

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER DIVISION

In the matter of administrative
proceedings against:

ACO-SW03-003
Date Entered: September 4, 2003

City of Ann Arbor
100 North Fifth Avenue
P.O. Box 8647
Ann Arbor, Michigan 48107

ADMINISTRATIVE CONSENT ORDER

This proceeding results from allegations by the Water Division (WD) of the Department of Environmental Quality (DEQ). The DEQ alleges that the City of Ann Arbor (City), which owns and operates a wastewater treatment plant (WWTP), located at 49 South Dixboro Road, Ann Arbor, County of Washtenaw, Michigan, is in violation of Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) MCL 324.3101 et seq.; and the rules promulgated under Part 31. The City and the DEQ agree to resolve the violations set forth in the Findings section of this Consent Order and to terminate this proceeding by entry of this Consent Order.

I. STIPULATIONS

The City and the DEQ stipulate as follows:

- 1.1 The NREPA, MCL 324.101 et seq. is an act that controls pollution to protect the environment and natural resources in the state.
- 1.2 Article II, Pollution Control, Part 31, Water Resources Protection, of the NREPA (Part 31), MCL 324.3101 et seq., and rules promulgated pursuant thereto, provides for the protection, conservation, and the control of pollution of the water resources of the state.
- 1.3 Section 3109(1) of Part 31 states: "A person shall not directly or indirectly discharge into the waters of the state a substance that is or may become injurious to: the public health, safety, or welfare; to domestic, commercial, industrial, agricultural, recreational, or other

uses that are being made or may be made of such waters; to the value or utility of riparian lands, or to livestock, wild animals, birds, fish, aquatic life, or plants or to the growth or propagation, or the growth or propagation thereof be prevented or injuriously affected; or whereby the value of fish and game is or may be destroyed or impaired."

- 1.4 Section 3112(1) of Part 31 states: "A person shall not discharge any waste or waste effluent into the waters of this state unless that person is in possession of a valid permit from the Department."
- 1.5 The DEQ is authorized by Section 3112(2) of Part 31 of the NREPA to enter orders requiring persons to abate pollution and, therefore, the Director has authority to enter this Consent Order with the City.
- 1.6 The Director has delegated authority to the Division Chief of the WD to enter into this Consent Order.
- 1.7 The City and the DEQ agree that the signing of this Consent Order is for settlement purposes only and does not constitute an admission by the City that the law has been violated.
- 1.8 This Consent Order becomes effective on the date of execution ("effective date of this Consent Order") by the WD Chief.
- 1.9 The City shall achieve compliance with the aforementioned regulations in accordance with the requirements contained in Section III, Compliance Program, of this Consent Order.

II. FINDINGS

- 2.1 The City discharges treated municipal wastewater from its WWTP through outfall 001A to the Huron River authorized by National Pollutant Discharge Elimination System Permit Number MI0022217 issued by the DEQ on December 19, 2000.

- 2.2 The City completed a Sanitary Sewer Trunk Line Study in 1995. The study was undertaken to evaluate the major sewage transport system to determine what system improvements would be needed to meet the City's immediate and future sewage transportation needs. Sewer system improvements were identified. Specific modifications were prioritized and the work is ongoing.
- 2.3 During heavy rain events the City's sanitary sewer system experiences excessive inflow and infiltration resulting in Sanitary Sewer Overflows (SSOs). The following chart lists the dates and discharge volumes of SSOs that occurred between March 1997 and June 2002, from the City's sanitary sewer system and/or bypasses at the WWTP.

List of Dates and Volume of Discharges from the City of Ann Arbor Sanitary Sewer System:

Date of SSO	Volume Discharged (gallons)	Cause of SSO
March 31, 1997	200	Sewer blockage
September 5, 1997	Unknown	Sewer blockage
March 9, 1998	Unknown	Surcharging manholes at three separate locations due to heavy rains. Basement floodings also occurred.
July 8, 1998	150-200	Sewer blockage
August 6, 1998	168,000	Bypass at outfall 002 due to heavy rains. Hydraulic pumping capacity exceeded.
September 29, 1998	Unknown	Broken sanitary sewer line
March 30, 1999	Unknown	Sewer blockage
April 23-24, 1999	1,120,000	Bypass at outfall 005 due to heavy rains.
July 10, 2000	Unknown	SSO on Swift Run Trunk Line due to heavy rains.
July 6, 2001	Unknown	Sewer blockage caused by roots
October 17, 2001	2,000	Heavy rained caused flows to inadvertently enter influent channel at plant which was under construction and overflow to storm sewer.
April 22, 2002	200	Plugged sanitary sewer main
June 24, 2002	700	Force main break

