

APPROVED

DONNER SUMMIT PUBLIC UTILITY DISTRICT
P.O. BOX 610 – SODA SPRINGS – CALIFORNIA – 95728
TELEPHONE (530) 426-3456 – FAX (530) 426-3460
E-mail: tskjelstad@dspud.com

Minutes of the Regular Meeting of the Board of Directors
Held: March 17, 2009

STAFF PRESENT: Tom Skjelstad, General Manager; Jim King, Plant Manager; Julie Bartolini, Office Manager; Deleane Mehler, Office Assistant
OTHERS PRESENT: Geoffrey O. Evers, General Counsel, by telephone from 641 Fulton Ave. Ste 130, Sacramento, CA 95825, Susan Synder, Amber Waddle, Cheryl Lebel, Mike Livak

1. Call to Order

The Regular Meeting of March 17, 2008 of the Donner Summit Public Utility District Board of Directors was called to order at 6:10p.m. by President Cathy Preis, at 53823 Sherritt Lane Soda Springs CA, California.

2. Roll Call

Cathy Preis, President	- Present
Rachel Tolmachoff, Vice President	- Absent -Excused
Bob Sherwood, Secretary	- Absent -Excused
Philip Gamick, Director	- Present
Dave Oneto, Director	- Present

3. Clear the Agenda

There were no changes to the agenda.

4. Public Participation

None

5. Consent Calendar:

All items listed under the Consent Calendar are considered to be routine and will be approved by one motion. There will be no separate discussion of these items unless a member of the Board requests an item to be removed from the Consent Calendar for a separate action. Any items removed will be considered after the motion to approve the Consent Calendar.

- A. Cash Disbursements – General, Month of February 2009 --
\$ 159,105.65
- B. Cash Disbursements – Payroll, Month of February 2009 --
\$ 57,092.16
- C. Financial Statements thru December 31, 2008
- D. Meeting Minutes of February 10, 2009

Motion: Accept the Consent Calendar
By: Dave Oneto
Second: Phil Gamick
Vote: 3 Ayes, 0 Noes, 2 Absent, 0 Abstain
Motion Carries

6. Department Reports

A. Administration: Tom Skjelstad, General Manager

1. **Administrative Civil Liability Complaint R5-2008-0626, Donner Summit Public Utility District, Nevada County-** current status of the proposed fines. Tom Skjelstad, ECO:LOGIC and Vice President Rachel Tolmachoff met with the RWQCB Enforcement staff to discuss the proposed fines. Topics discussed included: eligible projects to apply the fines, authorization of discretionary funds, and timing of permit and violations. District staff continues to communicate with the Enforcement staff in order to develop a mutually acceptable resolution.
2. **Comments Received by the Regional Water Quality Control Board Regarding the District Tentative Draft Waste Discharge Permit-**summary of comments received. Tom Skjelstad reported on the comments received by the Regional Water Control Board regarding the Tentative Draft Permit. Almost all of the comments included: dilution credit, a stream gage to monitor river flow, a date certain for commencement of land disposal, climate change factors, and the biostimulation (algae) study. The Tentative Draft Permit is scheduled to be heard April 23/24 at the Regional Water Quality Control Board public hearing.
3. **Planning Steps Prior to Adoption of the District's Discharge Permit-**developing a planning process to implement upon adoption of the District's discharge permit. A discussion ensued regarding the proposed planning process. The purpose of the planning process is to publicly and cooperatively pursue solutions that result in the Donner Summit Public Utility District wastewater meeting the water quality standards as established and set down by the Regional Quality Control Board, Central Valley Region to the benefit of the citizens and environment.
4. **Report from Meeting with Heidi Kolbe, Professional Facilitator-**report from a meeting staff held with Heidi Kolbe on March 13, 2009. Tom Skjelstad reported there will be a public Parks meeting on March 24, 2009.
5. **Barnard & Vogler, Co. Engagement Letter for Bookkeeping Services thru December 31, 2009** - renew annual letter of agreement.

Motion: Authorize Cathy Preis to Sign the Barnard Vogler, Co. Engagement Letter for Bookkeeping Services thru December 31, 2009

By: Dave Oneto

Second: Phil Gamick

Vote: 3 Ayes, 0 Noes, 2 Absent, 0 Abstain

Motion Carries

6. Sierra Lakes County Water District Peer Review Engineers- SLCWD has hired an engineering firm to conduct a peer review of ECO:LOGIC wastewater treatment plant design upgrade process begins. Tom Skjelstad reported the Sierra Lakes County Water District's Board of Directors have retained the services of Water Works Engineers to review the work that ECO:LOGIC will conduct on behalf of the DSPUD with regards to the wastewater treatment plant.

B. Sewer and Water Department – Jim King, Chief Plant Operator

1. Waste Water Flow Data – for February-Reported

2. Fresh Water Flow Data – for February-Reported

3. Operations and Maintenance Summary – activities during the month of February. Jim King reported the following:

Operations WWTP

- Continued work with Telstar on completion of SCADA control and monitoring system testing and troubleshooting.
- Experienced power outage on 2/16 to plant, main office and outlying lift stations.
- The wastewater plant had one excursion from its monthly ammonia limit. The calculated allowable average limit was 5.9 mg/L with the effluent returning a value of 8.8 mg/L. The regional board was notified by phone as soon as the excursion was known and by official letter 5 days later.
- Placer Electric installed a new grounding rod at the main office to protect the electrical and phone systems from power surges.

Operations Water Plant

- Completed and sent out monthly fresh water report to DHS.
- Transported by snow-cat 2000lbs of alum to the fresh water plant.
- Repaired the hydraulic hoses on loader.

- Replaced blown surge protectors on the plant head-works flow meter.

Repairs and Maintenance WWTP

- Installed new shelving and piping for chemical feed pumps and equipment.

Laboratory

- Continued sampling of the plant effluent, R-1, R-2, and Towle Mountain for phosphorus and nitrate.
- Continued in-house COD and ammonia monitoring of influent composite samples.
- Sent out for testing plant effluent for 1st quarter bioassay testing.

C. Safety Committee Meeting Minutes

1. Administrative and Operations Department Safety Committee – February meeting.

Motion: Accept The Safety Committee Meeting Minutes for February
By: Dave Oneto
Second: Phil Gamik
Vote: 3 Ayes, 0 Noes, 2 Absent, 0 Abstain

Motion Carries

7. President's Report

1. 2009 Board Committee Appointments

The committee appointments will be decided at the April meeting.

8. Correspondence: None

9. Closed Session: None

- 10. Informational** In accordance with Government Code Section 54954.2(a), Directors may make brief announcements or brief reports on their own activities (concerning the District). They may ask questions for clarification, make a referral to staff or take action to have staff place a matter of business on a future agenda. It was decided to reschedule the April Board of Directors meeting to April 28th, 2009.

11. Adjournment

Motion: **Adjourn at 6:50p.m.**
By: Dave Oneto
Second: Phil Gamick
Vote: 3 Ayes, 0 Noes, 2 Absent, 0 Abstain

Motion Carries

Schedule of Upcoming Meetings

Special Meeting - April 28, 2009
Regular Meeting - May 19, 2009
Regular Meeting - June 16, 2009

The wording in these minutes are as reread from the notes by the Clerk of the Board.

