FACT SHEET FOR STATE WASTE DISCHARGE PERMIT ST-8082

FACILITY NAME Quadra Chemicals - Spokane

SUMMARY

Quadra Chemicals is located in Spokane Valley, Washington. The facility consists of warehouse, loading dock, solvent tank farm (not in use), caustic tank farm, acid tank farm, tanker truck loading area, railroad tanker offloading area, and container truck loading area which occupies about 2.2 acres. The facility does not produce a finished product. It receives, stores, and distributes various bulk industrial chemicals. The facility has operated in its current configuration since 1990.

Since May 2000, the facility has been discharging into the City of Spokane wastewater collection system since May 2000. Because the facility is located in Spokane Valley and there is no interlocal agreement between the City of Spokane, the City of Spokane Valley, and Spokane County for pretreatment and permitting, the Department of Ecology is the permitting authority for this company.

The facility currently uses approximately 1250 gallons per day which comes from the City of Spokane. This water use consists of domestic (bathroom and drinking facilities), irrigation (for landscaping in the summer months), tanker truck rinse down, boiler condensate, and pressure washing.

The treatment of wastewater from pressure wash containment areas, tanker truck rinse down and tanker truck washout occurs in two wastewater holding tanks. Each tank has 4000 gallon holding capacity. Thus, the facility batch discharges 3300-3500 gallons of non-domestic wastewater to sanitary collection system average each month. Before each discharge, the wastewater is adjusted with Sulfuric acid to ensure that pH is within the range 5 to 12 s.u. Also, each batch is tested for chemical parameters of the City of Spokane Local Limits. In order for the discharge to occur, the facility personnel must connect a hose from the full (approved) holding tank to the discharge pipe in the wastewater meter manhole located below the pavement outside the container truck loading area. The hose is either connected to the bottom of the wastewater tank for gravity flow or pumped from the top if solids buildup prevents gravity flow. Thus, the wastewater and/or process stormwater is pumped from the holding tank, through the meter (where wastewater flow is measured), through a sand trap, and oil/water separator, and then to the City of Spokane sanitary sewer collection system.

The Department proposes that the permit be issued for 5 years.

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INTRODUCTION

This fact sheet is a companion document to the draft State Waste Discharge Permit No. **ST-8082**. The Department of Ecology (the Department) is proposing to issue this permit, which will allow discharge of wastewater to City of Spokane Wastewater Treatment Plant. This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington State law (RCW 90.48.080 and 90.48.160) requires that a permit be issued before discharge of wastewater to waters of the state is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 WAC).

This fact sheet and draft permit are available for review by interested persons as described in Appendix A—Public Involvement Information.

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. The fact sheet will not be revised. Changes to the permit will be addressed in Appendix D—Response to Comments.

GENERAL INFORMATION		
Applicant	Quadra Chemicals Western, Inc	
Facility Name and Address	Quadra Chemicals-Spokane, N 1402 Thierman, City of Spokane Valley, Washington 99212-1125	
Type of Facility:	SIC 5169 Chemical Distributor	
Facility Discharge Location	Latitude: 47° 40' 10" N Longitude: 117° 18' 49" W.	
Treatment Plant Receiving Discharge	City of Spokane Wastewater Treatment Plant, Spokane, Washington	
Contact at Facility	Geary Powell, Operations Manager, 509-928-0195	
Responsible Officials	Name: Steven M Pozzi Title: President Address: 13801 Reese Blvd West Suite 190, Huntersville, NC 28078 Telephone #: (704) 875-9968 FAX #(704) 875-9847	Fred Devereux Nation Operations Manager 5700 NW 14th Avenue Portland, Oregon 97210 (503) 242-0200 (503) 421-3390

BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

Quadra Chemicals is located in Spokane Valley, Washington. A map of their location is in Appendix E – Map #1. The facility consists of warehouse, loading dock, solvent tank farm (not in use), caustic tank farm, acid tank farm, tanker truck loading area, railroad tanker offloading area, and container truck loading area which occupies about 2.2 acres. See Appendix E – Figure #1 – Existing facility layout. The facility does not produce a finished product. It receives, stores, and distributes various bulk industrial chemicals. See Appendix E—Figure #3 – chemical storage areas, for exact locations for storage of each chemical.

HISTORY

The facility was originally constructed in 1974. The original facility included the warehouse facility but not the tank farm. In 1982, the caustic tank farm and boiler room was added. In 1990 further facility modification were done including the expansion of the tank farm facilities. The facility has operated in its current configuration since 1990. The solvent tank farm has not been operating since 1998 and there are no plans at this time to use this area. The facility has been discharging into the City of Spokane wastewater collection system since May 2000. Prior to this, the facility's wastewater (for about 10 years) was disposed of by transporting on tanker trucks and delivering directly to the City of Spokane Wastewater Treatment Facility. Because the facility is located in Spokane Valley and there is no interlocal agreement between the City of Spokane, the City of Spokane Valley, and Spokane County for pretreatment and permitting, the Department of Ecology is the permitting authority for this company. In 2001, the engineering report was completed and in 2003, a secondary containment evaluation was completed. Both were accepted by Department of Ecology on August 26, 2003. These documents describe in detail as the facility is built now.

INDUSTRIAL PROCESSES

Bulk and packaged chemicals are delivered to the facility by railroad tanker cars or container trucks. See Appendix E- Figure #2 (Chemical Transfer Areas) and Figure #3 (Chemical Storage Areas) shows the general areas and the process for this transfer of chemicals to Quadra Chemicals' customers. The chemicals offloaded from the container trucks and are stored in the warehouse. They are then transferred back to container trucks for delivery. The chemicals transported in the railroad tankers are air-unloaded in the tank farm storage tanks. The chemicals are transferred from the storage tanks into tanker trucks for delivery.

For spill containment, the tank farms have reinforced concrete floors and walls that surround each tank farm. The tanker truck and container truck transfer areas have depressed concrete floors with rolled concrete edges, form 8"-12" deep containment basins. All storm water catch basins within the tank farms or transfer areas are equipped with isolating valves. The other catch basins have no fixed piping in them.

All water collected in the storm water catch basins within the tank farms and truck transfer areas is visually inspected for oil contamination and tested for pH levels. Wastewater (water that is potentially oil contaminated or has high pH levels) is pumped to the wastewater holding tanks. Storm water collected in the tank farms, loading basins, containment areas, etc, along with other

rinse and wash water that is not oil contaminated or has normal pH levels is collected and pumped into storm water holding tank. This stormwater is considered process stormwater. Storm water collected in paved parking and driveway areas is either pumped into the storm water storage tank or released to the bioswale. The process stormwater collected and stored in the storm water storage tank is reused by pumping into tanker trucks to dilute the 50% Caustic Soda to 25% Caustic Soda product. If needed, the permittee may request to discharge part of the process stormwater to the City of Spokane POTW.

The facility currently uses approximately 1250 gallons per day which comes from the City of Spokane. This water use consists of domestic (bathroom and drinking facilities), irrigation (for landscaping in the summer months), tanker truck rinse down, boiler condensate, and pressure washing.

The wastewater and stormwater is disposed as follows:

1) Stored Process Storm Waster-The collected water stored in the storm water storage tank and is pumped into tanker trucks to dilute the 50% caustic Soda to 25% Caustic Soda.

2) Boiler- The boiler is used to maintain proper temperature in the caustic soda tanks and/or in the caustic soda railroad tanker cars prior to transfer to the storage tanks. The condensate (water from the cooled steam) from the caustic soda storage tanks is returned to the boiler for reuse and the condensate from the railroad tanker steam coils is vented to the ground and not returned to the boiler.