III. COMPLIANCE PROGRAM

IT IS THEREFORE AGREED AND ORDERED THAT the City will take the following actions to work toward the elimination of SSOs and prevent further violations of Part 31 of the NREPA:

FOOTING DRAIN DISCONNECTION (FDD) PROJECT

- 3.1 In order to eliminate SSOs, flow must be removed from the sanitary sewer system. The primary method of flow reduction selected by the City is FDD. The scope of services for monitoring flow removals achieved by the FDDs is contained in Appendix A. Field investigation by City personnel revealed the range of footing drain flows to the sanitary sewer system to be 2–15 gallon/minute (gpm) per individual footing drain connection. Using an assumed average flow of 4 gpm per footing drain connection, the City shall perform FDDs within the sanitary sewer system at 620 locations. Footing drain connections at 155 locations will be removed from the City sanitary sewer system on or before **June 30, 2004 and every year thereafter by June 30 through June 30, 2007 or until 620 FDDs are completed as required by this Consent Order.**

Monitoring of flows from a representative sampling of FDDs will occur during the first two years of the project, from January 2001 to January 2003. The purpose of this monitoring is to confirm the flows being removed from the sanitary sewer system. Should the City fail to confirm that adequate flows are being removed from the sanitary sewer system flow monitoring shall continue at the discretion of the Jackson District Office Supervisor.

- 3.2 Flow monitoring and hydraulic modeling shall be conducted system-wide to certify that the system meets or will meet criterion based upon a corrective action plan. The criterion specified shall be the design criterion for transport throughout the sewer system of peak flows equal to the maximum hourly flow produced by a historically typical 25-year, 24-hour precipitation event during growth conditions and normal soil moisture and provide storage for subsequent treatment of excess flow which is generated by a 25-year, 24-hour precipitation event; or shall be the performance criterion of transport throughout the sewer system of peak flows produced by historically typical precipitation events resulting

in a predictable long-term average occurrence of SSOs no more frequently than one every ten years. This certification shall be submitted to the DEQ, WD, District Supervisor, 301 E. Glick Highway, Jackson, Michigan 49201, on or before **June 30, 2006**.

OFFSET MITIGATION PROGRAM

- 3.3 The City shall immediately implement an Offset-Mitigation Program (O-MP) that requires for each new premise connected to the system, that there shall be a reduction of 1,680 gallons per day (gpd) per residential equivalent unit of peak flow I/I in the City's sanitary sewer system. Pre-existing residential dwelling units served by on-site sewage treatment systems shall be exempt from required offset-mitigation. Each single-family residential unit (r.u.) shall be equivalent to 350 gpd. Dry weather flows for other uses shall be determined based on the city's Table A, which is contained in Appendix B. Credits shall be granted by the DEQ based on a 4-gpm rate for residential footing drains. Credits may be achieved through the removal of illegitimate connections, the removal of footing drains, roof drains, parking lot drains or other approvable actions that remove flow from the City's sanitary sewer system. The City shall submit to the DEQ the total number of credits achieved, the descriptions of actions taken, addresses where actions were taken and the calculations supporting those credits with each Part 41 permit application. The total number of credits granted to the City at the onset of this O-MP shall be 179, which is based upon the number of FDDs completed by the City since the start of the City's program in October 2000 and completed prior to June 30, 2003. The 179 is a credit bank and does not count against the 155 FDD per year required in Paragraph 3.1. Subsequent credits shall be granted to the City annually on June 30 each year based upon actual FDDs (155) completed during the previous 12 months with no credit being earned for the first 145 FDDs removed per year, for each year during the term of this Consent Order.

Where new premises are connected to the City system in areas outside the jurisdictional boundary of the City, the DEQ shall require the Part 41 permit applicant to demonstrate as a condition of the permit issuance that the collection system capacity exists or is being provided by a specific agreement with the City. The DEQ shall accept a statement with supporting documentation consistent with the Part 41 permit application process from the

City certifying that collection system capacity is available, along with supporting data, as sufficient demonstration for the permit applicant. Collection system capacity for premises connected in areas outside of the City's jurisdiction may be provided by contractual means, specified agreement or off-set mitigation as provided for in the O-MP contained herein.

