

SEMI-ANNUAL REPORT FOR INDUSTRIAL USERS REGULATED BY 40CFR433

Attn: Allen Gilliam Water Div NPDES Pretreatment

**(1) IDENTIFYING INFORMATION**

<p>A. LEGAL NAME &amp; MAILING ADDRESS: Baxter Healthcare Corporation 1900 N. Hwy. 201 Mountain Home, AR 72653</p>	<p>B. FACILITY &amp; LOCATION ADDRESS:  Baxter Healthcare Corporation 1900 N. Hwy. 201 Mountain Home, AR 72653</p>
<p>C. FACILITY CONTACT: Carolyn Walker, Env. Representative      TELEPHONE NUMBER: 870-424-5336</p>	

**(2) REPORTING PERIOD—FISCAL YEAR From Feb. 1 to Jan. 31 (Both Semi-Annual Reports must cover Fiscal Year)**

<p>A. MONTHS WHICH REPORTS ARE DUE:</p>	<p>B. PERIOD COVERED BY THIS REPORT:</p>
<p>February      &amp;      August</p>	<p>FROM: 08/01/2007      TO: 01/31/2008</p>

**(3) DESCRIPTION OF OPERATION:**

A. REGULATED PROCESSES

**CORE PROCESS(ES)**

CHECK EACH APPLICABLE BLOCK

- Electroplating
- Electroless plating
- Anodizing
- Coating
- Chemical Etching and Milling
- Printed Circuit Board
- Manufacture

**ANCILLARY PROCESS(ES)\***

LIST BELOW EACH PROCESS USED IN THE FACILITY

Cleaning, Polishing, Grinding

B. CHANGES: SUMMARIZE ANY CHANGES IN THE REGULATED PROCESS SINCE THE LAST REPORT. ATTACH AN ADDITIONAL SHEET IF THE SPACE BELOW IS INADEQUATE. PROVIDE A NEW SCHEMATIC IF APPROPRIATE.

*contacted Ms. Baxter re: high Cr, Ni readings. see 2/09 report for clarification*

**5410**

**FEB 28 2008**

**nh**

NPDES PERMIT FILE  
NPDES # AR0021211  
AFIN # \_\_\_\_\_  
\_\_\_\_\_ Permit PN  
 Correspondence  
\_\_\_\_\_ Technical Backup  
3/27/09 **nh** Date Scanned

C. NUMBER OF REGULAR EMPOLYEEES AT THIS FACILITY:

950 Employees

D. {RESERVED}

**(4) FLOW MEASUREMENT**

INDIVIDUAL & TOTAL PROCESS FLOWS DISCHARGED TO POTW IN GALLONS PER DAY

Process	Average	Maximum	Type of Discharge
Regulated (Core & Anc)	1,050	1,050	Batch
Regulated (Cyanide)	NA	NA	NA
§403.6(e) Unregulated*	40,407	40,407	Batch/Continuous
§403.6(e) Dilute	NA	NA	NA
Cooling Water	83,682	83,682	Continuous
Sanitary	36,300	36,300	Continuous
Total Flow to POTW	161,439	161,439	*****

\* "Unregulated" has a precise legal meaning; see 40 CFR403.6(e).

**(5) MEASUREMENT OF POLLUTANTS**

**A. TYPE OF TREATMENT SYSTEM**

CHECK EACH APPLICABLE BLOCK

X	Neutralization
X	Chemical Precipitation and Sedimentation
	Chromium Reduction
	Cyanide Destruction
	Other:
	None

**B. COMMENTS ON TREATMENT SYSTEM**

C. THE INDUSTRIAL USER MUST PERFORM SAMPLING AND ANALYSIS OF THE EFFLUENT FROM ALL REGULATED PROCESSES—CORE & ANCILLARY—(AFTER TREATMENT, IF APPLICABLE). ATTACH THE LAB ANALYSIS WHICH SHOWS A MAXIMUM, TABULATE ALL THE ANALYTICAL DATA COLLECTED DURING THE REPORT PERIOD IN THE SPACE PROVIDED BELOW. ZERO CONCENTRATIONS ARE NOT ACCEPTABLE; LIST THE DETECTION LIMIT IF CONCENTRATION WAS BELOW DETECTION LIMIT.

Pollutant(mg/l)	Cd	Cr	Cu	Pb	Ni	Ag	Zn	CN*	TTO*
Max for 1 day	0.11	2.77	3.38	0.69	3.98	0.43	2.61	1.20	2.13
Monthly Ave.	0.07	1.71	2.07	0.43	2.38	0.24	1.48	0.65	--
Max Measured	0.0065	4.2	0.52	0.13	2.6	<0.007	0.56	0.14	NA
Ave. Measured	0.0065	1.05	0.11	0.13	0.55	<0.007	0.24	0.022	NA

\* PROVIDE THE CONCENTRATION HERE IF NO CERTIFICATION IS PROVIDED IN SECTION 6 BELOW OR MARK N/A IF A CERTIFICATION IS PROVIDED.

Sample Location:	See Attached Sampling Plan (Attachment #1)
Sample Type (Grab or Composite):	Grab (See Sample Plan Attachment #1)
Number of Samples and Frequency Collected:	9 (01/22/2008, 01/30/2008, 2/15/2008)
40CFR136 Preservation and Analytical Methods Use:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

**(6) CERTIFICATION**

A. CHECK ONE  CYANIDE ANALYSIS ATTACHED  EPA REGION VI CYANIDE CERTIFICATION PROVIDED BELOW

Based on my inquiry of the person or persons directly responsible for managing compliance with pretreatment standards, I certify that to the best of my knowledge, cyanide has not been used or generated in our processes which are regulated by the Metal Finishing (40 CFR 433) categorical pretreatment standards since the filing of the last semi-annual compliance report.