Respectfully Submitted,

Deleane Mehler
Clerk of the Board



Linda S. Adams
Secretary for
Environmental
Protection

California Regional Water Quality Control Board Central Valley Region

Karl E. Longley, ScD, P.E., Chair

11020 Sun Center Drive #200, Rancho Cordova, California 95670-6114
Phone (916) 464-3291 • FAX (916) 464-4645
<http://www.waterboards.ca.gov/centralvalley>



Arnold
Schwarzenegger
Governor

Donner Summit Public Utilities District
10 February 2009 Meeting Handout

EXHIBIT A

What Is The Regional Water Quality Control Board?

The Regional Water Board is the State agency responsible for protecting surface and ground water quality, including the aquatic life and human health beneficial uses of the water.

What are a National Pollutant Discharge Elimination System (NPDES) Permit and Cease and Desist Order?

An NPDES Permit, issued by the Regional Water Board, allows a discharge of wastewater to surface and ground water. The Permit sets forth limitations, requirements and prohibitions to protect the beneficial uses of the receiving waters. A Cease and Desist Order, also issued by the Regional Water Board, is an enforcement Order that provides a Discharger an identified time period and requires specific actions to comply with NPDES Permit requirements.

Why are an NPDES Permit and Cease and Desist Order Necessary for the Donner Summit Public Utilities District (DSPUD)?

The DSPUD provides its customers with collection and advanced treatment of domestic wastewater. After treatment, the wastewater is discharged to land during summer months and to the South Yuba River during the months of October thru July. By law, wastewater can be discharged to rivers only under an NPDES Permit. If the discharger cannot comply with some or all of the NPDES Permit, the Regional Water Board has a number of enforcement options, a Cease and Desist Order is one of those options. DSPUD cannot comply with all the effluent limitation in the proposed NPDES Permit, so a new Cease and Desist Order is also proposed.

Why are the NPDES Permit and Cease and Desist Order being changed at this time?

- Under Federal law an NPDES Permit must be renewed every five years whether or not any change is needed. The DSPUD Permit is more than five years old and needs to be renewed.
- The current NPDES Permit contains effluent limitations for nitrate that the DSPUD cannot comply with consistently, so the current Cease and Desist Order contains a time schedule to achieve compliance with the nitrate effluent limitations. The current Permit and Cease and Desist Order need to be updated to address this issue.

Why is nitrogen (ammonia and nitrate) in the wastewater discharge a concern?

- Nitrates can harm the health of fetuses and young children. The Department of Public Health drinking water standard is 10 mg/L as nitrogen (or 45 mg/L as nitrate).
- Ammonia can kill fish. The safe concentration of ammonia varies with the pH and temperature of the water. Ammonia will slowly convert to nitrates in the environment, reducing fish toxicity, but increasing the drinking water concern from nitrates.
- Both nitrate and ammonia act as a fertilizer to stimulate algae growth in rivers. There are many factors that contribute to algae growth including other sources of nitrogen (animal wastes, septic tanks, soil erosion), phosphorous (also acts as a fertilizer and also is in the wastewater discharge), water temperature, dilution, water turbidity, and other factors. It is not clear that reduction in effluent nitrogen will resolve the observed algae problem observed downstream of the DSPUD discharge.

What is NOT CHANGED in the newly proposed NPDES Permit?

- The discharge flow limit has not changed. The treatment plant does have capacity to serve additional connections. The DSPUD decides how the available capacity is used.
- Land disposal is the preferred method of disposal. Discharge to the South Yuba River is only allowed when snow or rain conditions make land disposal impossible. A new prohibition against discharge to the South Fork Yuba has been added to clarify this restriction.
- Disinfection requirements to protect the public from disease are unchanged. The disinfection requirement for river and snowmaking discharges essentially eliminate the risk of disease from contact with the wastewater. Land application of wastewater has a lower level of disinfection, but exposure of the public to the wastewater is prohibited.

What is CHANGED in the newly proposed NPDES Permit?

- New or more stringent pollutant limitations for aluminum, ammonia, dichlorobromomethane, aldrin, alpha BHC, copper, cyanide, manganese, silver and zinc
- A dilution credit applied to the new dichlorobromomethane limitations. This chemical is a byproduct of wastewater chlorination. The proposed effluent limitations are set to protect someone from a one-in-one-million increased risk of cancer if they drink one liter of river water every day for 70 years under the most critical conditions. Normally the risk will be much lower.
- Study requirements to examine the treated wastewater's contribution to biostimulation of aquatic growths in the South Yuba River. Depending on the results of the Study, future changes in the NPDES Permit are possible. If the Permit is changed in the future, the same public review and comment process will occur prior to Regional Water Board adoption.
- A new cross-stream effluent diffuser is required to incorporate more rapidly mixing of the discharged wastewater and river flow, reducing the possibility that a fish or human will be exposed to concentrated wastewater. The effluent limitations (with the possible exceptions of nitrates and dichlorobromomethane) are set to be protective for undiluted effluent. The new diffuser further reduces any risk of harmful impact from the wastewater discharge.
- Nitrate effluent limitations in the existing NPDES Permit are currently set at the Department of Public Health drinking water standard. DSPUD has requested allowing higher nitrate concentrations in the effluent, but meeting the drinking water standard in the river, that is, after dilution. This is the major technical issue of the proposed NPDES permit renewal.
- A newly Cease and Desist Order providing the DSPUD a time schedule to comply with pollutant limitations.

What is in the Tentative NPDES Permit Renewal Package Issued for Public Comments?

The tentative NPDES Permit Renewal Package includes

- (1) The tentative NPDES Permit and Cease and Desist Order containing permit limitations that allow for dilution credits applied to nitrate and dichlorobromomethane limitations, and
- (2) Tentative NPDES Permit Options that do not allow for dilution for either or both of these human health constituents.

PUBLIC COMMENTS DUE BY 6 MARCH 2009

QUESTIONS? CALL DIANA MESSINA, REGIONAL BOARD STAFF, AT (916) 464-4828

EXHIBIT B

Donner Summit Public Utility District

**Existing Wastewater Treatment
Plant Performance and Possible
Plant Modifications to Meet
Evolving Permit Requirements**