- 3.4 An annual progress report detailing the number of footing drain locations disconnected and any additional flow removed to offset development from the City sanitary sewer system, including any flow monitoring data obtained to confirm flows, to confirm that the objectives of the FDD project are being met for the 12 months preceding June 30 shall be submitted to the DEQ on or before **July 30 of each year beginning July 30, 2004 and ending July 30, 2007.**

The DEQ will verify the data in the annual report in a timely manner after receipt of the report. Should the City fail to prove that the objectives of the FDD project and O-MP have been achieved, the DEQ reserves the right to delay issuance of Part 41 permits until the City can prove that said objectives have been met. The O-MP may be modified by mutual agreement at the request of the City or the DEQ. The O-MP shall terminate upon the expiration date of this Consent Order.

SWIFT RUN TRUNK PROJECT

- 3.5 The City shall submit an approvable work plan and accompanying schedule for improvements that are to be made to the Swift Run Trunk sewer in order to work toward the elimination of SSOs and to correct capacity issues to the DEQ on or before **June 30, 2005.** The approvable schedule shall be incorporated into this Consent Order as an enforceable requirement by reference. See Section IV for specifications regarding DEQ approval of the Swift Run Trunk submittals.
- 3.6 The City shall submit all reports, work plans, specifications, schedules, or any other writing required by this section to the District Supervisor, WD, DEQ, 301 E. Louis B. Glick Hwy., 4th Floor, Jackson, Michigan 49201. The cover letter with each submittal shall

identify the specific paragraph and requirement of this Consent Order that the submittal is intended to satisfy.

IV. DEQ APPROVAL OF SUBMITTALS

- 4.1 All work plans, proposals, and other documents, excluding applications for permits or licenses, that are required by this Consent Order shall be submitted by the City to the DEQ for review and approval.
- 4.2 All work plans, proposals, and other documents required to be submitted by this Consent Order shall include all of the information required by the applicable statute and/or rule, and all of the information required by the applicable paragraph(s) of this Consent Order.
- 4.3 In the event the DEQ disapproves a work plan, proposal, or other document, it will notify the City, in writing, of the specific reasons for such disapproval. The City shall submit, within thirty (30) days of receipt of such disapproval, a revised work plan, proposal, or other document which adequately addresses the reasons for the DEQ's disapproval. Disapproval of the revised work plan, proposal and other document constitutes a violation of the Consent Order requirements and is subject to stipulated penalties according to Section IX.
- 4.4 In the event the DEQ approves with specific modifications, a work plan, proposal, or other document, it will notify the City, in writing, of the specific modifications required to be made to such work plan, proposal, or other document prior to its implementation and the specific reasons for such modifications. The DEQ may require the City to submit, prior to implementation and within thirty (30) days of receipt of such approval with specific modifications, a revised work plan, proposal, or other document which adequately addresses such modifications. If the revised work plan, proposal or other document is still not acceptable to the DEQ, the DEQ will notify the City of this disapproval. Disapproval of the revised work plan, proposal and other document constitutes a violation of the Consent Order requirements and is subject to stipulated penalties according to Section IX.

- 4.5 Any delays caused by the City's failure to submit an approvable work plan, proposal, or other document when due shall in no way affect or alter the City's responsibility to comply with any other deadline(s) specified in this Consent Order.
- 4.6 No informal advice, guidance, suggestions, or comments by the DEQ regarding reports, work plans, plans, specifications, schedules or any other writing submitted by the City will be construed as relieving the City of its obligation to obtain written approval, if and when required by this Consent Order.

V. EXTENSIONS

- 5.1 The City and the DEQ agree that the DEQ may grant the City a reasonable extension of the specified deadlines set forth in this Consent Order. Any extension shall be preceded by a timely written request to the Jackson District Supervisor at the address in paragraph 3.2, and shall include:
- a. Identification of the specific deadline(s) of this Consent Order that will not be met,
 - b. A detailed description of the circumstances which will prevent the City from meeting the deadline(s),
 - c. A description of the measures the City has taken and/or intends to take to meet the required deadline; and
 - d. The length of the extension requested and the specific date on which the obligation will be met.