\_\_\_\_\_  
(Typed Name)

\_\_\_\_\_  
(Corporate Officer or authorized representative)

Date of Signature:

B. CHECK ONE  §433.11(e) TOXIC ORGANIC ANALYSIS ATTACHED  §433.12(a) TTO CERTIFICATION PROVIDED BELOW

Based on my inquiry of the person or persons directly responsible for managing compliance with pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last semi-annual compliance report. I further certify that this facility is implementing the toxic organic management plan submitted to Arkansas Department of Pollution Control and Ecology.

Steve Cardin, Plant Manager

\_\_\_\_\_  
(Typed Name)

*Steve Cardin*  
\_\_\_\_\_  
(Corporate Officer or authorized representative)

Date of Signature: 2-26-08

**CORPORATE ACKNOWLEDGEMENT (Optional)**

State of Arkansas  
County of Baxter

Before me, the undersigned authority, on this day personally appeared \_\_\_\_\_ of

\_\_\_\_\_ a corporation, known to me to be the person whose name is subscribed to the foregoing instrument(s), and acknowledged to me that he executed the same for purposes and considerations therein expressed, in the capacity therein stated and as the act and deed of said corporation.

Given under my hand and seal of office on this 25<sup>th</sup> day of February, 2002.

\_\_\_\_\_  
Notary Public in and for Baxter  
County, Arkansas

**(7) POLLUTION PREVENTION ACT OF 1990 [42 U.S.C. 13101 et seq.]**

§6602 [42 U.S.C. 13101 et seq.] Findings and Policy para. (b) Policy – The congress hereby declares it to be the national policy of the United States that pollution should be prevented or reduces at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be prevented or recycled should treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner.

The User may list any new or ongoing Pollution Prevention practices:

**(8) GENERAL COMMENTS**

The sample pulled at the "grinder wastewater" location indicated a problem with the filter unit. The filter unit was examined and it was determined that the filters had not been changed out at the frequency required to ensure adequate filtration of the grinding wastewater. Standard work was updated to include frequency to change filters and employees trained per the standard work.

**Attachments included with submission:**

- Attachment #1            Needles Sampling Plan
- Attachment #2            Needles Wastewater Flow Schematic
- Attachment #3            Toxic Organic Management Plan
- Attachment #4            Pretreatment Compliance Assurance Visit Response
- Attachment #5            Analytical Results

**(9) SIGNATORY REQUIREMENTS [40CFR403.12(l)]**

I certify under penalty of law that I have personally examined and am familiar with the information in this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Steve Cardin, Plant Manager

NAME OF CORPORATE OFFICER OR AUTHORIZED REPRESENTATIVE

SIGNATURE:

*Steve Cardin*  
 2-26-08

# Attachment #1

## Needles Sampling Plan (40 CFR 433 Subpart A)

In accordance with 40 CFR Part 403.12(e) industrial users with processes regulated by categorical pretreatment standards (40 CFR Part 433, et al) are required to submit semi-annual reports to the ADEQ to demonstrate continued compliance when discharge from the regulated processes enter, can enter, or will enter a Publicly Owned Treatment Works (POTW). Reports are due February and August.

**Sampling Plan:** Sample once every 6 months. If noncompliance noted sample as needed to demonstrate compliance.

1. Sample will consist of one grab sample from pretreatment holding tank discharge point; holding tank discharge avg. 700 gal. with discharge time of 15 minutes. Pretreatment is performed on the Sodium Hydroxide bath and primary rinse water; Electropolish (Phosphoric Acid/Sulfuric Acid/Water); Nitric Acid bath and primary rinse water.
2. Sample will consist of one grab sample at the end of the shift prior to water entering drain from each separate operation: Ground Needle Staging; Hydroblast Rinse, Spray Rinse, Hydroblast Rinse, Oakite Process; Overflow rinse, filtered grinding waste water.
3. Sample effluent data to be reported semi-annually (February and August).