3) Pressure Wash containment Area—The containment areas and depressed concrete basin areas are occasionally pressure washed as routine maintenance. This water is collected, tested for pH and visually inspected for oil contamination. If contaminated, it is pumped to the wastewater holding tank and treated as described in the Treatment Process of this fact sheet. If not contaminated, it is pumped to the storm water holding tank.

4) Tanker Trunk Rinse down—After a tanker truck is loaded, the connection points are rinsed off. This water is collected in a catch basin and pumped to the wastewater holding tanks. This wastewater is treated as described in the Treatment Process of this fact sheet.

5) Tanker Truck Washout (switch loading). If the contents of a specific tank is changed to another chemical, the tank is washed out prior to loading the new chemical. This wash water is collected in a catch basin and pumped to the wastewater holding tank. This wastewater is treated as described in the Treatment Process of this fact sheet. The washout is done infrequently as it causes excess wear and tear on the tanks.

TREATMENT PROCESSES

The treatment of wastewater from pressure wash containment areas, tanker truck rinse down and tanker truck washout occurs in two wastewater holding tanks. Each tanks have 4000 gallon holding capacity. Each tank is sized to store approximately one-month worth of non-domestic wastewater. Thus, the facility batch discharges 3300-3500 gallons of non-domestic wastewater to sanitary collection system average each month. With two holding tanks, this gives the facility a redundant system. This also allows for an additional month of wastewater storage while the filled holding tank is treated, tested, and approved for discharge.

Before each discharge, the wastewater and/or process stormwater is adjusted with Sulfuric acid to ensure that pH is within the range 5 to 12 s.u. Also, each batch is tested for chemical

parameters of the City of Spokane Local Limits. After receiving permission from the City of Spokane, the wastewater and/or process stormwater is discharge to the City of Spokane sanitary sewer collection system.

In order for the discharge to occur, the facility personnel must connect a hose from the full (approved) holding tank to the discharge pipe in the wastewater meter manhole located below the pavement outside the container truck loading area. The hose is either connected to the bottom of the wastewater tank for gravity flow or pumped from the top if solids buildup prevents gravity flow. Thus, the wastewater is pumped from the holding tank, through the meter (where wastewater flow is measured), through a sand trap, and oil/water separator, and then to the City of Spokane sanitary sewer collection system. See Appendix E—Figure 4 Wastewater collection and discharge for a diagram of these procedure.

Sludge buildup in catch basins, containment areas, or within the wastewater holding tanks occurs infrequently. However, when necessary, sludge is removed, packaged and hauled away for proper disposal.

PERMIT STATUS

An application for a permit was submitted to the Department on July 23, 2001 and accepted by the Department on November 7, 2001. .

The facility last received an inspection on October 28, 2003.

WASTEWATER CHARACTERIZATION

The concentration of pollutants in the discharge was reported in the permit application and engineering report. For each wastewater discharge, the City of Spokane required flow and sampling for pH, Copper, Chromium, Lead, and Zinc before approval of the discharge to the City. On annual basis, the City also required Arsenic, Cadmium, Cyanide, Mercury, Nickel, Silver, Zinc, BTEX, and Fats, Oil, and Grease (FOG). In Appendix E, Table #1 (Wastewater Sampling) shows each batch sampling data for the above parameters from May 2000 to September 2003. In Appendix E, Graph #1 through Graph #6 shows in graphically form the Wastewater Sampling data for flow, pH, copper, chromium, lead, and zinc. The proposed wastewater discharge is characterized for the following parameters:

Parameter	Concentration – Low (mg/l)	Concentration – High (mg/l)	Concentration – Average (mg/l)
pH	6.39	9.42	7.70
Nickel	.0833	1.13	.607
Arsenic	Non-detect	Non-detect	Non-detect
Cadmium	Non-detect	.00942	.00471
Copper	Non-detect	.283	.0727
Chromium	Non-detect	1.04	.110
Cyanide	Non-detect	Non-detect	Non-detect
Lead	Non-detect	.169	.0404

Mercury	Non-detect	Non-detect	Non-detect
Silver	Non-detect	Non-detect	Non-detect
Zinc	Non-detect	.948	.426
BTEX [c]	Non-detect	.145	.0725
Fats, Oils, Grease	Non-detect	2.05	1.03

SEPA COMPLIANCE

This is existing facility. No SEPA requirements were required at the time for the original facility was constructed in 1974 and when the caustic tank farm and boiler room were added in 1982.

PROPOSED PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Wastewater must be treated using all known, available, and reasonable treatment (AKART) and not interfere with the operation of the POTW.

The minimum requirements to demonstrate compliance with the AKART standard and specific design criteria for this facility were determined in the engineering report: Application for a Wastewater to A POTW for Quadra Chemicals Western, Inc dated November 6, 2001 and Secondary Containment Evaluation for Quadra Chemicals Western, Inc received July 20, 2003.

The more stringent of the local limits-based or technology-based limits are applied to each of the parameters of concern. Each of these types of limits is described in more detail below.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

All waste discharge permits issued by the Department must specify conditions requiring available and reasonable methods of prevention, control, and treatment of discharges to waters of the state (WAC 173-216-110). This facility does not have any federal categorical limitations found under 40 CFR Part 405-471.

EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

In order to protect City of Spokane Wastewater Treatment Plant from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, limitations for certain parameters are necessary. These limitations are based on local limits established by City of Spokane Wastewater Treatment Plant and codified in ordinance. Applicable limits for this discharge for wastewater and process stormwater include the following:

Parameter	**Maximum Daily [b]**
pH	5 to 11 s.u.

Parameter	**Maximum Daily** [b]
Nickel	3.98 mg/l
Arsenic	.94 mg/l
Cadmium	.11 mg/l
Copper	1.4 mg/l
Chromium	5.0 mg/l
Cyanide	.49 mg/l
Lead	.32 mg/l
Mercury	.2 mg/l
Silver	.43 mg/l
Zinc	7.47 mg/l
BTEX [c]	.5 mg/l
Fats, Oils, Grease	100 mg/l

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110).

The monitoring schedule is detailed in the proposed permit under Condition S2 and S3. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

For process stormwater, monitoring for flow, Arsenic, Cadmium, Copper, Chromium, Cyanide, Lead, Mercury, Nickel, Silver, Zinc, BTEX and FOG are required to further characterize the effluent. These pollutant(s) could have a significant impact on the receiving POTW.

For wastewater, monitoring for Arsenic, Cadmium, Cyanide, Mercury, Nickel, Silver, Zinc, BTEX, and FOG is required to further characterize the effluent. These pollutant(s) could have a significant impact on the receiving POTW.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The conditions of S3 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-216-110 and 40 CFR 403.12 (e),(g), and (h)).

OPERATIONS AND MAINTENANCE

The proposed permit contains condition S.5. as authorized under Chapter 173-240-150 WAC and Chapter 173-216-110 WAC. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment. The proposed permit requires submission of an updated O&M manual for the entire wastewater system.

PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

DILUTION PROHIBITED

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

SOLID WASTE PLAN

The Department has determined that the Permittee has a potential to cause pollution of the waters of the state from leachate of solid waste.

This proposed permit requires, under authority of RCW 90.48.080, that the Permittee develop and submit to the Department a solid waste plan to prevent solid waste from causing pollution of waters of the state. The plan must also be submitted to the local solid waste permitting agency for approval.