The DEQ shall respond in writing to such requests. No change or modification to this Consent Order shall be valid unless in writing from the DEQ, and if applicable, signed by both parties.

VI. REPORTING

6.1 The City shall verbally report any violation(s) of the terms and conditions of this Consent Order to the Jackson District Supervisor by no later than the close of the next business day following detection of such violation(s) and shall follow such notification with a written report within five (5) business days following detection of such violation(s). The written report shall include a detailed description of the violation(s), as well as a description of any actions proposed or taken to correct the violation(s). The City shall report any anticipated violation(s) of this Consent Order to the above-referenced individual in advance of the relevant deadlines whenever possible.

VII. RETENTION OF RECORDS

7.1 Upon request by an authorized representative of the DEQ, the City shall make available to the DEQ all records, plans, logs, and other documents required to be maintained under this Consent Order or pursuant to Part 31 of the NREPA or its rules. All such documents shall be retained by the City for at least a period of three (3) years from the date of generation of the record unless a longer period of record retention is required by Part 31 of the NREPA, or its rules.

VIII. RIGHT OF ENTRY

8.1 The City shall allow any authorized representative or contractor of the DEQ, upon presentation of proper credentials, to enter upon the premises of the Ann Arbor WWTP at all reasonable times for the purpose of monitoring compliance with the provisions of this Consent Order. This paragraph in no way limits the authority of the DEQ to conduct tests and inspections pursuant to the NREPA and the rules promulgated there under, or any other applicable statutory provision.

IX. PENALTIES

9.1 The City agrees to pay to the State of Michigan **TWENTY-FIVE HUNDRED (\$2,500) DOLLARS** as partial compensation for the cost of investigations and enforcement activities arising from the discharge of sanitary sewage to waters of the state. Payment

shall be made within thirty (30) days in accordance with paragraph 9.5.

- 9.2 The City agrees to pay a civil penalty of ~~SEVENTY FIVE HUNDRED (\$7,500) DOLLARS~~ for the illegal discharge of sanitary sewage to waters of the state. Payment shall be made within thirty (30) days in accordance with paragraph 9.5.
- 9.3 The City agrees to pay stipulated penalties of **ONE THOUSAND (\$1,000) DOLLARS** per day for each failure to meet the requirements or dates of the corrective program set forth in Section III, Compliance Program of this Consent Order. The City shall pay accrued stipulated penalties by check made payable to the State of Michigan and delivered to the address in paragraph 9.5 no later than ten (10) days after the end of the month in which violations occurred and without request from the DEQ.
- 9.4 To ensure timely payment of the above civil fine, costs, and stipulated penalties, the City shall pay an interest penalty to the General Fund of the State of Michigan each time it fails to make a complete or timely payment. This interest penalty shall be based on the rate set forth at MCL 600.6013(6), using the full increment of amount due as principal, and calculated from the due date for the payment until the delinquent payment is finally made in full.
- 9.5 The City agrees to pay all funds due pursuant to this agreement by check made payable to the State of Michigan and delivered to the Michigan Department of Environmental Quality, Financial & Business Services Division, Revenue Control Unit, P.O. Box 30657, 525 West Allegan Street, 5th floor south, Lansing, MI 48909. To ensure proper credit, all payments made pursuant to this Order must include the **Payment Identification Number WTR3010**. All funds shall be paid within thirty (30) days of entry of this agreement unless otherwise noted.
- 9.6 The City agrees not to contest the legality of the civil fine or costs paid pursuant to paragraphs 9.1, and 9.2, above. The City further agrees not to contest the legality of any stipulated penalties or interest penalties assessed pursuant to paragraphs 9.3 and 9.4, above, but reserves the right to dispute the factual basis upon which a demand by the DEQ for stipulated penalties or interest penalties is made.

- 9.7 Any penalty not received by the DEQ for a violation under this Consent Order within the deadline defined herein constitutes a separate violation subject to additional stipulated penalties.