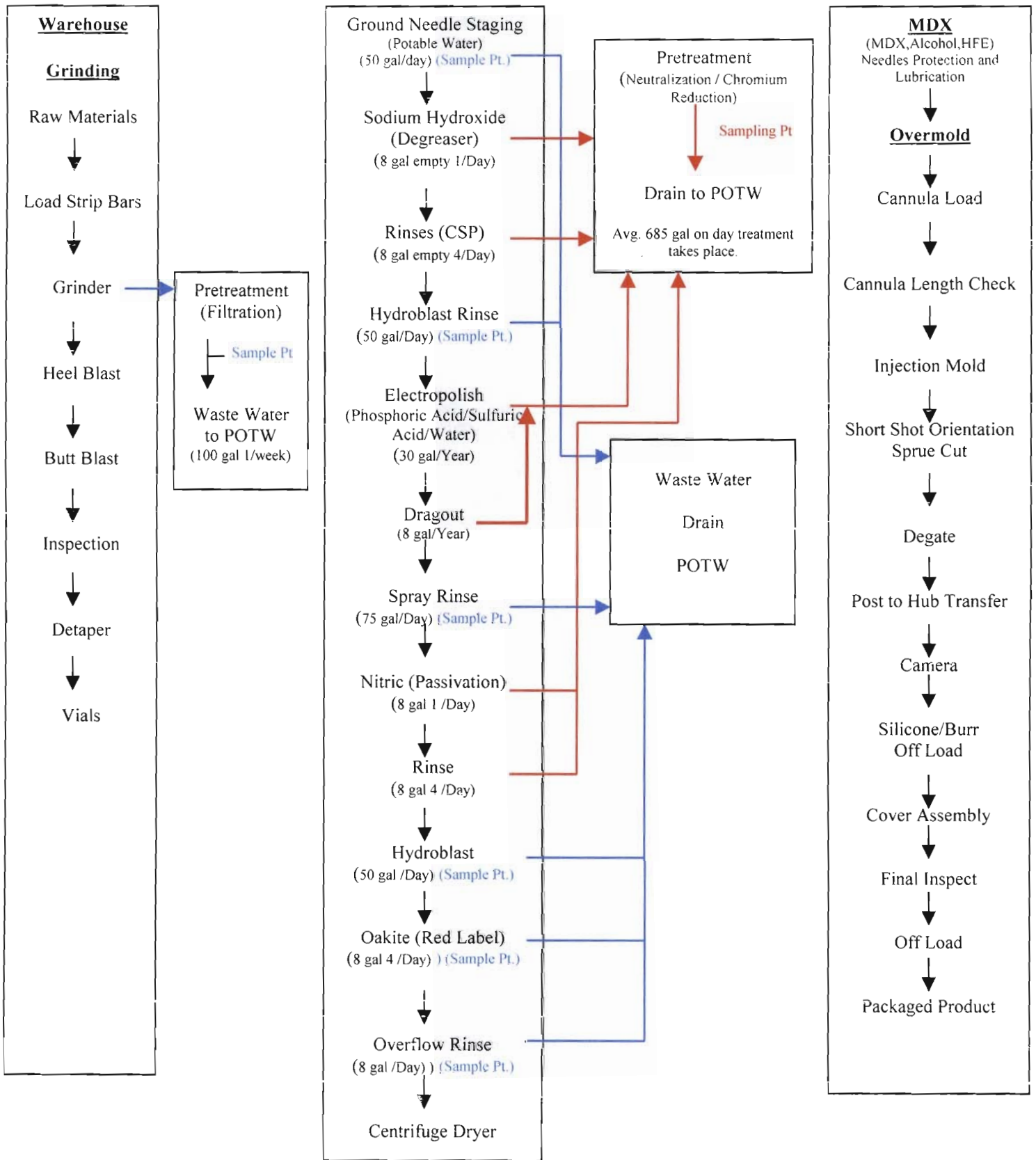


Attachment #1  
(Cont'd).

**Needles Electropolish Operation**

	<u>Cadmium</u>	<u>Chromium</u>	<u>Copper</u>	<u>Lead</u>	<u>Nickel</u>	<u>Silver</u>	<u>Zinc</u>	<u>Total Cyanide</u>	<u>Date Sampled</u>
Grinder Wastewater	0.0065	4.2	0.12	<0.04	2.6	<0.007	0.56	0.14	1/22/2008
Grinder Wastewater	<0.004	1.6	0.039	<0.04	0.64	<0.007	<0.002	0.035	2/15/2008
Grinder Ndl Staging	<0.004	0.017	0.013	<0.04	0.012	<0.007	0.038	<0.01	1/22/2008
Hydroblast Rinse 1	<0.004	0.13	0.11	0.13	0.057	<0.007	0.12	<0.01	1/22/2008
Spray Rinse	<0.004	1.8	0.52	<0.04	0.86	<0.007	0.97	<0.01	1/22/2008
Hydroblast 2	<0.004	0.016	<0.006	<0.04	<0.01	<0.007	0.033	<0.01	1/30/2008
Oakite Batch	<0.004	0.34	<0.006	<0.04	0.029	<0.007	0.040	<0.01	(Cyanide) 1/22/2008
Overflow Rinse	<0.004	0.17	<0.006	<0.04	0.034	<0.007	0.10	<0.01	1/22/2008
Pretreatment Tank	<0.004	0.13	0.073	<0.04	0.14	<0.007	0.051	<0.01	1/30/2008
<b>Max Measured</b>	0.0065	4.2	0.52	0.13	2.6	<0.007	0.56	0.14	
<b>Avg Measured</b>	0.0065	1.050	0.109	0.13	0.547	<0.007	0.239	0.022	

Needles (40CFR 433 Subpart A)



Waste Water goes directly to drain to POTW  
 Sample Points at Tanks prior to entering drain →  
 Pretreatment prior to going to drain to POTW →

# Attachment # 2 Cont'd

	Needle 433 Regulated (Core & Anc)	
	100	1/week (Wkend)
Grinder Waste Water	100	
Ndis Staging	50	
Sodium Hydroxide Degreaser	8 *	
Rinses	32 *	
Hydroblast Rinse 1	50	
Electropolish	30 *	1/year
Dragout	8 *	1/year
Spray Rinse	75	
Nitric Passivation	8 *	
Rinse	32 *	
Hydroblast Rinse 2	50	
Oakite Bath	32	
Overflow Rinse	8	
<b>Total</b>	<b>483</b>	
Pretreatment Tank*	<b>118</b>	batch process avg. 685 gal when treatment takes place
Ancillary	365	
<b>Regulated (Core &amp; Anc)</b>	<b>1050</b>	<b>gal/day</b>



**TOXIC ORGANIC MANAGEMENT PLAN**  
**Baxter Healthcare Corporation**  
**1900 N. Hwy. 201**  
**Mountain Home, AR 72653**

I. Description of Facilities and Chemical Use

a. Process Description

The Baxter Healthcare Corporation, located at 1900 N. Hwy. 201, Mountain Home, AR manufactures disposal medical products including needles used for collection of whole blood. In this process stainless steel cannula are ground, cleaned and assembled for use in Baxter products (§433). Cannulas consisting of 304 stainless steel are ground on one end to produce the point of the needle that will be inserted into the donor's arm. After the needles are ground they will proceed to several steps necessary to clean the needle. A sodium hydroxide solution is first used to clean the needles. The needles will then be subjected to a process that will polish the tips of the needles. This process uses a sulfuric and phosphoric acid mixture to smooth the tips of the needles. The needles then undergo a passivation treatment to help the needle resist rust. This treatment consists of a nitric acid mixture. After this step in the process the needles will pass through several other cleaning steps to ensure that all solvents and acids introduced to the needle are completely removed. See attached Process Flow Charts for more detail on the flow of materials.

b. Identification of Toxic Organic Chemicals Entering the Plant Wastewaters

i. Chemical Analysis of Treated Wastewaters

Samples were taken of the plant's treated wastewaters associated with the needles electroplating process for analysis for the 110 toxic organics regulated under the metal finishing categorical pretreatment standards. Samples collected were grab samples due the batch process involved with the neutralization tank system. Samples were analyzed by American Interplex Corporation Laboratories ( See Appendix 1 for EPA procedures used and analysis results).