February 10, 2009

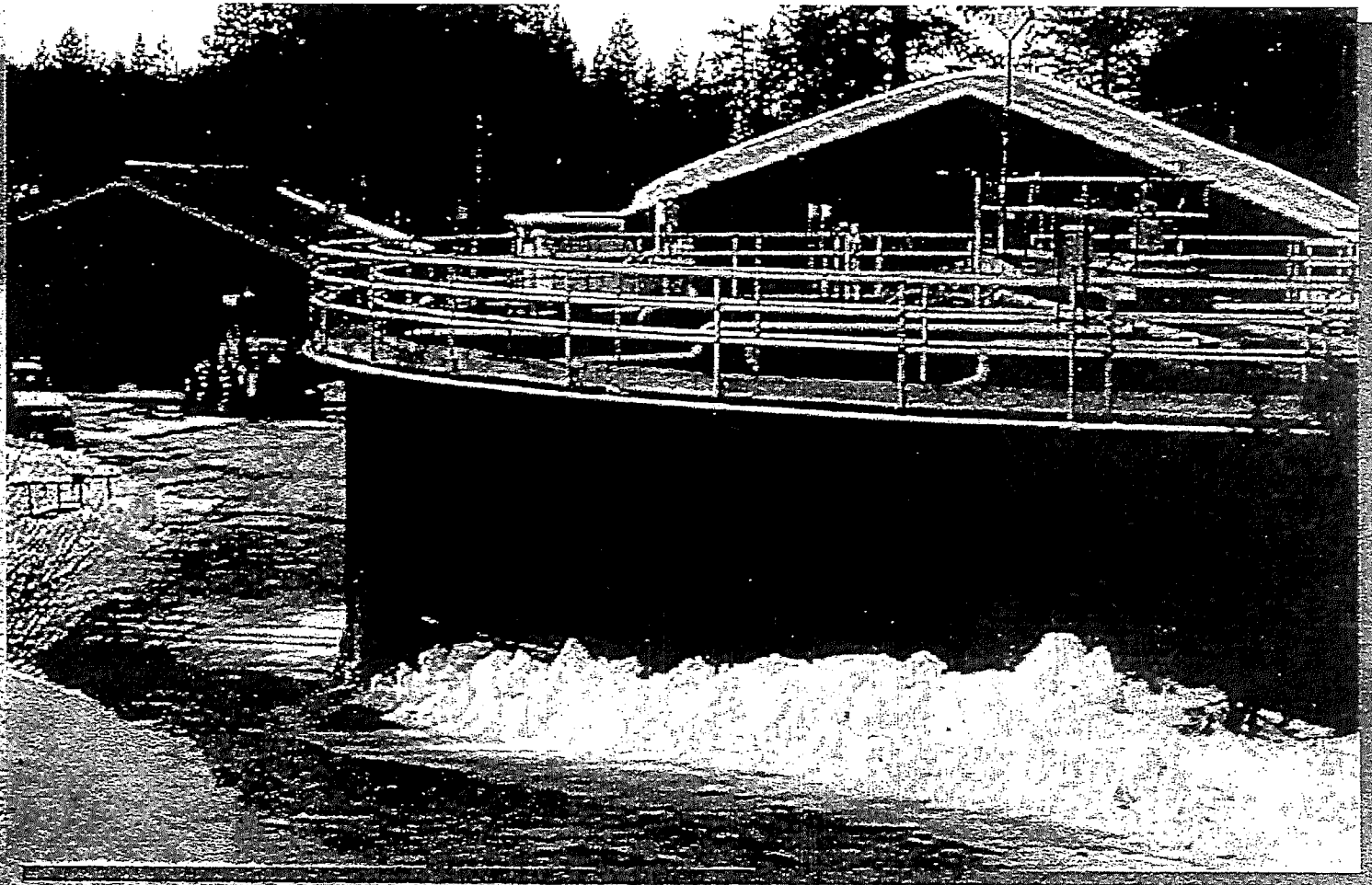
ECO:LOGIC
ENGINEERS CONSULTANTS

Design Flows and Loads Summary

From Technical Memorandum No. 1

Parameter	Existing Conditions	Allowance for Growth	Future Condition
Design Flows, Mgal/d			
Average Annual Flow (AAF)	0.23	TBD	TBD
Average Day Maximum Monthly Flow (ADMMF)			
Typical	0.35	TBD	TBD
High	0.43	TBD	TBD
Average Day Maximum Weekly Flow (ADMWF)			
Typical	0.43	TBD	TBD
High	0.61	TBD	TBD
Peak Day Flow (PDF)	0.97	TBD	TBD
Peak Hour Flow (PHF)	TBD	TBD	TBD
BOD Load, lb/d			
Average Annual Load (AAL)	215	TBD	TBD
Average Day Maximum Monthly Load (ADMML)	520	TBD	TBD
Average Day Maximum Weekly Load (ADMWL)	780	TBD	TBD
Peak Day Load (PDL)	900	TBD	TBD
BOD Concentration, mg/L			
AAL combined with AAF	112	TBD	TBD
ADMML combined with Typical ADMMF	178	TBD	TBD
ADMML combined with High ADMMF	145	TBD	TBD
ADMWL combined with Typical ADMWF	218	TBD	TBD
ADMWL combined with High ADMWF	153	TBD	TBD
PDL combined with ADMWF	251	TBD	TBD
PDL combined with PDF	111	TBD	TBD
TSS Loads and Concentrations	1.0 x BOD	1.0 x BOD	1.0 x BOD
TKN Loads and Concentrations	0.3 x BOD	0.3 x BOD	0.3 x BOD