X. DISPUTE RESOLUTION

- 10.1 Unless otherwise provided in this Consent Order, the dispute resolution procedures of this section shall be the exclusive mechanism to resolve disputes arising under or with respect to this Consent Order. However, the procedures set forth in this section shall not apply to actions by the state to enforce obligations of the City that are not disputed in accordance with this section. Initiation of formal or informal dispute resolution shall not be cause for the City to delay the performance of any compliance requirements or response activity.
- 10.2 Any dispute that arises under this Consent Order shall in the first instance be the subject of informal negotiations between the parties. The period of negotiations shall not exceed twenty (20) days from the date of written notice by any party that a dispute has arisen, unless the time period for negotiations is modified by written agreement between the parties. A dispute under this section shall occur when one party sends the other party a written notice of dispute. If agreement cannot be reached on any issue within this twenty (20)-day period, the DEQ shall provide a written statement of its decision to the City and, in the absence of initiation of formal dispute resolution by the City under paragraph 10.3, the DEQ position, as outlined in its written informal decision, shall be binding on the parties.
- 10.3 If the City and the DEQ cannot informally resolve a dispute under paragraph 10.2, the City may initiate formal dispute resolution by requesting review of the disputed issues by the DEQ, WD Chief. This written request must be filed with the DEQ, WD Chief within fifteen (15) days of the City's receipt of the DEQ's informal decision that is issued at the conclusion of the informal dispute resolution procedure set forth in paragraph 10.2. The City's request shall state the issues in dispute; the relevant facts upon which the dispute is based; any factual data, analysis, or opinion supporting its position; and all supporting documentation upon which the City bases its position. Within twenty-one (21) days of the WD Chief's receipt of the City's request for a review of disputed issues, the WD Chief will

provide a written statement of decision to the City, which will include a statement of his/her understanding of the issues in dispute; the relevant facts upon which the dispute is based; any factual data, analysis, or opinion supporting her/his position; and all supporting documentation relied upon by the WD Chief's review of the disputed issues. The WD Chief's time period for review of the disputed issues may be extended by written agreement of the parties.

- 10.4 The written statement of the WD Chief issued under paragraph 10.3 shall be a final decision and is binding on the parties unless, within twenty-one (21) days under the Revised Judicature Act after receipt of DEQ's written statement of decision, the City files a petition for judicial review in a court of competent jurisdiction that shall set forth a description of the matter in dispute, the efforts made by the parties to resolve it, the relief requested, and the schedule, if any, within which the dispute must be resolved to ensure orderly implementation of this Consent Order.
- 10.5 An administrative record of the dispute shall be maintained by DEQ. The administrative record shall include all of the information provided by the City pursuant to paragraph 10.3, as well as any other documents relied upon by DEQ in making its final decision pursuant to paragraph 10.3. Where appropriate, DEQ shall allow submission of supplemental statements of position by the parties to the dispute.
- 10.6 In proceeding on any dispute as to whether the City has met its obligations under this Consent Order, and on all other disputes that are initiated by the DEQ, the DEQ shall bear the burden of persuasion on issues of both fact and law. In proceedings on all other disputes initiated by the City, the City shall bear the burden of persuasion on issues of fact and law.
- 10.7 Notwithstanding the invocation of dispute resolution procedures under this section, stipulated penalties shall accrue from the first day of any failure or refusal to comply with any term or condition of this Consent Order, but payment shall be stayed pending resolution of the dispute. Stipulated penalties shall be paid within thirty (30) days after resolution of the dispute. The City shall pay that portion of a demand for payment of stipulated penalties that is not subject to dispute resolution procedures in accordance

with and in the manner provided in Section IX (Penalties). Failure to make payment by the City within the 30-day deadline constitutes a separate violation of the agreement and is subject to additional stipulated penalties.

XI. FORCE MAJEURE

- 11.1 The City shall perform the requirements of this Consent Order within the time limits established herein, unless performance is prevented or delayed by events that constitute a "Force Majeure." Any delay in the performance attributable to a "Force Majeure" shall not be deemed a violation of the City's obligations under this Consent Order in accordance with this section.
- 11.2 For the purpose of this Consent Order, "Force Majeure" means an occurrence or non-occurrence arising from causes not foreseeable, beyond the control of, and without the fault of the City and that delay the performance of an obligation under the Consent Order, such as, but not limited to: an Act of God, untimely review of permit applications or submissions by the DEQ or other applicable authority, and acts or omissions of third parties that could not have been avoided or overcome by the City's diligence, such as, but not limited to strikes, lockouts, court orders and the unavailability of contractors to perform the work. "Force Majeure" does not include, among other things, unanticipated or increased costs, changed financial circumstances, or failure to obtain a permit or license as a result of the City's actions or omissions.
- 11.3 The City shall notify the DEQ, by telephone, within forty-eight (48) hours of discovering any event which causes a delay in its compliance with any provision of this Consent Order. Verbal notice shall be followed by written notice within ten (10) calendar days and shall describe, in detail, the anticipated length of delay, the precise cause or causes of delay, the measures taken by the City to prevent or minimize the delay, and the timetable by which those measures shall be implemented. The City shall adopt all reasonable measures to avoid or minimize any such delay.
- 11.4 Failure of the City to comply with the notice requirements and time periods under paragraph 11.3, shall render this Section XI void and of no force and effect as to the