c. Sources Of All Toxic Organics

i. Needles Process

1. Sodium hydroxide, 50% is used to clean the cannulas. In a stainless steel ultrasonic solution tank, a caustic solution of approximately six (6) parts of 50% Sodium Hydroxide to ten (10) parts potable water. The solution is changed every twenty-four (24) hours. The solution is heated to  $180^{\circ} \pm 30^{\circ} \text{ F}$  ( $82^{\circ} \pm 16^{\circ} \text{ C}$ ) and cannulas are placed in solution with ultrasonics for a minimum of ten (10) minutes, but not more than thirty (30) minutes. Cannulas are removed from caustic solution and submerged in a stainless steel rinse tank filled with

potable water that has been heated to  $100^{\circ} \pm 20^{\circ} \text{F}$  ( $38^{\circ} \pm 11^{\circ} \text{C}$ ). Cannulas from the caustic rinse tank are rinsed thoroughly with Hydro-blast (potable water/air) for a minimum of three (3) minutes. Wastewaters are drained to the neutralization holding tank.

2. Sulfuric acid (9.980 L) /Phosphoric acid (45.360L)/Water (27.018 L) solution is used for the vial electropolish procedure. The temperature of the solution is maintained at  $110^{\circ} \pm 10\text{F}$ . The needles will be electropolished for 14-15 seconds at 80-85 amps. Once per year the tank is emptied and cleaned. The waste material is transferred to the nitric tank and pumped to the holding tank for treatment.
3. Nitric acid is used for cleaning the needles. Needles are cleaned in a stainless steel ultrasonic solution tank, a nitric acid solution of approximately one (1) part 42% nitric acid to one (1) part potable water. Solution is changed every twenty-four (24) hours. Needles are placed in the solution for a minimum of twenty (20) minutes, but not more than forty (40) minutes. Needles are rinsed with potable water. Rinse water is changed every four (4) hours. All waste waters are drained to the neutralization holding tank.
4. Sodium phosphate tribasic and water for Inj. USP (1.0% cleaning solution) is used for cleaning. The cleaning solution is changed after four (4) hours of production.
5. Safety Cool 831 is used as a lubricating solution in the grinding process. The Safety Cool is sprayed on the needles to reduce friction and heat generated at the grinding step. Coolant is removed from needles during cleaning process. Excess coolant is pumped through a safety cool recovery unit and then through a 3-5 micron filter before being released into water system.

ii. All Other Processes

1. Ethylene Oxide is a gas sterilant used to sterilize for medical products. Standard Operating Procedures are in place to ensure proper handling of ethylene oxide. Ethylene oxide is used in the gas form therefore none will reach the drains.
2. Ethylene glycol is a by-product from the ethylene oxide gas sterilant and is captured in a holding tank. The holding tank is located in a containment pit with manually locked valves. Ethylene glycol recycled for use as a anti-freeze. Bulk tankers pick up the material for recycling.
3. Methylene Chloride is used for solvent sealing plastic parts together in the Alyx Department and the Sets Department. There are no drains in the are to allow the material to escape.
4. Bis(2-ethylhexyl)phthalate is an oil used in the plastics extrusion process. The oil is stored in bulk tanks located inside a containment pit. All drains within the state-of-the-art plastics blending process have been sealed to prevent escape of oils to drains.
5. Lubricating/Hydraulic oils used throughout the facility.

d. Solvent Management Plan

- i. All tanks used in the Needles Neutralization process are drained to the neutralization holding tank. There are no floor drains in the area therefore a spill will not enter the POTW without prior treatment.
- ii. Outside tanks are contained in a containment pit with manual locking valves.
- iii. Drains within the facility have been sealed or raised to prevent spills reaching the drains.
- iv. Chemicals are stored in an outside chemical storage building. One container at a time of each chemical is brought into the facility and placed on a containment skid during dispensing. Nitric acid and sodium hydroxide are dispensed through piping connected directly from the 55 gallon drum to the cleaning tanks.

e. Method of Disposal

- i. Acids and bases are neutralized then drained to the POTW at a pH between 6.0 – 9.0.
- ii. Solvent waste is collected in DOT drums and transported to an approved TSDf for fuels blending.
- iii. Hydraulic/lubricating oils are collected in DOT drums and transported to an approved TSDf for fuels blending.
- iv. Ethylene glycol is collected in a bulk storage tank and sold as a by-product.
- v. Bis(2-ethylhexyl)phthalate is collected in drums and sold as a by-product.


f. Training

- i. All personnel in the area receive annual training concerning the hazards associated with the chemicals used in the area. Training has been conducted concerning no chemicals to be dumped down drains.

As a result of the above controls and procedures, Baxter believes that all of its toxic organic pollutant discharges can be controlled by a toxic organic management plan in lieu of routine toxic organic monitoring.

II. Certification

Based on my inquiry of the person or persons directly responsible for managing compliance with the TTO limitations, I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last report. I further certify that this facility is implementing this toxic organic pollutant management plan submitted to the Control Authority on October 18, 2002 and updated on November 26, 2007.

  
Steve Cardin  
Plant Manager

**Baxter**

January 18, 2008

Allen R. Gilliam  
ADEQ State Pretreatment Coordinator  
5301 Northshore Drive  
North Little Rock, AR 72118-5317RE: Baxter Healthcare Pretreatment Compliance Assurance Visit (Tracking #ARP001045/  
AFIN #03-00002)

Dear Mr. Gilliam:

The Pretreatment Compliance Assurance Visit Report was received at the facility January 10, 2008.