NON-ROUTINE AND UNANTICIPATED DISCHARGES

Occasionally, this facility may generate wastewater which is not characterized in their permit application because it is not a routine discharge and was not anticipated at the time of application. These typically are waters used to pressure test storage tanks or fire water systems or leaks from drinking water systems. These are typically clean waste waters but may be contaminated with pollutants. The permit contains an authorization for non-routine and unanticipated discharges. The permit requires a characterization of these waste waters for pollutants and examination of the opportunities for reuse. Depending on the nature and extent of pollutants in this wastewater and opportunities for reuse, Ecology may authorize a direct discharge via the process wastewater outfall or through a stormwater outfall for clean water, require the wastewater to be placed through the facilities wastewater treatment process or require the water to be reused.

SPILL PLAN

The Department has determined that the Permittee stores a quantity of chemicals that have the potential to cause water pollution if accidentally released. The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080.

The proposed permit requires the Permittee to develop and implement a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs.

The Permittee has developed a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs. The proposed permit requires the Permittee to update this plan and submit it to the Department.

SLUG DISCHARGE CONTROL PLAN

The Department has determined that the Permittee has the potential for a batch discharge or a spill that could adversely effect the POTW therefore a slug discharge control plan is required (40 CFR 403.8 (f)).

GENERAL CONDITIONS

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G10 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11 requires the payment of permit fees. Condition G12 describes the penalties for violating permit conditions.

PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for 5 years.

REFERENCES FOR TEXT AND APPENDICES

Washington State Department of Ecology.

Laws and Regulations(http://www.ecy.wa.gov/laws-rules/index.html)

Permit and Wastewater Related Information
(http://www.ecy.wa.gov/programs/wq/wastewater/index.html

APPENDICES

APPENDIX A—PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public notice of application was published on November 19 and November 26, 2001 in the Spokesman-Review to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

The Department will publish a Public Notice of Draft (PNOD) on (date) in (name of publication) to inform the public that a draft permit and fact sheet are available for review. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments should be mailed to:

Water Quality Permit Coordinator
Department of Ecology
Eastern Regional Office
4601 N Monroe
Spokane, WA 99205

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30) day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-216-100). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing.

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department will consider all comments received within thirty (30) days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, (509) 329-3473, or by writing to the address listed above.

This permit was written by Scott Mallery.

APPENDIX B—GLOSSARY

Ammonia—Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation—The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD_5--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD_5 is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass—The intentional diversion of waste streams from any portion of the collection or treatment facility.

Categorical Pretreatment Standards—National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity—Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Continuous Monitoring –Uninterrupted, unless otherwise noted in the permit.

Engineering Report—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample—A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial User—A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial Wastewater—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference— A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal and;

Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local Limits—Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Maximum Daily Discharge Limitation—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

Pass-through— A discharge which exits the POTW into waters of the-State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase

in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

pH—The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Potential Significant Industrial User--A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day or;

b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).

The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Quantitation Level (QL)-- A calculated value five times the MDL (method detection level).

Significant Industrial User (SIU)--

1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and;

2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

Slug Discharge—Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

State Waters—Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater—That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based Effluent Limit—A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Coliform Bacteria—A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

Total Dissolved Solids—That portion of total solids in water or wastewater that passes through a specific filter.

Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

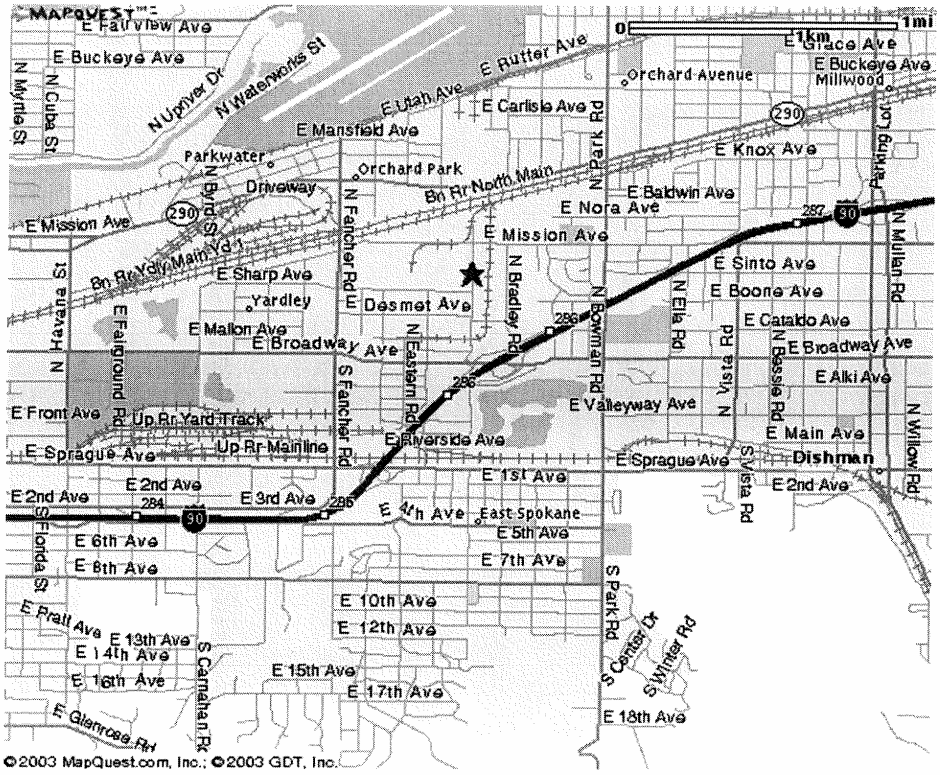
Water Quality-based Effluent Limit—A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