particular incident involved. The DEQ may, at its sole discretion and in appropriate circumstances, waive in writing the notice requirements of paragraph 11.3, above.

- 11.5 If the parties agree that the delay or anticipated delay was beyond the control of the City, this may be so stipulated and the parties to this Consent Order may agree upon an appropriate modification of this Consent Order. If the parties to this Consent Order are unable to reach such agreement, the dispute shall be resolved in accordance with Section X (Dispute Resolution) of this Consent Order. The burden of proving that any delay was beyond the reasonable control of the City and that all the requirements of this Section XI have been met by the City rests with the City.
- 11.6 An extension of one compliance date based upon a particular incident does not necessarily mean that the City qualifies for an extension of a subsequent compliance date without providing proof regarding each incremental step or other requirement for which an extension is sought.

XII. GENERAL PROVISIONS

- 12.1 With respect to any violations not specifically addressed and resolved by this Consent Order, the DEQ reserves the right to pursue any other remedies to which it is entitled for any failure on the part of the City to comply with the requirements of the NREPA and its rules.
- 12.2 The DEQ and the City consent to enforcement of this Consent Order in the same manner and by the same procedures for all final orders entered pursuant to Part 31, MCL 324.3101 et seq.; and enforcement pursuant to Part 17, Michigan Environmental Protection Act, of the NREPA, MCL 324.1701 et seq.
- 12.3 This Consent Order in no way affects the City's responsibility to comply with any other applicable state, federal, or local laws or regulations.
- 12.4 The WD, at its discretion, may seek stipulated fines or statutory fines for any violation of this Consent Order. However, the WD is precluded from seeking both a stipulated fine under this Consent Order and a statutory fine for the same violation.

- 12.5 Nothing in this Consent Order is or shall be considered to affect any liability the City may have for natural resource damages caused by the City's ownership and/or operation of the Ann Arbor WWTP. The State of Michigan does not waive any rights to bring an appropriate action to recover such damages to the natural resources.
- 12.6 In the event the City sells or transfers the Ann Arbor WWTP, it shall advise any purchaser or transferee of the existence of this Consent Order in connection with such sale or transfer. Within thirty (30) calendar days, the City shall also notify the WD Jackson District Supervisor, in writing, of such sale or transfer, the identity and address of any purchaser or transferee, and confirm the fact that notice of this Consent Order has been given to the purchaser and/or transferee. The purchaser and/or transferee of this Consent Order must agree, in writing, to assume all of the obligations of this Consent Order. A copy of that agreement shall be forwarded to the WD Jackson District Supervisor within thirty (30) days of assuming the obligations of this Consent Order.
- 12.7 The provisions of this Consent Order shall apply to and be binding upon the parties to this action, and their successors and assigns. The City shall give notice of this Consent Order to any prospective successor in interest prior to transfer of ownership and shall notify the DEQ of such proposed sale or transfer.

XIII. TERMINATION

- 13.1 This Consent Order shall remain in full force until terminated by a written Notice of Termination issued by the DEQ. Prior to issuance of a written Notice of Termination, the City shall submit a request consisting of a written certification that the City has fully complied with the requirements of this Consent Order and has made payment of any fines, including stipulated penalties, required in this Consent Order. Specifically, this certification shall include:
- a. The date of compliance with each provision of the compliance program in section III, and the date any fines or penalties were paid,

- b. A statement that all required information has been reported to the District Supervisor; and
- c. Confirmation that all records required to be maintained pursuant to this Consent Order are being maintained at the Ann Arbor City Hall.