## Requirements:

- 1) Baxter is not sampling all regulated wastestreams from its metal finishing operations ("needles room" and the grinding operations).  
**Response:** The sampling plan that Baxter was being followed prior to the visit on 11/14/07 was approved by the previous ADEQ Pretreatment Coordinator. The ancillary processes are listed on the previous semi-annual reports. The schematic included with the reports identified all core and ancillary operations. The schematic was simplified to help the inspector accurately understand the wastewater sources, discharge and sampling points, a copy has been submitted to the Dept.  
**Proposed Sampling Plan:** The proposed sampling plan will be followed for the Semi-Annual Report due to the Dept. February 29, 2008. As indicated in electronic conversation on 01/18/2008, an addendum will be provided for the reports previously submitted of the sampling results.
- 2) Chains of custody are not complete. For a sample to be considered legally defensible, valid and not suspect of tampering, the sampler's name ("relinquished by") as well as the "received by" name(s), all the way to the contract lab must coincide and be complete with dates and times indicating transfers.  
**Response:** Standard Work and training has been completed to ensure that the person pulling the sample relinquishes the chain of custody to the carrier, the carrier will sign the "received by". A memo has been sent to the laboratory, stating the requirements that the carrier must relinquish the chain of custody to the lab.
- 3) Under 40 CFR 403.5(b)... "the following pollutants shall not be introduced into a POTW: (2) Pollutants which will cause corrosive structural damage to the POTW, but in no case

**Baxter**

discharges with pH lower than 5.0, unless the works is specifically designed to accommodate such discharges..."

And, under 40 CFR 203.12(g) Monitoring and analysis to demonstrate continued compliance... (5) All analyses shall be performed in accordance with procedures established by the Administrator pursuant to section 304(h) of the Act and contained in 40 CFR part 136...."

**Response:** Standard Work and training has been completed to ensure that the pH of the discharge is measured with a calibrated pH probe.

Baxter is committed to maintaining compliance with the National Pretreatment Program. If further information is required, please feel free to contact me at (870) 424-5336/

Sincerely,



Carolyn Walker  
Environmental Representative

**Standard Work**  
**Baxter's Metal Finishing Regulated Processes under CFR 433.17**  
**"Needle Process"**

**Waste Water Sampling**

**Reference Documents:** CFR40 Part 433.17

**Sample Containers**

- Sample containers are received from pre-approved outside laboratory pre-cleaned.
- They must NOT be contaminated prior to pulling sample.
- DO NOT REMOVE lid from containers until actual time sample is pulled.
- Containers may not be rinsed or cleaned with anything.
- Identification on containers MUST match the chain of custody.

**Clean Sampling Techniques**

- Wear clean, non-talc gloves at all times when handling equipment and sample containers.
- Keep clean sampling equipment wrapped in a clean plastic bag.

**Sampling Equipment**

- Prior to sample collection, all sampling equipment must be cleaned.

**Chain of Custody** - Ensure Chain of Custody has been filled out:

- The following blanks to be completed by Project Manager: Client, Project Reference, Project Manager, Sample Identification, Grab, Water, No. of Bottles, Analyses Requested, Container Type, Preservative, Report Information.
- The following blanks to be completed by person pulling sample: Sampled by, Date/Time Collected, Relinquished by/Date/Time.
- Carrier MUST sign "Received by" section of Chain of Custody

**Sample Shipment**

- Tape lids of all sample containers.
- Place sample containers in cooler.
- Place ice in cooler and tape cooler.
- Velocity Carrier will be instructed to pickup sample at Security. Arrangements must be made with Velocity carrier prior to sample date to ensure sample is delivered next day to American Interplex.
- Carrier MUST sign "Received by" section of Chain of Custody
- Make a copy of chain of custody once the carrier has signed the "received by" section for Baxter's file.
- Place completed original chain of custody in plastic bag and tape to top of cooler.

**Sampling Plan:**

- Sample will consist of one grab sample from pretreatment holding tank discharge point.
- Sample will consist of one grab sample at the end of the shift prior to water entering drain from each separate operation: ground needle staging; hydroblast rinse, spray rinse, hydroblast rinse, oakite process, overflow rinse, filtered grinding waste water.
  - Collect water from the 2 hydroblast rinse stations and spray rinse station by placing a plug over the drain to collect rinse water.



**Baxter**

January 18, 2008

John Overby  
American Interplex Corp.  
8600 Kanis Road  
Little Rock, AR 72204

RE: Baxter Healthcare Pretreatment Compliance Assurance Visit

Dear Mr. Overby:

Baxter received a Pretreatment Compliance Assurance Visit from ADEQ on January 10, 2008. The following requirement was received in the report.

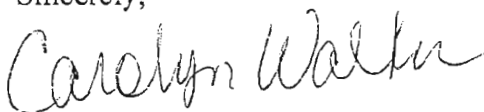
Requirements:

- 1) Chains of custody are not complete. For a sample to be considered legally defensible, valid and not suspect of tampering, the sampler's name ("relinquished by") as well as the "received by" name(s), all the way to the contract lab must coincide and be complete with dates and times indicating transfers.

The Pretreatment Coordinator indicated that the chain of custody is not complete due to the carrier not signing the "received by" at Baxter and "relinquished by" when delivered to American Interplex. I have put in place standard work that will ensure the "Received by" is signed by carrier when picked up at Baxter. Please initiate procedures and/or standard work that will ensure the "Relinquished by" is signed at the time the sample is delivered to the lab.

Thank you for your help with compliance with this issue.

Sincerely,



Carolyn Walker  
Environmental Representative





Baxter Healthcare Corporation  
ATTN: Ms. Carolyn Walker  
1900 North Highway 201  
Mountain Home, AR 72653

Dear Ms. Carolyn Walker:

Project Description: Seven (7) water sample(s) received on January 26, 2008  
NPDES Monitoring  
Needles Process

This report is the analytical results and supporting information for the samples submitted to American Interplex Corporation (AIC) on January 26, 2008. The following results are applicable only to the samples identified by the control number referenced above. Accurate assessment of the data requires access to the entire document. Each section of the report has been reviewed and approved by the appropriate laboratory director or a qualified designee.

Data has been validated using standard quality control measures performed on at least 10% of the samples analyzed. Quality Assurance, instrumentation, maintenance and calibration were performed in accordance with guidelines established by the cited methodology.

**AMERICAN INTERPLEX CORPORATION**

By \_\_\_\_\_

A handwritten signature in black ink, appearing to read 'John Overbey', is written over a horizontal line. Below the line, the name 'John Overbey' and title 'Laboratory Director' are printed.

