphenol
Bis(2-chloroethoxyl)methane
2,4-Dichlorophenol
1,2,4-Trichlorobenzene
1-Fluoronaphthalene

Hexachlorobutadiene
4-Chloro-3-methylphenol
Hexachlorocyclopentadiene
2,4,6-Trichlorophenol
2-Chloronaphthalene
Dimethyl phthalate
Acenaphthylene
2,6-Dinitrotoluene
Acenaphthene
2,4-Dinitrophenol
4-Nitrotophenol
2,4-Dinitrotoluene
Diethyl phthalate
4-Chlorophenyl phenyl ether
Fluorene
4,6-Dinitro-o-cresol
n-Nitrosodiphenylamine
1,2-Diphenylhydrazine
2,4,6-Tribromophenol
4-Bromophenyl phenyl ether
Hexachlorobenzene
Pentachlorophenol
Phenanthrene
Anthracene
Di-n-butyl phthalate
Fluoranthene
Benzidine
Pyrene
Butyl benzyl phthalate
3,3'-Dichlorobenzidine
Benzo(a)anthracene
Chrysene
Bis(2-ethylhexyl)phthalate
Di-n-octyl phthalate
Benzo(b)fluoranthene
Benzo(k)fluoranthene
Benzo(a)pyrene
Indeno(1,2,3-cd)pyrene
Dibenzo(ghi)perylene
Dibenzo(a,h)anthracene

Pesticides/PCB

Aldrin
Dieldrin
Chlordane
4,4'-DDT
4,4'DDE
4,4'DDD
alpha endosulfan

- beta endosulfan
- endosulfan sulfate
- Endrin
- Endrin aldehyde
- Heptachlor
- Heptachlor epoxide
- alpha BHC
- Beta BHC
- Lindane (gamma BHC)
- Delta BHC
- PCB-1242
- PCB-1254
- PCB-1221
- PCB-1232
- PCB-1248
- PCB-1260
- PCB-1016
- Toxaphene
- Methoxychlor

PH
Solids
TKN
TKP
Volatile solids
Vapor Space Organics

Laboratory Information Management System (LIMS)

DIW has a laboratory Information Management System (LIMS) for tracking and managing its analytical data. The LIMS system is a personal computer based system and operates on a 32-bit client/server network. It has a windows based operating system on an Oracle database. The LIMS is installed on our LAN and have the potential for installation on a wide area network (WAN) linking two or more sites.

The system provides multilevel security on the LIMS as well as network security. This ensures that the data is secure and any changes are traceable. Samples can be logged into the LIMS using self-generated bar code labels. Samples may be logged in individually or as a group.

Each client is given a unique location identifier that includes testing required, invoice information (where required), maximum holding times, and location description. Each location code has upper and lower warning limits and target results. These specifications are checked each time a sample result for that location is entered or validated. Results that exceed the limits are immediately color coded on the screen.

Quality assurance package attached to the LIMS allows for statistical charts to be generated for all the QA parameters. The LIMS also has the capability to chart the results of individual parameters and to display and print the results immediately.

Reports maybe generated in Access, Excel, Word or any third party software package. The report can be exported to other programs or to the e-mail system.

The system has a project management component and an Industrial Pretreatment module. These modules allow tracking our industrial clients and issuing notice of violation to the managers. At present this module is not used. Pretreatment information is maintained in a separate database.

PREFACE

M.S.D.LAB. believes that the commitment of all within its organization to a comprehensive Quality Assurance Program Plan is a necessity to meet the objectives of this analytical laboratory. The following Laboratory Quality Management Plan is an embodiment of the current practices of quality assurance/quality control at M.S.D.LAB. The in-house quality assurance program is aimed at the production of data of known quality and integrity, while sustaining a minimum loss of data due to out-of-control conditions.

Each laboratory section is responsible for keeping an updated version of Standard Operating Procedures (SOP) applicable to that section. To ensure continuity of analysis throughout the laboratory, specifics in the areas such as sample handling, instrument calibration, quality control measures, injection technique, data acquisition, data processing, and autosampler procedures are thoroughly explained in each SOP. Following the guidelines stated in SOPs, M.S.D. obligations and method specifications can be met.

The practices of quality assurance/quality control presented in the following text are set forth as minimums, and any additional measures that M.S.D. requires can be incorporated into the quality assurance/quality control project plan. The minimums set forth should be considered, as such, minimums.

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Appendix A: Qualifications of Personnel

Appendix B: Analytical Methodologies

Instruments & Capabilities of the DIW Laboratory

2 Flow Injection Analyzers
5 Analytical Balances
1 Ion Chromatograph
1 GCMS
1 GCMS with Purge and Trap
Glass/plastic ware for organic prep
10 Hot plates for metals prep
1 ICP
1 ICPMS
1 Graphite Furnace AA
1 Hg Atomic Fluorescence
1 Hg AA
Water bath for Fecals
2 Incubators