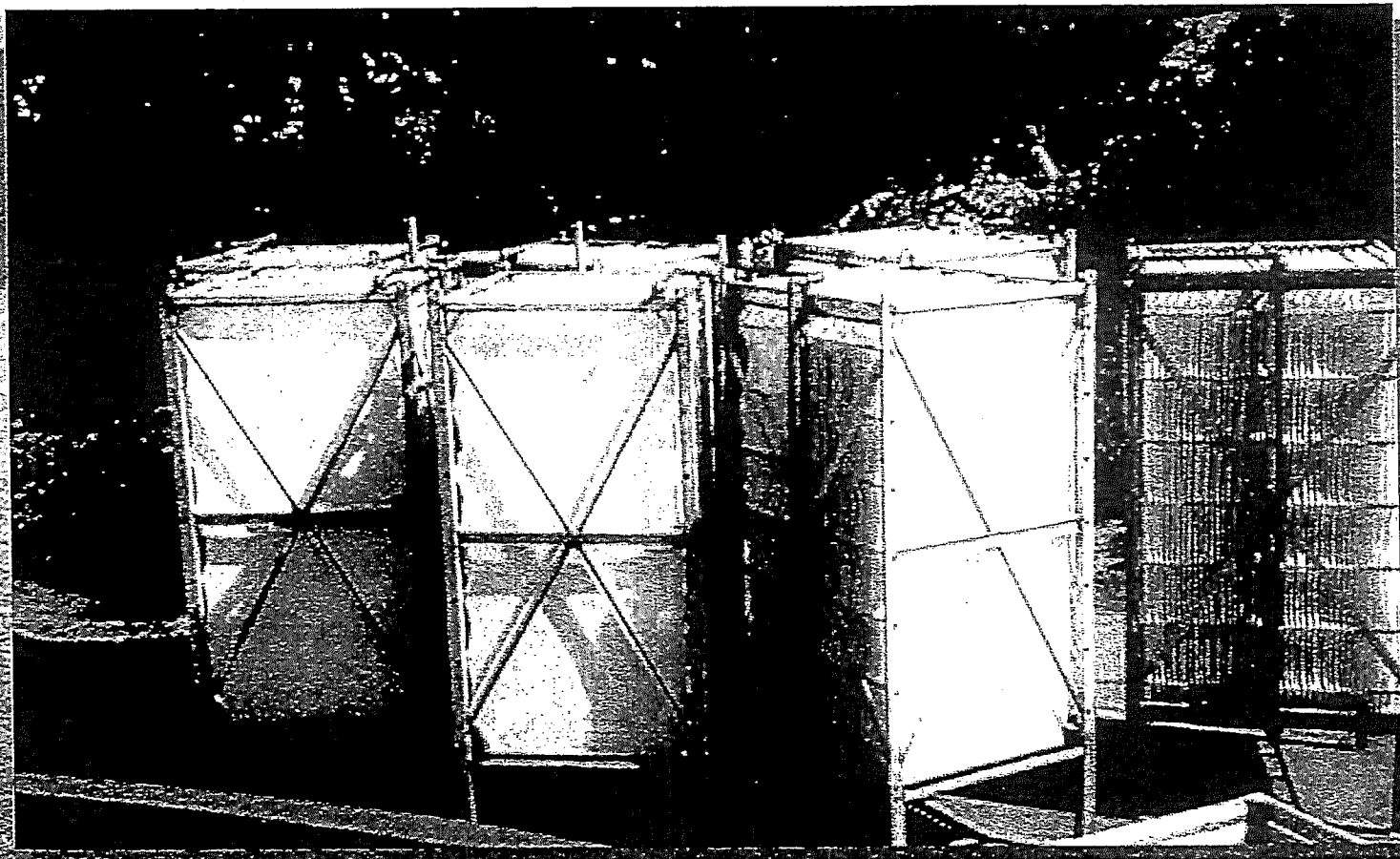
Plant 1



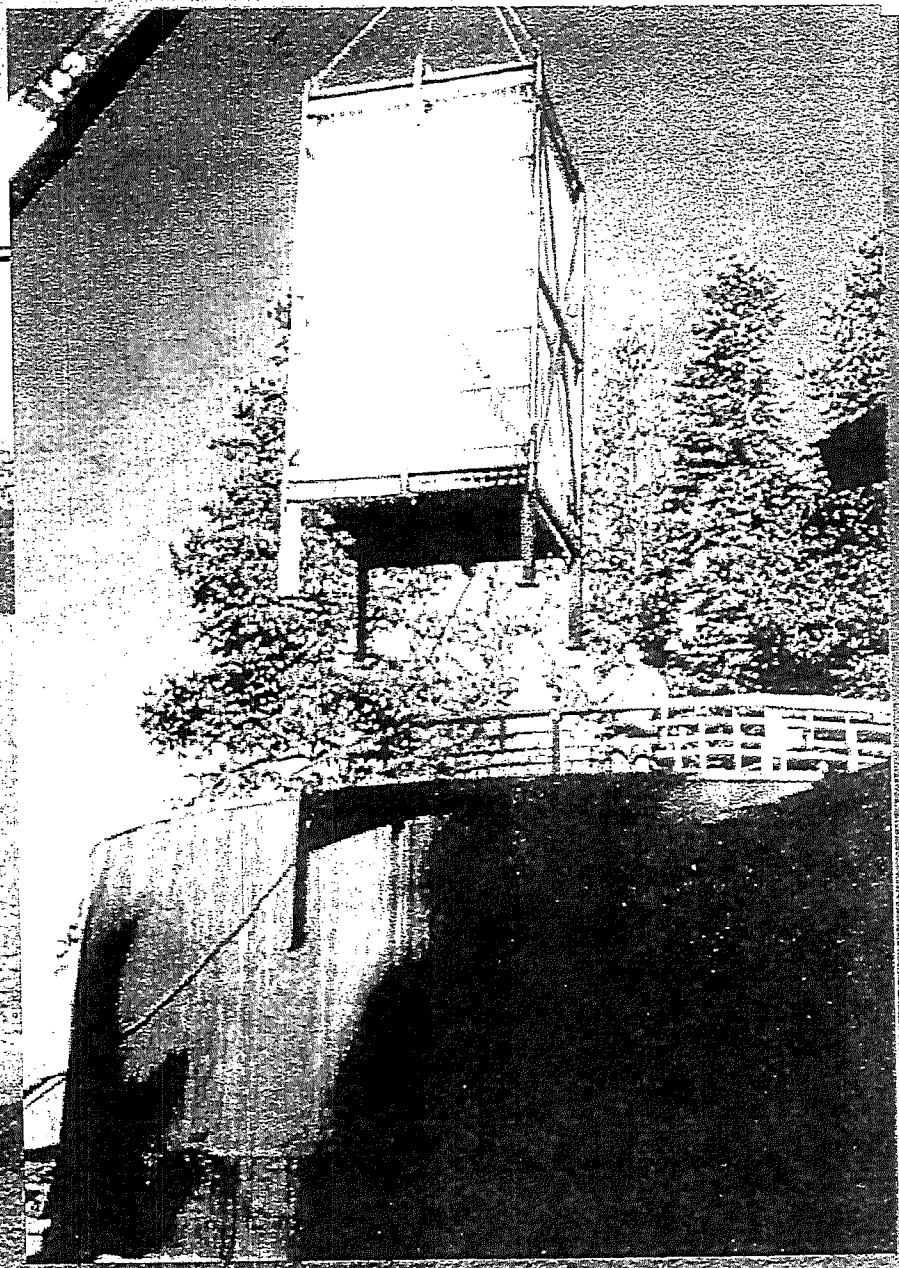
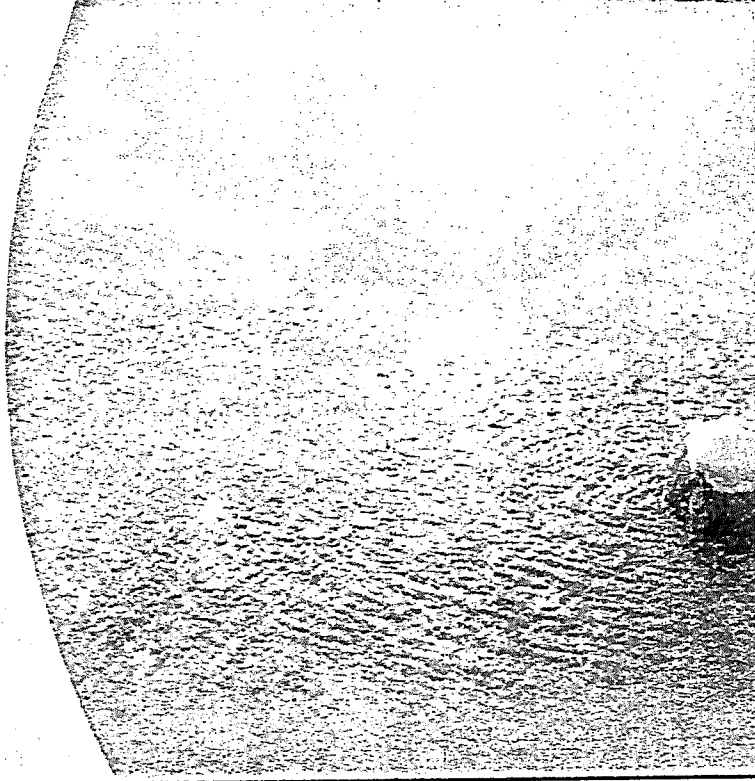
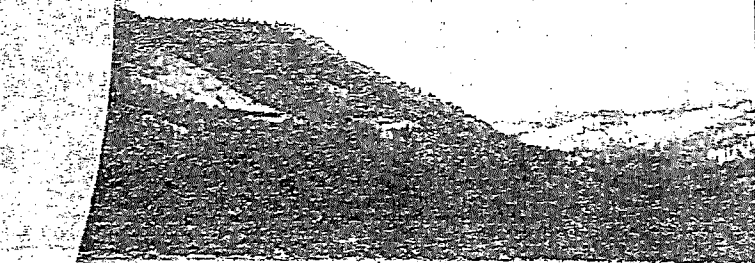
COLECO