APPENDIX C—TECHNICAL CALCULATIONS

APPENDIX D—RESPONSE TO COMMENTS

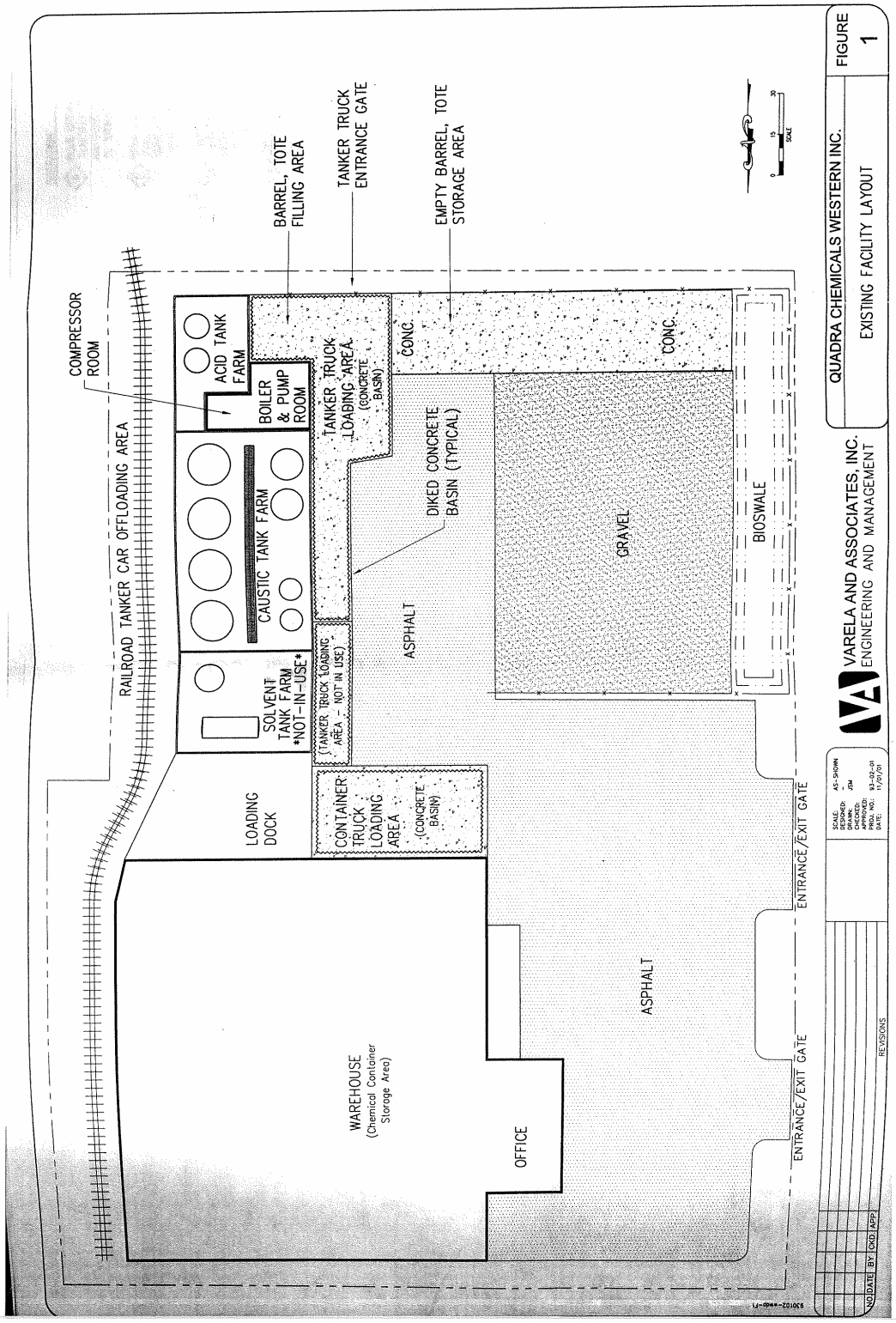
APPENDIX E—QUADRA CHEMICALS –MAP#1

Page 1 of 1

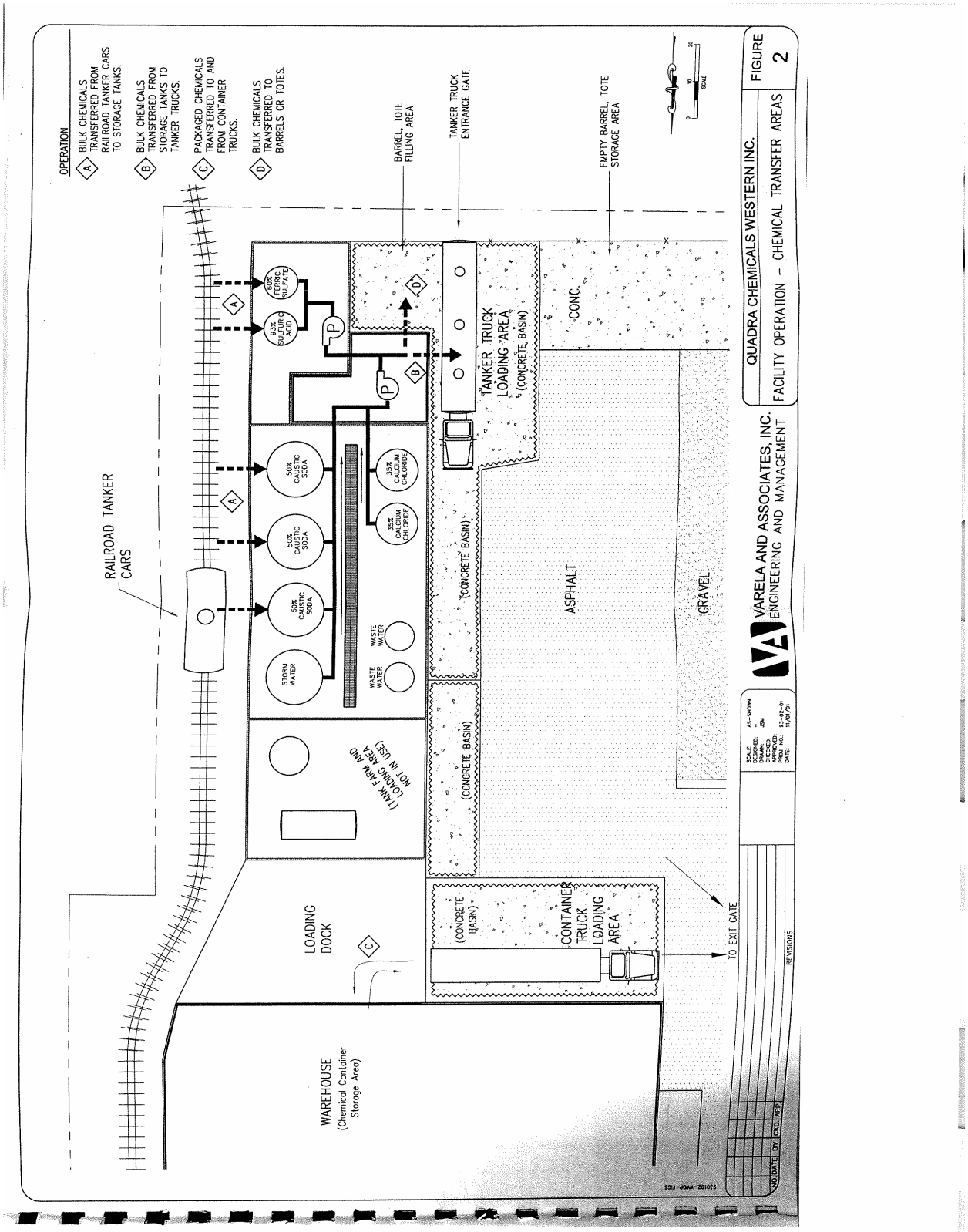


http://mq-mapgend.websys.aol.com/mqmapgend?MQMapGenRequest=FDR2dmwjDE%... 10/20/2003