John Overbey  
Laboratory Director

Enclosure(s): Chain of Custody

Baxter Healthcare Corporation  
1900 North Highway 201  
Mountain Home, AR 72653

ANALYTICAL RESULTS

AIC No. 116436-1

Sample Identification: Grinder Wasterwater 1-22-08/11:10AM

Analyte	Method	Result	RL	Units	Batch	Qualifier
Total Cyanide	SM4500-CN C,E	0.14	0.01	mg/l	W23882	
Chromium	EPA 200.7	4.2	0.007	mg/l	S22209	
Copper	EPA 200.7	0.12	0.006	mg/l	S22209	
Lead	EPA 200.7	< 0.04	0.04	mg/l	S22209	
Nickel	EPA 200.7	2.6	0.01	mg/l	S22209	
Silver	EPA 200.7	< 0.007	0.007	mg/l	S22209	
Zinc	EPA 200.7	0.56	0.002	mg/l	S22209B	

AIC No. 116436-2

Sample Identification: Ground Ndl Staging 1-22-08/9:55AM

Analyte	Method	Result	RL	Units	Batch	Qualifier
Total Cyanide	SM4500-CN C,E	< 0.01	0.01	mg/l	W23882	
Chromium	EPA 200.7	0.017	0.007	mg/l	S22209	
Copper	EPA 200.7	0.013	0.006	mg/l	S22209	
Lead	EPA 200.7	< 0.04	0.04	mg/l	S22209	
Nickel	EPA 200.7	0.012	0.01	mg/l	S22209	
Silver	EPA 200.7	< 0.007	0.007	mg/l	S22209	
Zinc	EPA 200.7	0.038	0.002	mg/l	S22209B	

AIC No. 116436-3

Sample Identification: Hydroblast Rinse 1 1-22-08/10:38AM

Analyte	Method	Result	RL	Units	Batch	Qualifier
Total Cyanide	SM4500-CN C,E	< 0.01	0.01	mg/l	W23882	
Chromium	EPA 200.7	0.13	0.007	mg/l	S22209	
Copper	EPA 200.7	0.11	0.006	mg/l	S22209	
Lead	EPA 200.7	0.13	0.04	mg/l	S22209	
Nickel	EPA 200.7	0.057	0.01	mg/l	S22209	
Silver	EPA 200.7	< 0.007	0.007	mg/l	S22209	
Zinc	EPA 200.7	0.12	0.002	mg/l	S22209B	

AIC No. 116436-4

Sample Identification: Spray Rinse 1-22-08/10:28AM

Analyte	Method	Result	RL	Units	Batch	Qualifier
Total Cyanide	SM4500-CN C,E	< 0.01	0.01	mg/l	W23882	
Chromium	EPA 200.7	1.8	0.007	mg/l	S22209	
Copper	EPA 200.7	0.52	0.006	mg/l	S22209	
Lead	EPA 200.7	< 0.04	0.04	mg/l	S22209	
Nickel	EPA 200.7	0.86	0.01	mg/l	S22209	
Silver	EPA 200.7	< 0.007	0.007	mg/l	S22209	
Zinc	EPA 200.7	0.97	0.002	mg/l	S22209B	

AIC No. 116436-5

Sample Identification: Hydroblast 2 1-22-08/11:20AM

Analyte	Method	Result	RL	Units	Batch	Qualifier
Chromium	EPA 200.7	0.016	0.007	mg/l	S22260	

Baxter Healthcare Corporation  
1900 North Highway 201  
Mountain Home, AR 72653

ANALYTICAL RESULTS

AIC No. 116436-5 (Continued)

Sample Identification: Hydroblast 2 1-22-08/11:20AM

Analyte	Method	Result	RL	Units	Batch	Qualifier
Copper	EPA 200.7	< 0.006	0.006	mg/l	S22260	
Lead	EPA 200.7	< 0.04	0.04	mg/l	S22260	
Nickel	EPA 200.7	< 0.01	0.01	mg/l	S22260	
Silver	EPA 200.7	< 0.007	0.007	mg/l	S22260	
Zinc	EPA 200.7	0.033	0.002	mg/l	S22260	

AIC No. 116436-6

Sample Identification: Oakite Bath 1-22-08/10:22AM

Analyte	Method	Result	RL	Units	Batch	Qualifier
Total Cyanide	SM4500-CN C,E	< 0.01	0.01	mg/l	W23882	
Chromium	EPA 200.7	0.034	0.007	mg/l	S22209	
Copper	EPA 200.7	< 0.006	0.006	mg/l	S22209	
Lead	EPA 200.7	< 0.04	0.04	mg/l	S22209	
Nickel	EPA 200.7	0.029	0.01	mg/l	S22209	
Silver	EPA 200.7	< 0.007	0.007	mg/l	S22209	
Zinc	EPA 200.7	0.040	0.002	mg/l	S22209B	

AIC No. 116436-7

Sample Identification: Overflow Rinse 1-22-08/10:17AM

Analyte	Method	Result	RL	Units	Batch	Qualifier
Total Cyanide	SM4500-CN C,E	< 0.01	0.01	mg/l	W23882	
Chromium	EPA 200.7	0.17	0.007	mg/l	S22209	
Copper	EPA 200.7	< 0.006	0.006	mg/l	S22209	
Lead	EPA 200.7	< 0.04	0.04	mg/l	S22209	
Nickel	EPA 200.7	0.034	0.01	mg/l	S22209	
Silver	EPA 200.7	< 0.007	0.007	mg/l	S22209	
Zinc	EPA 200.7	0.10	0.002	mg/l	S22209B	