15000 15000 15000 15000 15000

AccuWeb Frames

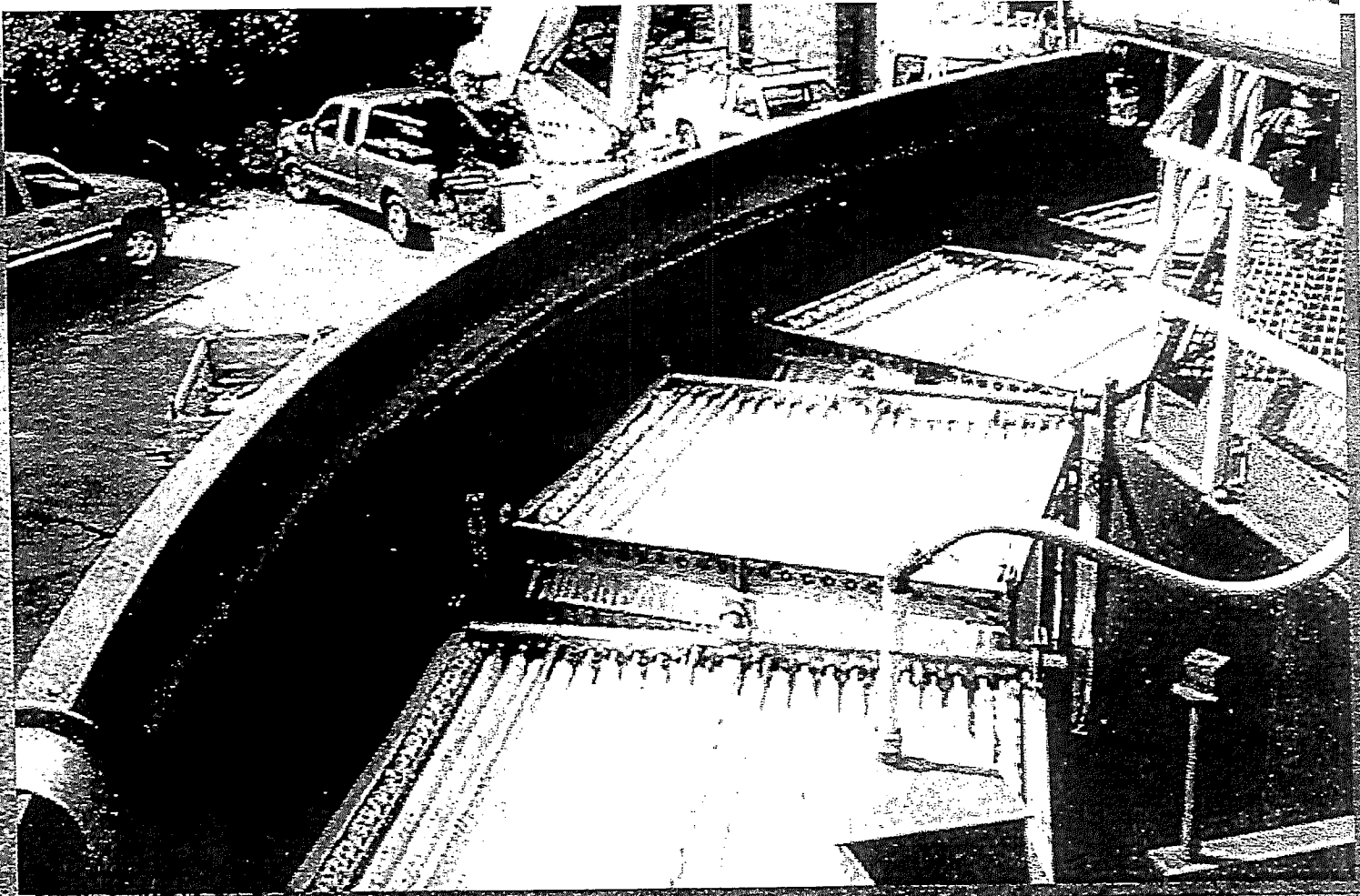


Frame Installation

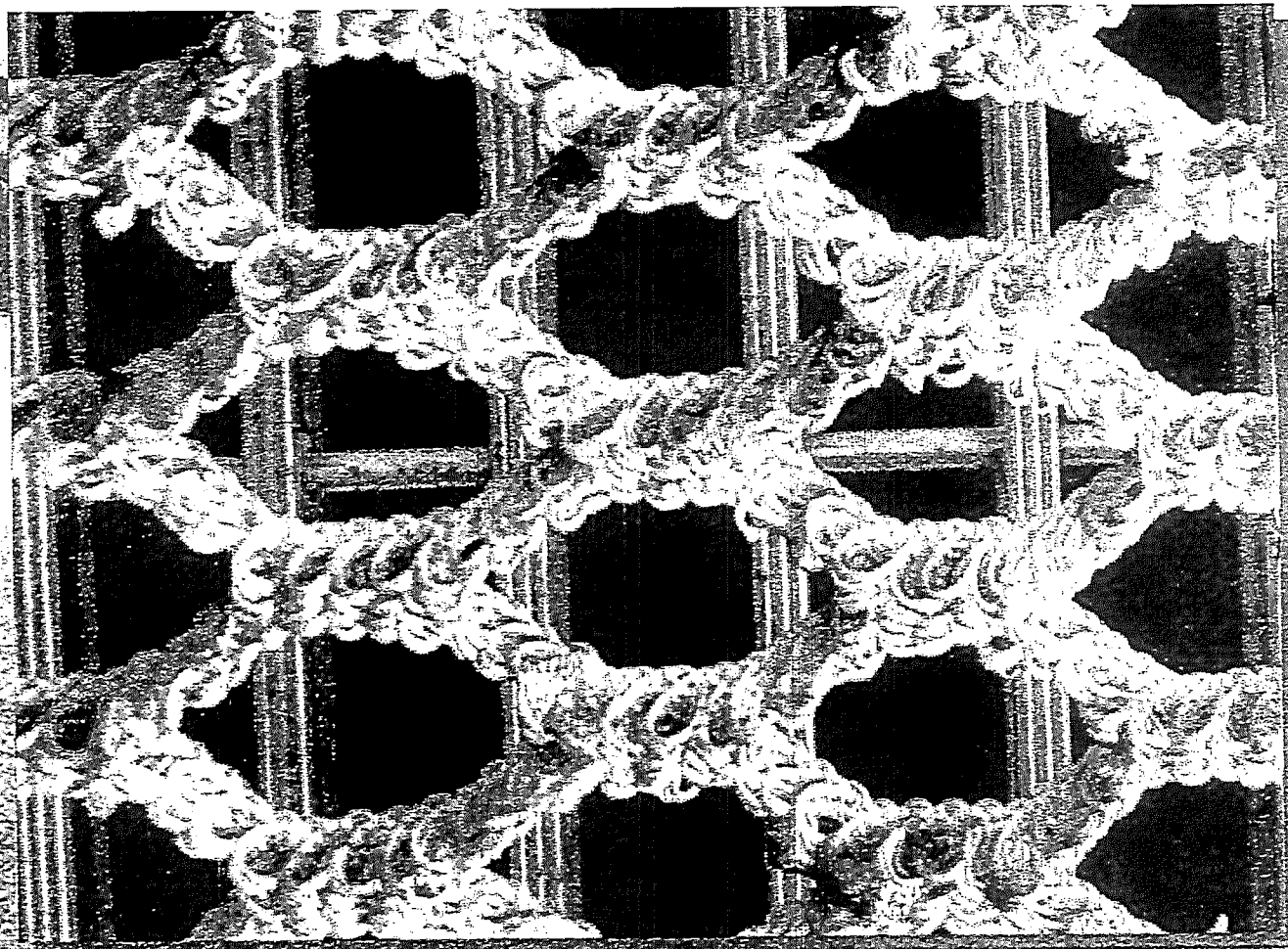


ECOLOGIC