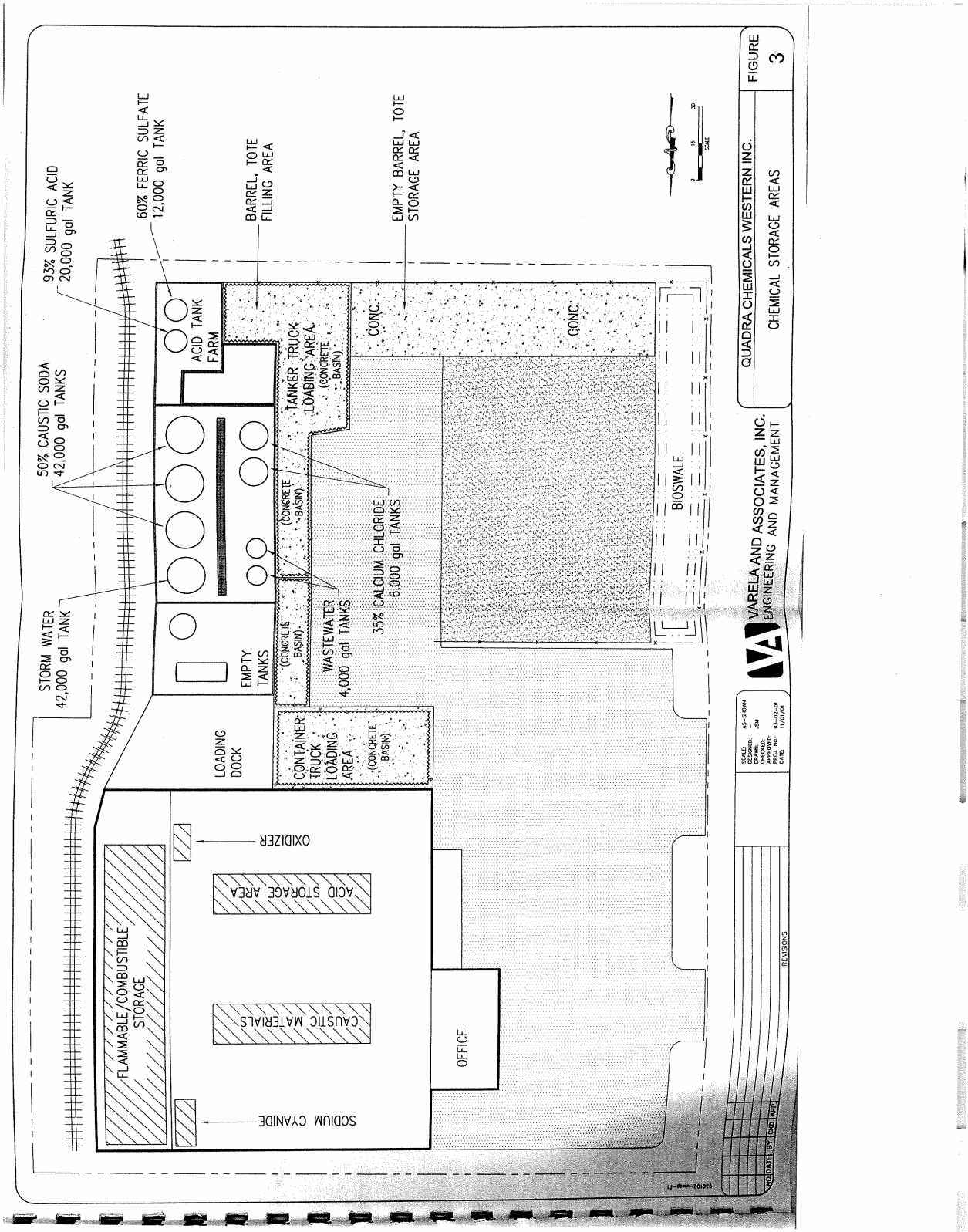
APPENDIX E—QUADRA CHEMICALS –FIGURE#1-EXISTING FACILITY LAYOUT



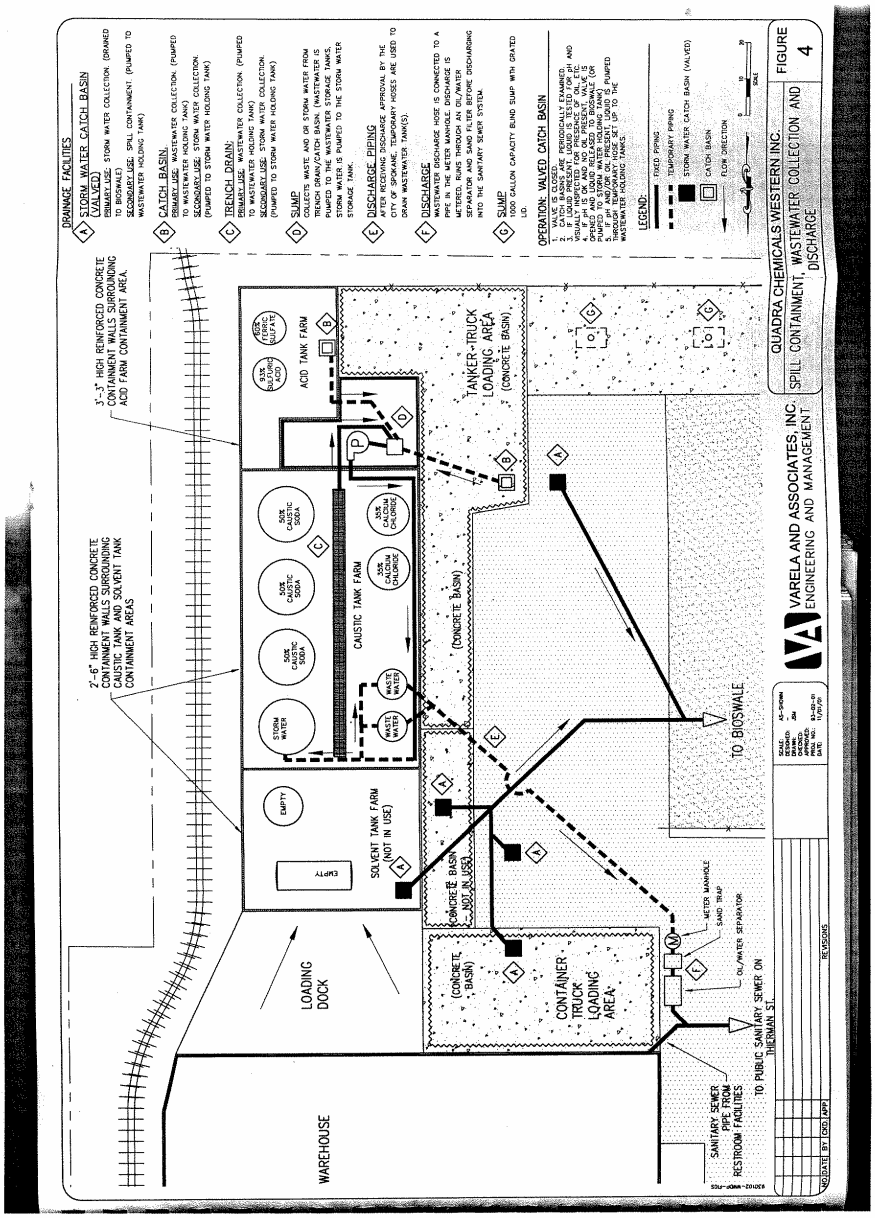
APPENDIX E—QUADRA CHEMICALS –FIGURE#2—CHEMICAL TRANSFER AREAS



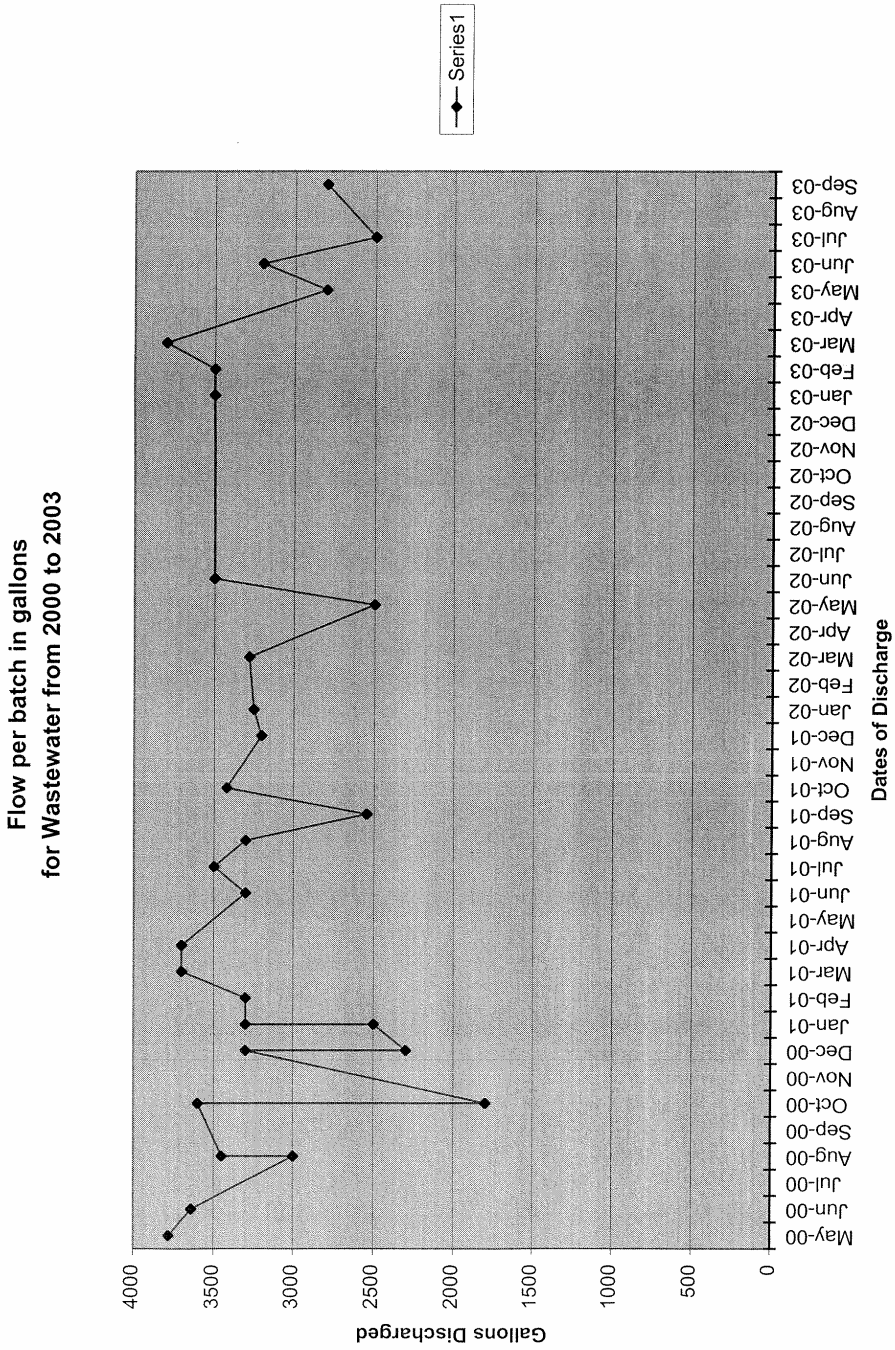