The DEQ may also request additional relevant information. The DEQ shall not unduly withhold issuance of a Notice of Termination.

Signatories

The undersigned CERTIFY they are fully authorized by the party they represent to enter into this Consent Order to comply by consent and to EXECUTE and LEGALLY BIND that party to it.

DEPARTMENT OF ENVIRONMENTAL QUALITY

Richard A. Powers
Richard A. Powers, Chief
Water Division

Richard A. Powers 9-4-07
Date

CITY OF ANN ARBOR

John Hieftje
By: John Hieftje, Mayor

8-25-03
Date

Kathleen M. Root
Kathleen M. Root, City Clerk

8-26-03
Date

Approved as to substance

Roger W. Fraser
By: Roger W. Fraser, City Administrator

8/21/03
Date

Sue McCormick
Sue McCormick, Director
Water Utilities Department

8/20/03
Date

Approved as to form

Stephen K. Postema *8-20*
By: Stephen K. Postema, City Attorney

8-20-03
Date

APPROVED AS TO FORM:

Alan F. Hoffmann *8/28/03*
By: Alan F. Hoffmann, Assistant Attorney General
For: A. Michael Leffler
Assistant Attorney General in Charge
Natural Resources, Environmental Protection and Agriculture Division
Michigan Department of Attorney General

APPENDIX A

Footing Drain Disconnection (FDD) Program Scope of Services and Other Activities

These final activities are performed to provide verification on removal of flows from the system and to assist with other public engagement needs.

Activity D1 Monitoring

Activity Objective: Coordinate sump pump discharge monitoring program. This effort will include the installation of sump pump monitors and collection of sump pump monitoring information as required. Install and collect information from rainfall gages. Provide 20 sump pump monitors for installation during the life of the project. Install half of the monitors for collection of data over an annual collection period and move the other half periodically (monthly) to gather data from a variety of sites. Install a total of five rain gages within the study areas. Provide analysis of the sump pump operational data and rainfall information. Calculate average footing drain flows from this monitoring information.

Approach and Work Plan

To assess the effectiveness of citywide implementation of the FDD program, footing drain discharges will be evaluated by monitoring the performance of the installed sump pumps. Sump pump monitors are recommended since a relatively small number of homes will be disconnected. Because of this, the flows in the sewer would be dominated by homes that are still connected and it would be difficult to determine the impacts of the disconnected homes using sewer monitoring. The CM will coordinate and install all sump pump discharge monitoring and rain gage monitoring equipment. This effort will include 20 sump pump event monitors and five tipping bucket rain gages installed, one in each of the five study areas.

The installed sump pump monitors will determine the on and off times of the sump pumps to within 0.5 seconds. During installation of the monitors, the pumping rates of the installed sump pump and discharge system will be measured for flow verification/calibration. From these two sources of information, the discharge rates versus time (hydrographs) will be developed. These will be evaluated based on the rainfall that took place for different storms. The sump pump monitors will be downloaded using a communication line installed to the outside of the home. The team will maintain 20 sump pump monitors during the life of the project. A total of 10 of these monitors will be installed at locations that are fixed for a year of monitoring and the remaining 10 monitors will be moved monthly. The fixed monitoring devices will remain in place to allow better understanding of the seasonal variation observed between the monitors. The remaining monitors will provide information on the variability of discharge throughout the areas that have FDD construction.

Statistics on the peak flows generated will be tied to GIS to determine whether spatial and/or topographic trends exist. If the GIS analysis indicates trends that can be extrapolated to the rest of the City, this analysis will be performed. If not, a general extrapolation of results will be made citywide with all assumptions documented. Through these monitoring efforts and extrapolation to the remainder of the City, a better understanding of how the long-term FDD program affects sanitary flows will be gained.

Products and Deliverables

- Provide raw and compiled data files from the monitoring work.
- Produce annual technical memoranda on sump pump performance.
- Provide a draft and final report that documents the collected information and evaluates program effectiveness at the end of the project. 6 – paper copies and 6 CD's of the final report will be provided with report in digital PDF and original format files.