Installed Frames

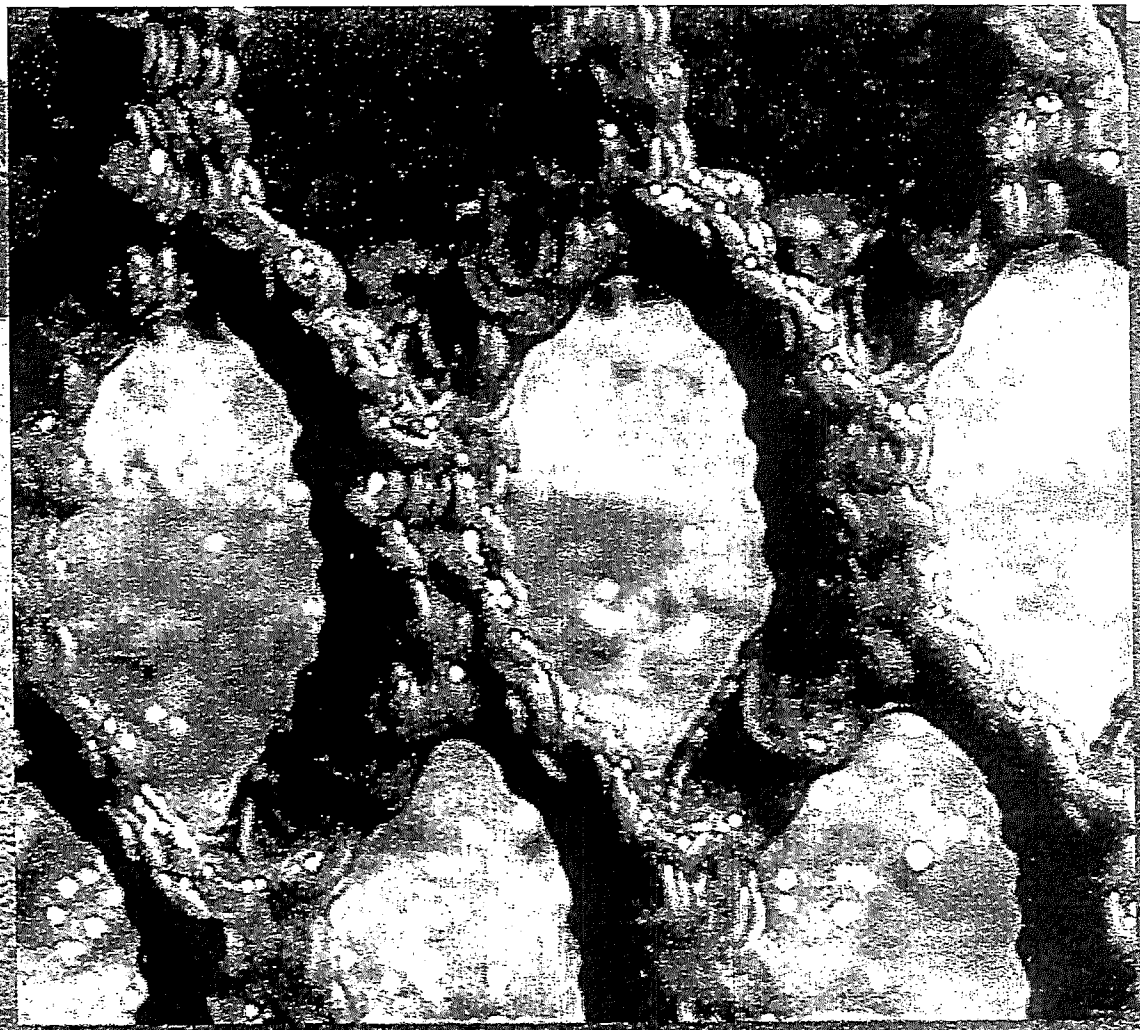


Web Closeup - Light Mass

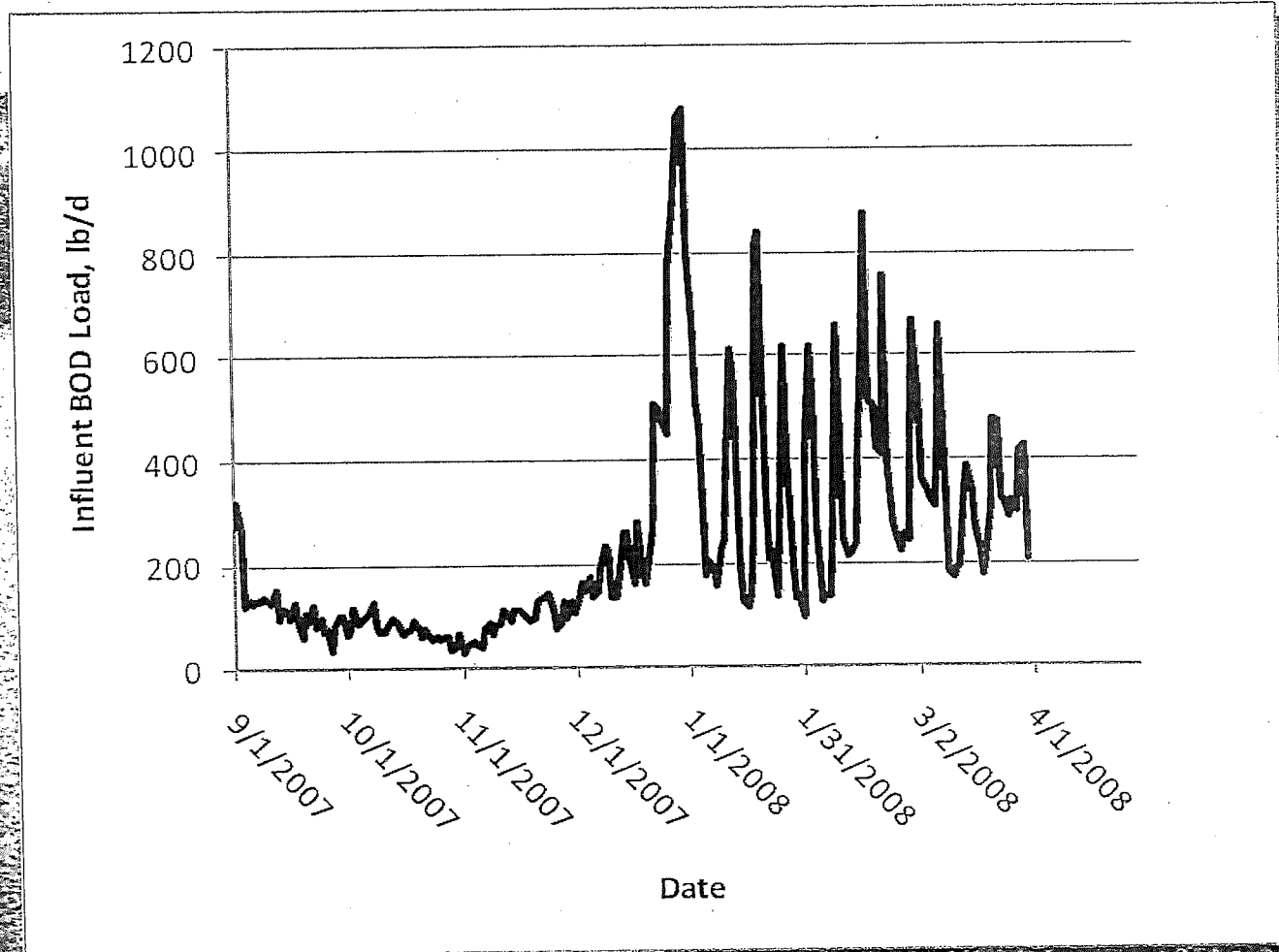


ECOLOGIC

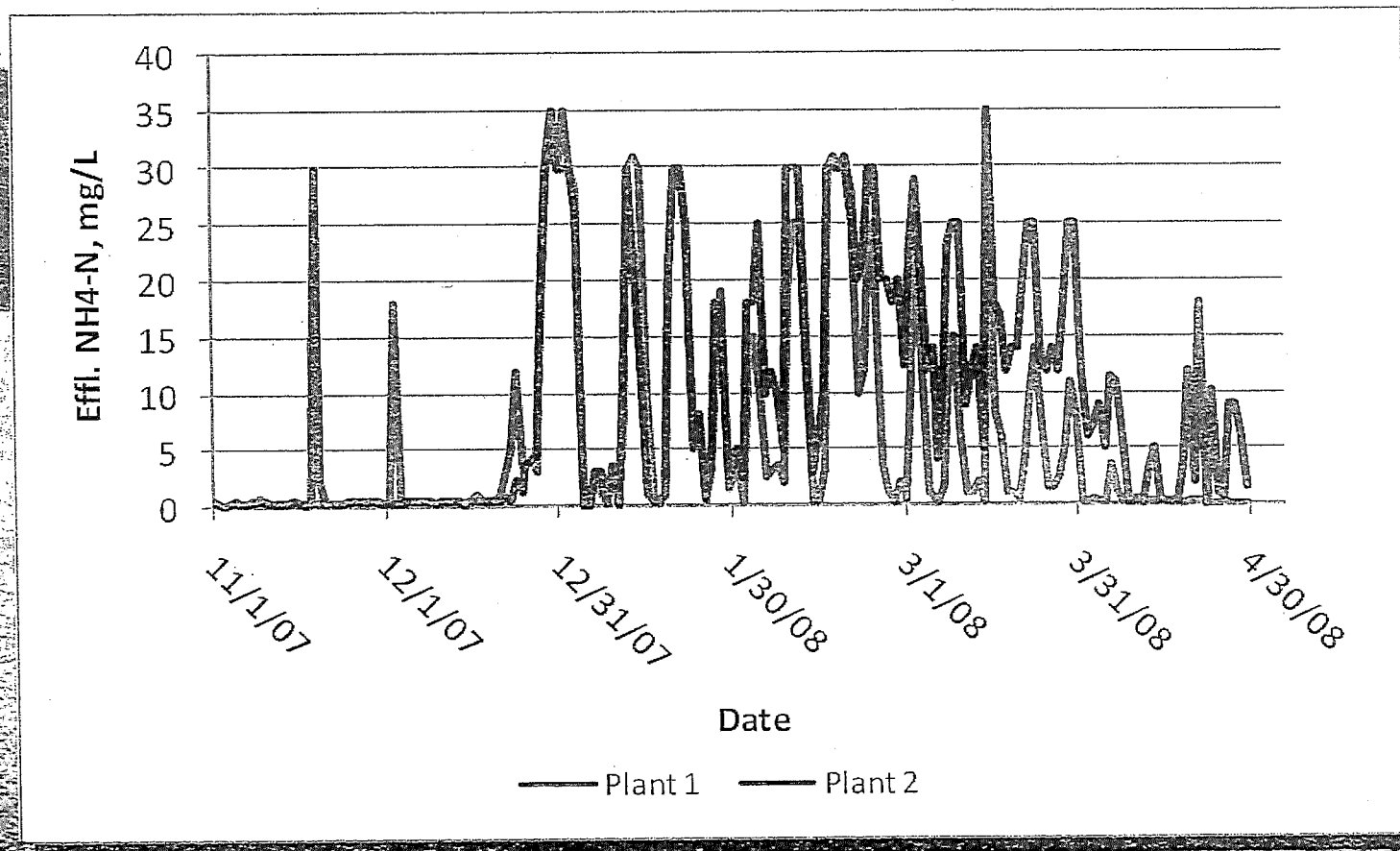