APPENDIX E—QUADRA CHEMICALS –FIGURE#3 CHEMICAL STORAGE AREAS



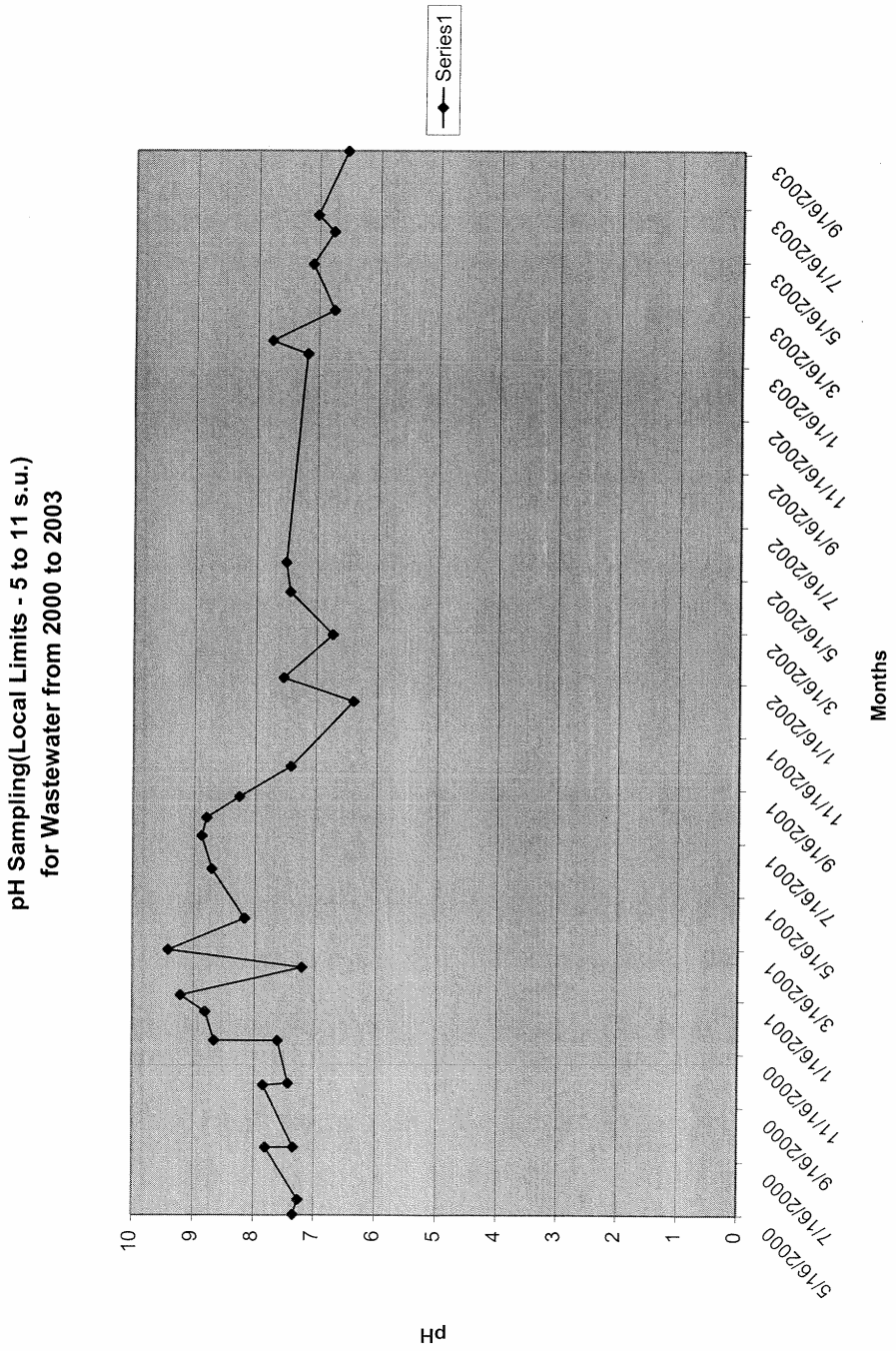
APPENDIX E—QUADRA CHEMICALS –FIGURE#4-WASTEWATER COLLECTION& DISCHARGE



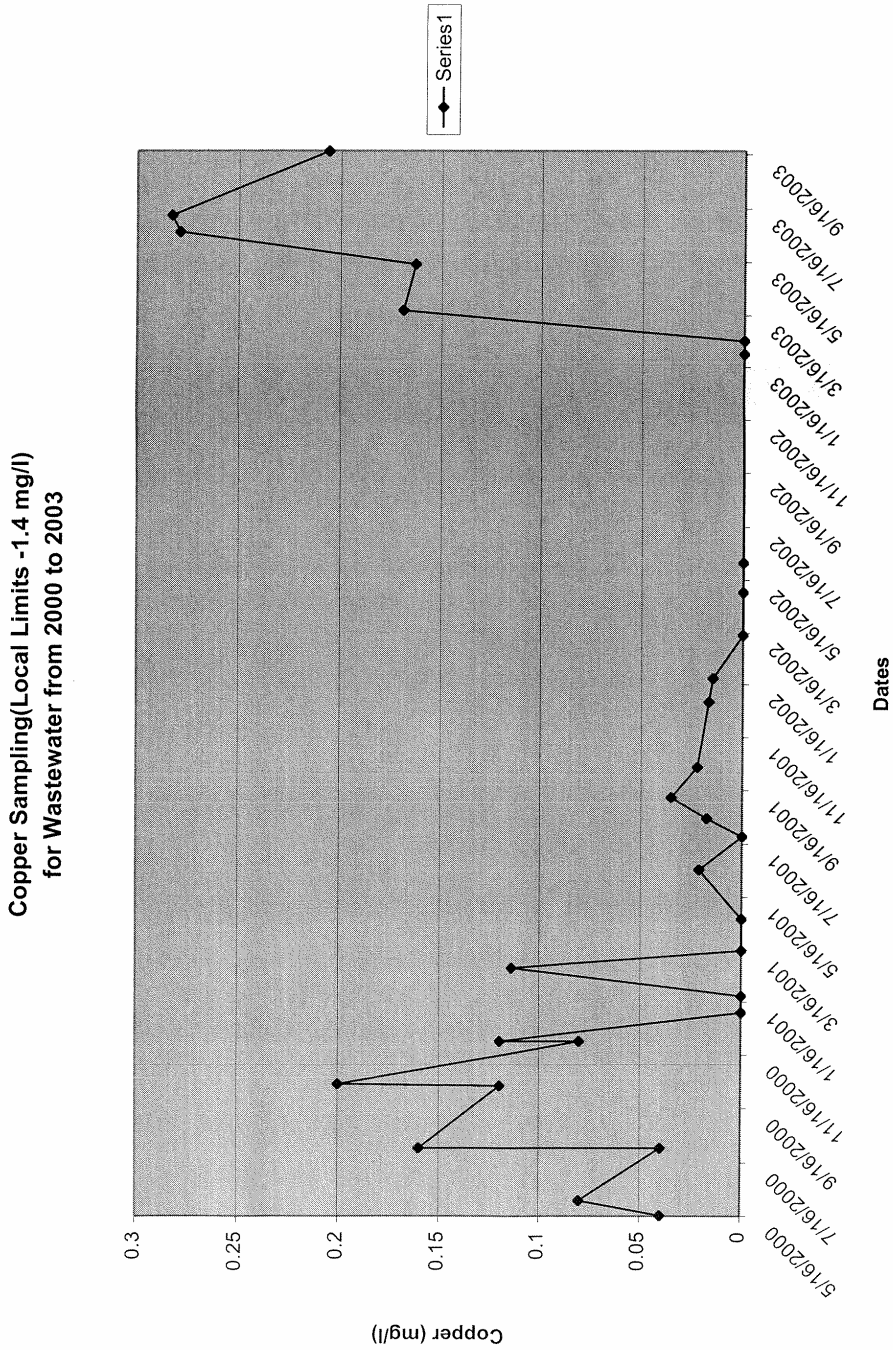
APPENDIX E—QUADRA CHEMICALS –GRAPH #1-BATCH WASTEWATER FLOW