**CHAIN OF CUSTODY / ANALYSIS REQUEST FORM**

Client: <u>Baxter Healthcare Corp</u>		Project Reference: <u>Needles Process</u>		Project Manager: <u>Carolyn Walker</u>		Sampled By: <u>M. Evans</u>		Date/Time Collected		NO OF BOTTLES		ANALYSES REQUESTED		PO No.		SAMPLE MATRIX		NO OF BOTTLES		AIC CONTROL NO:		AIC PROPOSAL NO:		Carrier: <u>Vel Ek</u>		Received on Ice (4°C)? YES <u>2.0</u> NO		Remarks	
AIC No.	Sample Identification	Date/Time Collected	GRAB	COMPO	WATER	SOIL	NO OF BOTTLES	ANALYSES REQUESTED	PO No.	SAMPLE MATRIX	NO OF BOTTLES	ANALYSES REQUESTED	NO OF BOTTLES	ANALYSES REQUESTED	NO OF BOTTLES	ANALYSES REQUESTED	NO OF BOTTLES	ANALYSES REQUESTED	NO OF BOTTLES	ANALYSES REQUESTED	NO OF BOTTLES	ANALYSES REQUESTED	NO OF BOTTLES	ANALYSES REQUESTED	NO OF BOTTLES	ANALYSES REQUESTED	NO OF BOTTLES	ANALYSES REQUESTED	
1	Grinding waste water	1-22-08 11:10 AM	✓		✓		2	✓		CR, CU, PB	2	✓																	
2	Ground Nit Staging	1-22-08 9:55 AM					2	✓			2	✓																	
3	Hydro Blast Rinse 1	1-22-08 10:38 AM					2	✓			2	✓																	
4	Spray Rinse	1-22-08 10:28 AM					2	✓			2	✓																	
5	Hydroblast 2	1-22-08 11:20 AM					2	✓			2	✓																	
6	Dakite Bath	1-22-08 10:22 AM					2	✓			2	✓																	
7	Overflow Rinse	1-22-08 10:17 AM					2	✓			2	✓																	
	Container Type																												
	Preservative																												
	G = Glass NO = none	P = Plastic S = Sulfuric acid pH2	V = VOA vials N = Nitric acid pH2	H = HCl to pH2 B = NaOH to pH12	T = Sodium Thiosulfate Z = Zinc acetate																								
Turnaround Time Requested: (Please circle)		NORMAL or EXPEDITED IN _____ DAYS		Expedited results requested by:		Relinquished		Date/Time		Received		Date/Time		By:		Received in Lab		Date/Time		By:		Date/Time		By:		Date/Time			
						By: <u>M. Evans</u>		1-25-08 11:20 AM		By: <u>[Signature]</u>		1-25-08 11:25				By: <u>[Signature]</u>		1-26-08 12:00				By: <u>[Signature]</u>		1-26-08 12:00					
Who should AIC contact with questions: <u>Carolyn Walker</u>		Phone: <u>870-424-5336</u> Fax: <u>870-424-5220</u>		Report Attention to: <u>Carolyn Walker</u>		Relinquished		Date/Time		By: <u>[Signature]</u>		Date/Time		By: <u>[Signature]</u>		Relinquished		Date/Time		By: <u>[Signature]</u>		Date/Time		By: <u>[Signature]</u>		Date/Time			
Report Address to: <u>Baxter Healthcare Corp.</u>		1900 N. Hwy 201		Mtn Home, AR 72653		By: <u>[Signature]</u>		1-25-08 11:20 AM		By: <u>[Signature]</u>		1-25-08 11:25		By: <u>[Signature]</u>		By: <u>[Signature]</u>		1-26-08 12:00		By: <u>[Signature]</u>		1-26-08 12:00		By: <u>[Signature]</u>		1-26-08 12:00			
Comments: <u>Baxter Paper 1-26-08 - 1201</u>																													

Baxter Healthcare Corporation  
1900 North Highway 201  
Mountain Home, AR 72653

ANALYTICAL RESULTS

AIC No. 117015-1

Sample Identification: Grinder Wastewater 02-15-08/7:40AM

Analyte	Method	Result	RL	Units	Batch	Qualifier
Total Cyanide	SM4500-CN C,E	0.035	0.01	mg/l	W24111	
Cadmium	EPA 200.7	< 0.004	0.004	mg/l	S22373	
Chromium	EPA 200.7	1.6	0.007	mg/l	S22373	
Copper	EPA 200.7	0.039	0.006	mg/l	S22373	
Lead	EPA 200.7	< 0.04	0.04	mg/l	S22373	
Nickel	EPA 200.7	0.64	0.01	mg/l	S22373	
Silver	EPA 200.7	< 0.007	0.007	mg/l	S22373	
Zinc	EPA 200.7	< 0.002	0.002	mg/l	S22373	





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1900 North Highway 201  
Mountain Home, AR 72653

SAMPLE PREPARATION REPORT

AIC No. 117015-1

<u>Analyte</u>	<u>Date/Time Prepared By</u>	<u>Date/Time Analyzed By</u>	<u>Dilution</u>	<u>Batch</u>	<u>Qualifier</u>
Total Cyanide	18FEB08 0955 258	18FEB08 1403 258		W24111	
Metals	19FEB08 1317 270	19FEB08 1444 270		S22373	



LABORATORIES

CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

PAGE 1 OF 1

Client: <u>Baker HealthCare</u>		AIC CONTROL NO: <u>117015</u>	
Project Reference: <u>Needles Grinder</u>		AIC PROPOSAL NO:	
Project Manager: <u>Carolyn Walker</u>		Carrier: <u>Vel-Ex</u>	
Sampled By: <u>M. Quinn</u>		Received Temperature C: <u>20C</u>	
AIC No. <u>Grinder Wastewater 02-15-08 07:40 AM</u>		Remarks:	
NO OF BOTTLES: <u>2</u>		ANALYSES REQUESTED:	
PO No.:		H = HCl to pH2 B = NaOH to pH12	
SAMPLE MATRIX:		T = Sodium Thiosulfate Z = Zinc acetate	
WATER		Relinquished Date/Time: <u>2-15-08 11:10 AM</u>	
G R A B		By: <u>M. Quinn</u>	
C O M P		Relinquished Date/Time: <u>2/16/08 9:05</u>	
G R A B		By: <u>M. Quinn</u>	
Date/Time Collected: <u>02-15-08 07:40 AM</u>		Comments:	
Sample Identification: <u>Grinder Wastewater</u>		V = VOA vials N = Nitric acid pH2	
Container Type: <u>Plastic</u>		P = Plastic S = Sulfuric acid pH2	
Preservative:		Turnaround Time Requested: (Please circle)	
G = Glass NO = none		NORMAL or EXPEDITED IN <u>2</u> DAYS	
Expedited results requested by: <u>Carolyn Walker</u>		Who should AIC contact with questions: <u>Carolyn Walker</u>	
Phone: <u>870-424-5336</u> Fax: <u>870-424-5370</u>		Report Attention to: <u>Carolyn Walker</u>	
Report Address to: <u>1900 Hwy 201 N</u>		Report Address to: <u>1900 Hwy 201 N</u>	
<u>Mtn Home, AR 72653</u>		<u>Mtn Home, AR 72653</u>	