Web Closeup - Heavy Mass



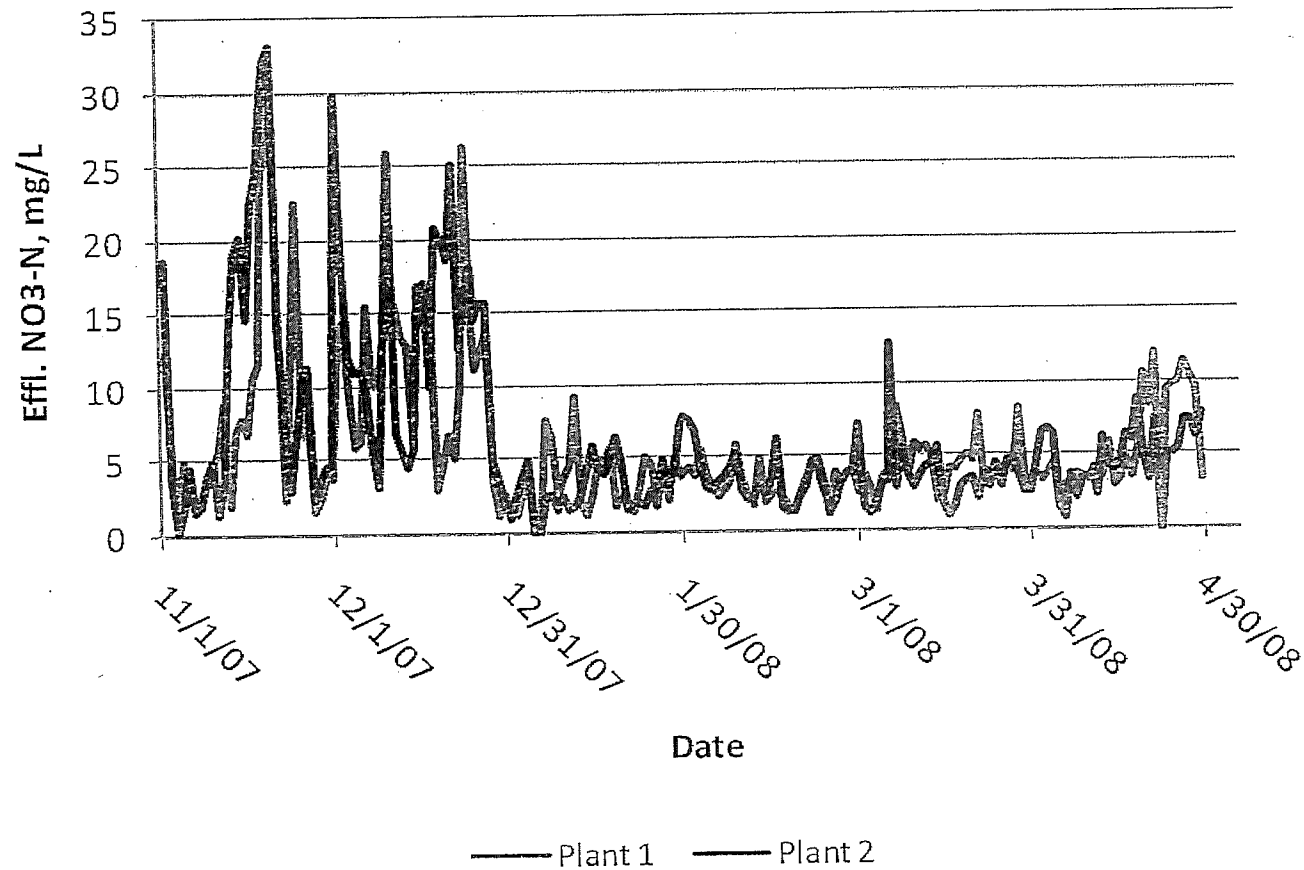
Influent BOD Load



Effluent Ammonia-N ($\text{NH}_4\text{-N}$), 2007/2008