**APPENDIX B
TABLE A**

TYPE OF FACILITY OR USE	DESIGN DRY WEATHER FLOW RATE
Single Family Residence	350 gpd
Two Family Residence	700 gpd
Apartment to a single family unit (up to 400 sq. ft)	200 gpd
Motels with kitchenettes, apartments, condos, mobile homes, trailers, co-ops, etc. up to 600 sq. ft. of gross floor area	200 gpd/unit
Motels with kitchenettes, apartments, condos, mobile homes, trailers, co-ops, etc. up to 601 – 1200 sq. ft. of gross floor area	275 gpd/unit
Motels with kitchenettes, apartments, condos, mobile homes, trailers, co-ops, etc. greater than 1200 sq. ft. of gross floor area	350 gpd/unit
Motel unit less than 400 sq. ft	100 gpd/unit
Motel unit greater than 400 sq. ft.	150 gpd/unit
Hospital (without laundry)	150 gpd/bed
Hospital	300 gpd/bed
University housing, rooming house, institutions	75 gpd/capita
Cafeteria (integral to an office or industrial building)	2.50 gpd/capita
Non-Medical Office space	0.06 gpd/sf gr. floor area
General Industrial Space	0.04 gpd/sf gr. floor area
Medical Arts (doctor, dentist, urgent care)	0.10 gpd/sf gr. floor area
Auditorium/Theater	5 gpd/seat
Bowling alley, tennis court	100 gpd/crt - alley + food
Nursing Home	150 gpd/bed
Church	1.50 gpd/capita
Restaurant (16 seat minimum or any size with dishwasher)	30 gpd/seat
Restaurant (fast food)	20 gpd/seat
Wet Store - Food processing	0.15 gpd/sf gr. floor area
Wet Store no food (barbershop, beauty salon, etc.)	0.10 gpd/sf gr. floor area
Dry Store (no process water discharge)	0.03 gpd/sf gr. floor area
Catering Hall	7.50 gpd/capita
Market	0.05 gpd/sf gr. floor area
Bar, Tavern, Disco	15 gpd/occupant + food
Bath House	5 gpd/occ. + 5gpd/shower
Swimming Pool	20 gpd/capita
Service Stations	300 gpd/double hose pump
Shopping Centers	0.02 gpd/sf gr. sales area
Warehouse	0.02 gpd/sf gr. area
Laundry	425 gpd/laundry machine
Schools, nursery and elementary	10 gpd/student
Schools, high and middle	20 gpd/student
Summer Camps	160 gpd/bed
Spa, Country Club	0.30 gpd.sf. gr. floor area
Industrial Facility, Large Research Facility	"Determined by Authority of
Others (car wash, etc.)	Water Utilities Director"

Values in Table A are from or derived from the following sources:

- Michigan Guidelines for Subsurface Sewage Disposal, 1977
- Schedule of Unit Assignment Factors, 1988, Oakland County Public Works (Michigan)
- Basis of Design, Scio Township (Michigan)
- Sewer Design, 1992, Los Angeles Bureau of Engineering
- Equivalent Residential Unit Determination, University of Central Florida
- Standard Handbook of Environmental Engineering, 1989, Robert Corbitt



JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING

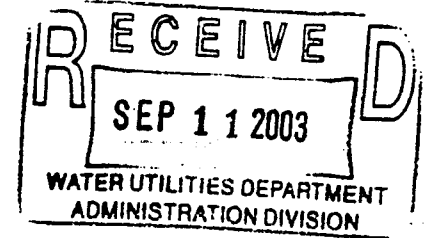


STEVEN E. CHESTER
DIRECTOR

September 8, 2003

CERTIFIED MAIL 7000 0520 0016 5014 9710

Ms. Sue McCormick, Director of Utilities
City of Ann Arbor
P.O. Box 8647
Ann Arbor, Michigan 48107-8647



SUBJECT: Administrative Consent Order ACO-SW03-003

Dear Ms. McCormick:

Enclosed please find a fully executed Administrative Consent Order (Consent Order) for the City of Ann Arbor (City). This Consent Order was entered into between the Department of Environmental Quality (DEQ) and the City on September 4, 2003. Payment of the cost reimbursement and the civil penalty, payable to the DEQ, as required in the Consent Order, was received on September 2, 2003.

Please contact me if you have any questions. Thank you.

Sincerely,

Jodie N. Taylor, Environmental Engineer
Enforcement Unit
Field Operations Section
Water Division
517-373-8545
517-373-2040 Telefax

Enclosure

cc/enc: Mr. Jon Russell, DEQ
Ms. Edwynna McKee, DEQ