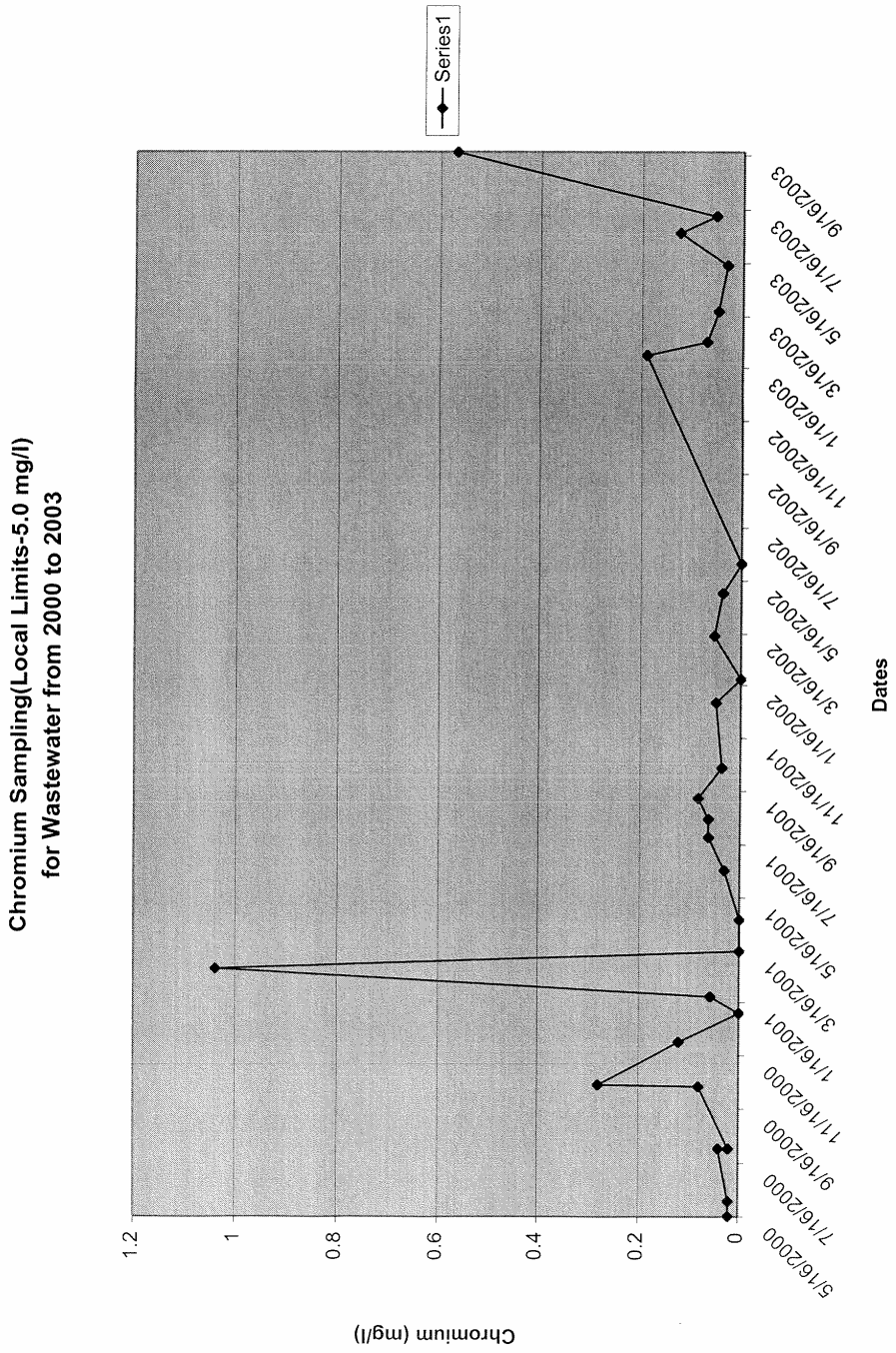
APPENDIX E—QUADRA CHEMICALS-GRAPH #2 – WASTEWATER SAMPLING FOR pH



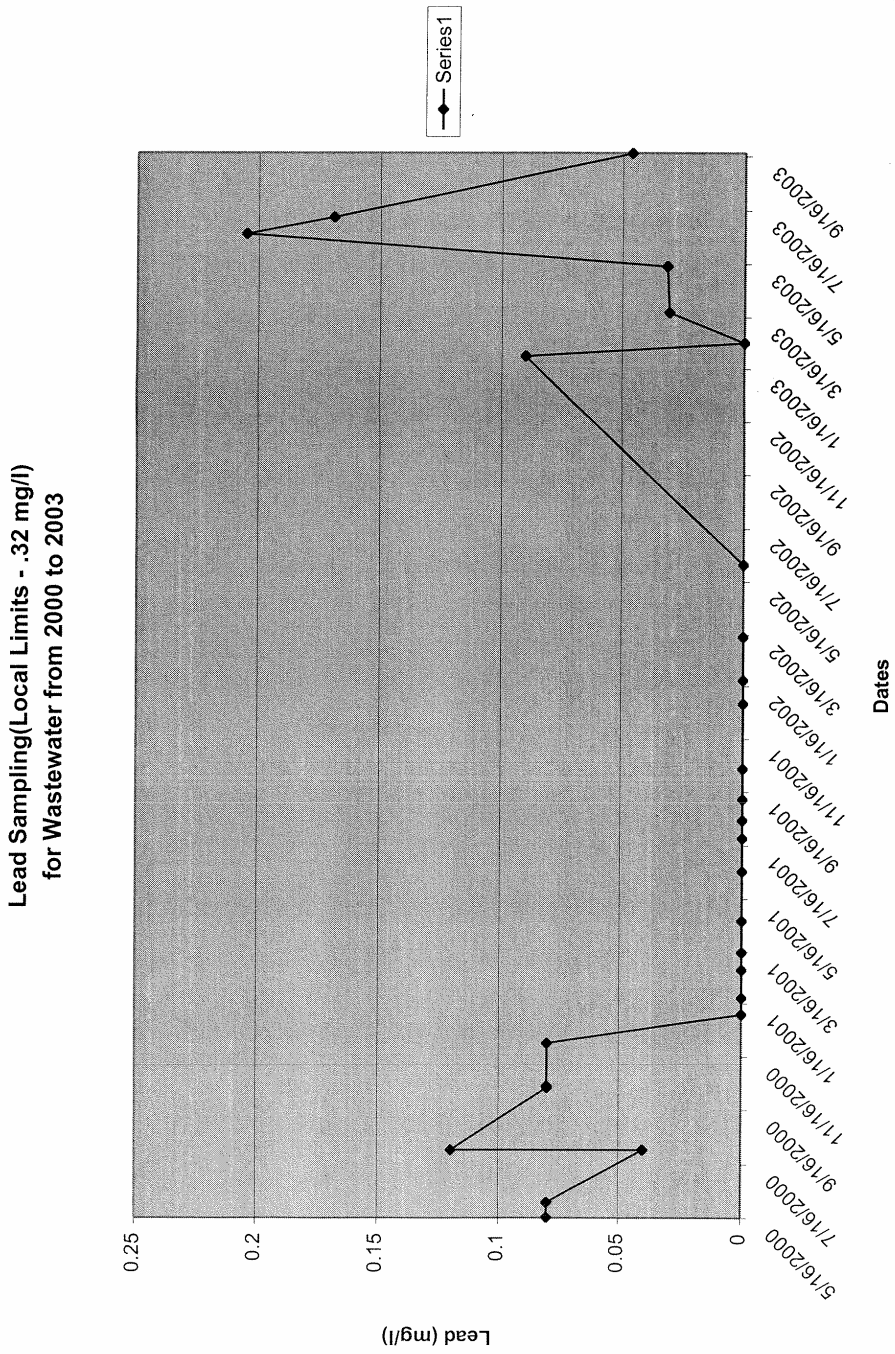
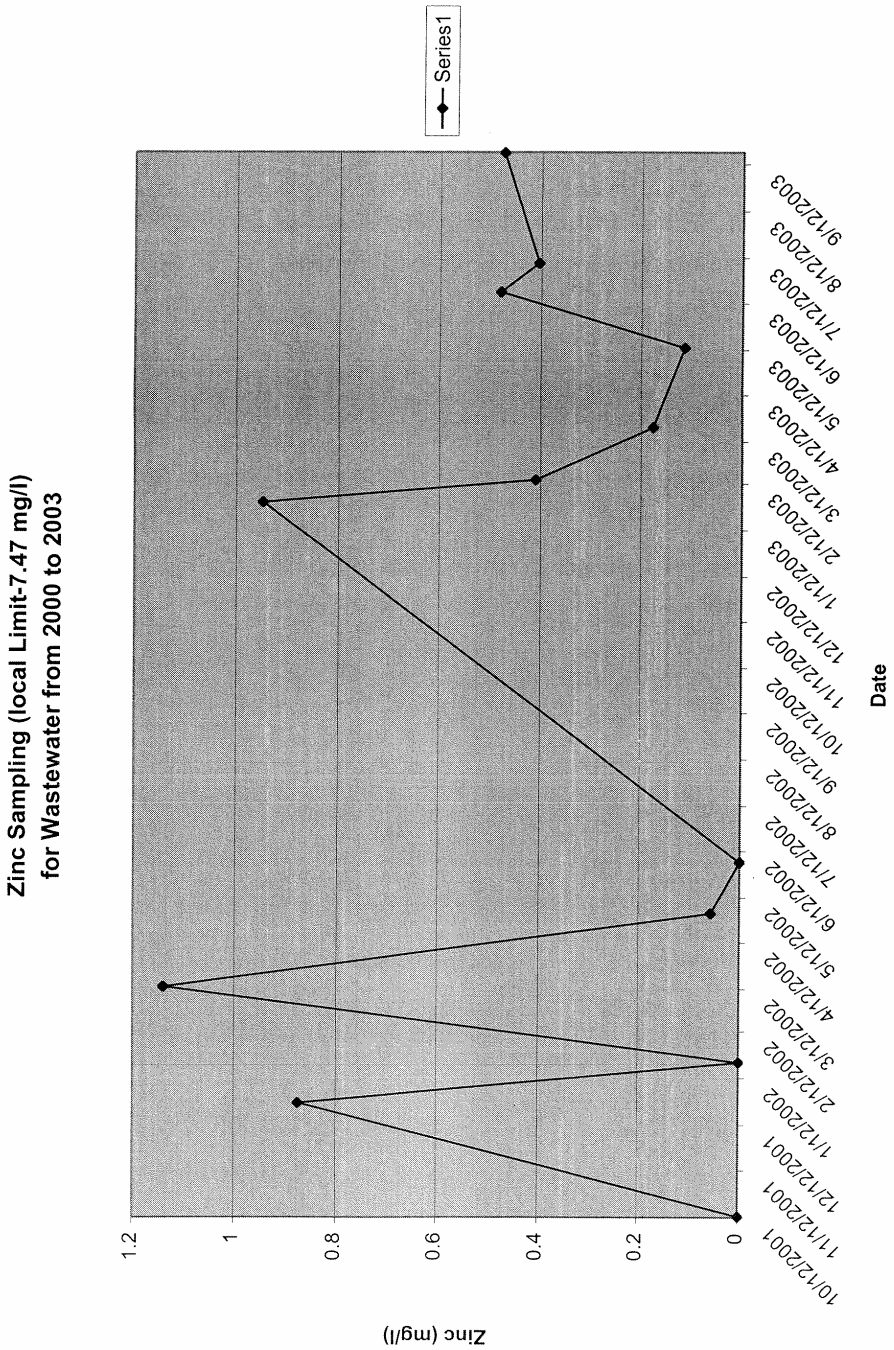
APPENDIX E—QUADRA CHEMICALS-GRAPH #3 – WASTEWATER SAMPLING FOR COPPER



APPENDIX E—QUADRA CHEMICALS-GRAPH #4 – WASTEWATER SAMPLING FOR CHROMIUM



APPENDIX E—QUADRA CHEMICALS-GRAPH #5 – WASTEWATER SAMPLING FOR LEAD



APPENDIX E—QUADRA CHEMICALS-GRAPH #6 – WASTEWATER SAMPLING FOR ZINC