FORM 0060

WS 5981 8/02

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Baxter Healthcare Corporation  
1900 North Highway 201  
Mountain Home, AR 72653

ANALYTICAL RESULTS

AIC No. 116668-1

Sample Identification: Hydroblast 2 1-30-08 / 10:53am

<u>Analyte</u>	<u>Method</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Batch</u>	<u>Qualifier</u>
Total Cyanide	SM4500-CN C,E	< 0.01	0.01	mg/l	W23964	



CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

PAGE 1 OF 1

Client: <u>Baxter Healthcare Corp</u>		PO No.		ANALYSES REQUESTED												AIC CONTROL NO: <u>116668</u>	
Project Reference: <u>Needles Washwater</u>		SAMPLE MATRIX														AIC PROPOSAL NO:	
Project Manager: <u>Carolyn Walker</u>		W A T E R I L														Carrier:	
Sampled By: <u>AMP</u>		G R A B C O M P														Received Temperature C	
AIC No. <u>Hydroblast</u>		Date/Time Collected <u>1-30-08</u> <u>10:53 AM</u>														Remarks	
		Container Type														Field pH calibration	
		Preservative														on @	
		G = Glass NO = none														Buffer:	
		P = Plastic S = Sulfuric acid pH2														T = Sodium Thiosulfate	
		V = VOA vials N = Nitric acid pH2														Z = Zinc acetate	
Turnaround Time Requested: (Please circle) <u>(NORMAL)</u> or EXPEDITED IN ___ DAYS		Relinquished														Received	
Expedited results requested by:		By: <u>AMP</u>														By: <u>Patricia</u>	
Who should AIC contact with questions:		Relinquished														Received in Lab	
Phone: <u>870-424-5336</u> Fax: <u>870-424-5220</u>		By: <u>Patricia</u>														Date/Time <u>2-4-08</u> <u>11:35 AM</u>	
Report Attention to: <u>Carolyn Walker</u>		By: <u>Patricia</u>														Date/Time <u>2-5-08</u> <u>11:00 AM</u>	
Report Address to: <u>Baxter Healthcare Corp</u>		Comments:														Date/Time <u>2-5-08</u> <u>11:00 AM</u>	
<u>1900 Hwy 201 N</u>																	
<u>MTD Home, AR 72653</u>																	



Baxter Healthcare Corporation  
1900 North Highway 201  
Mountain Home, AR 72653

ANALYTICAL RESULTS

AIC No. 116667-1

Sample Identification: Pretreatment Tank 1-30-08 / 2:18pm

Analyte	Method	Result	RL	Units	Batch	Qualifier
Total Cyanide	SM4500-CN C,E	< 0.01	0.01	mg/l	W23964	
Cadmium	EPA 200.7	< 0.004	0.004	mg/l	S22260	
Chromium	EPA 200.7	0.13	0.007	mg/l	S22260	
Copper	EPA 200.7	0.073	0.006	mg/l	S22260	
Lead	EPA 200.7	< 0.04	0.04	mg/l	S22260	
Nickel	EPA 200.7	0.14	0.01	mg/l	S22260	
Silver	EPA 200.7	< 0.007	0.007	mg/l	S22260	
Zinc	EPA 200.7	0.051	0.002	mg/l	S22260	





CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

PAGE 1 OF 1

Client: <u>Baxter Healthcare Corp</u>		AIC CONTROL NO: <u>1166667</u>	
Project Reference: <u>Needles Wash Water</u>		AIC PROPOSAL NO:	
Project Manager: <u>Carolyn Walker</u>		Carrier:	
Sampled By: <u>Wiggins</u>		Received Temperature C	
AIC No. <u>1-30-08</u>		Remarks	
Date/Time Collected <u>2:18 PM</u>			
Sample Identification <u>Pre-treatment tank</u>			
G R A B <u>✓</u>			
C O M P <u>✓</u>			
W A T E R <u>✓</u>			
S O I L			
NO OF BOTTLES			
PO No.		ANALYSES REQUESTED	
SAMPLE MATRIX			
W A T E R <u>✓</u>		T = Sodium Thiosulfate	
S O I L		Z = Zinc acetate	
G R A B <u>✓</u>		H = HCl to pH2	
C O M P <u>✓</u>		B = NaOH to pH12	
W A T E R <u>✓</u>		V = VOA vials	
S O I L		N = Nitric acid pH2	
G R A B <u>✓</u>		Relinquished	
C O M P <u>✓</u>		By: <u>Wiggins</u>	
W A T E R <u>✓</u>		Date/Time <u>2-4-08 11:35 am</u>	
S O I L		Received	
G R A B <u>✓</u>		By: <u>Kathy Cox</u>	
C O M P <u>✓</u>		Date/Time <u>1-4-08/11-35/11/08</u>	
W A T E R <u>✓</u>		Received in Lab	
S O I L		By: <u>Wiggins</u>	
G R A B <u>✓</u>		Date/Time <u>2-5-08 9:00</u>	
C O M P <u>✓</u>		By: <u>Kathy Cox</u>	
W A T E R <u>✓</u>		Comments:	
S O I L			
G R A B <u>✓</u>			
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