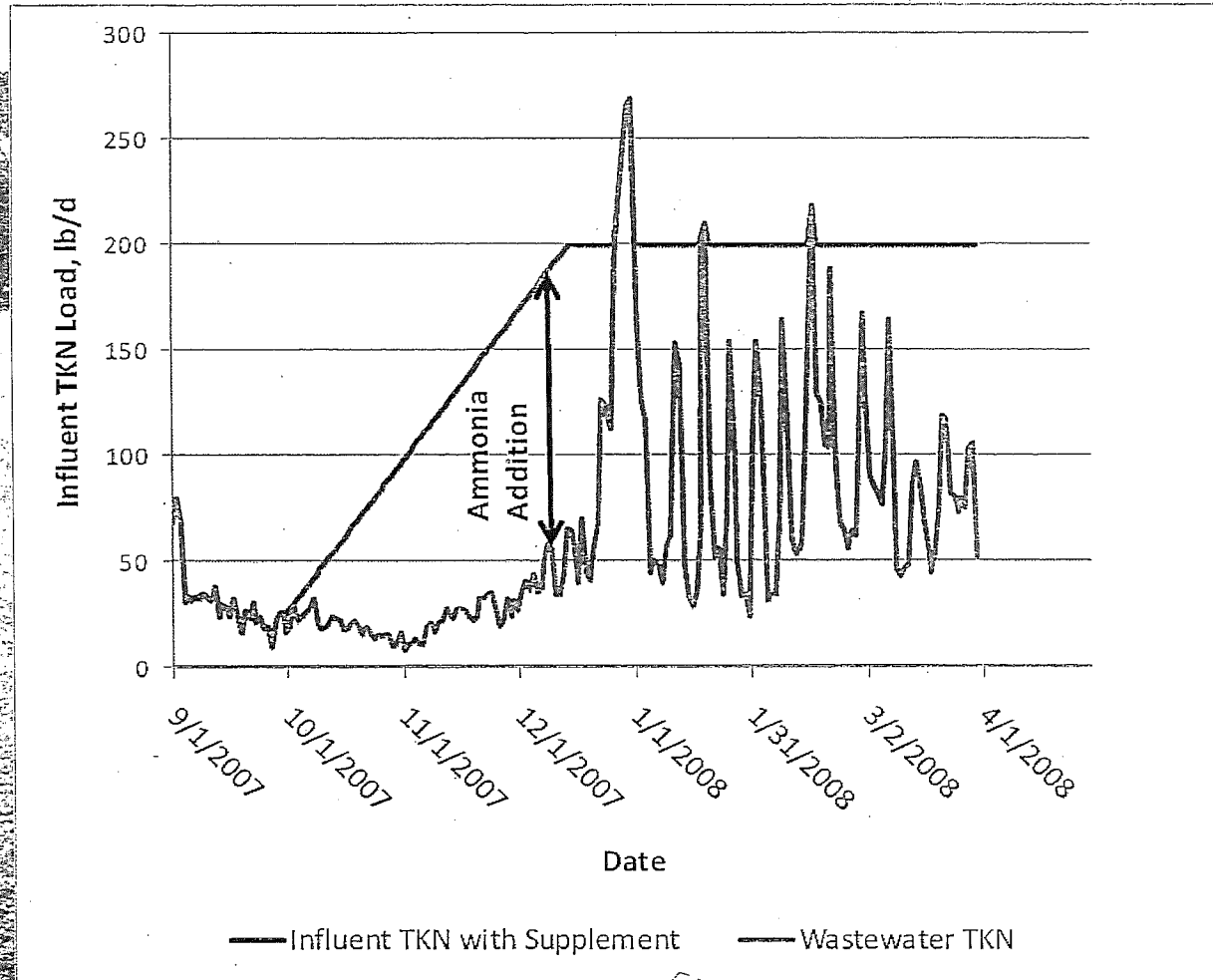
Effluent Nitrate-N ($\text{NO}_3\text{-N}$), 2007/2008



Effluent Ammonia and Nitrate Concentrations Considered for this Analysis

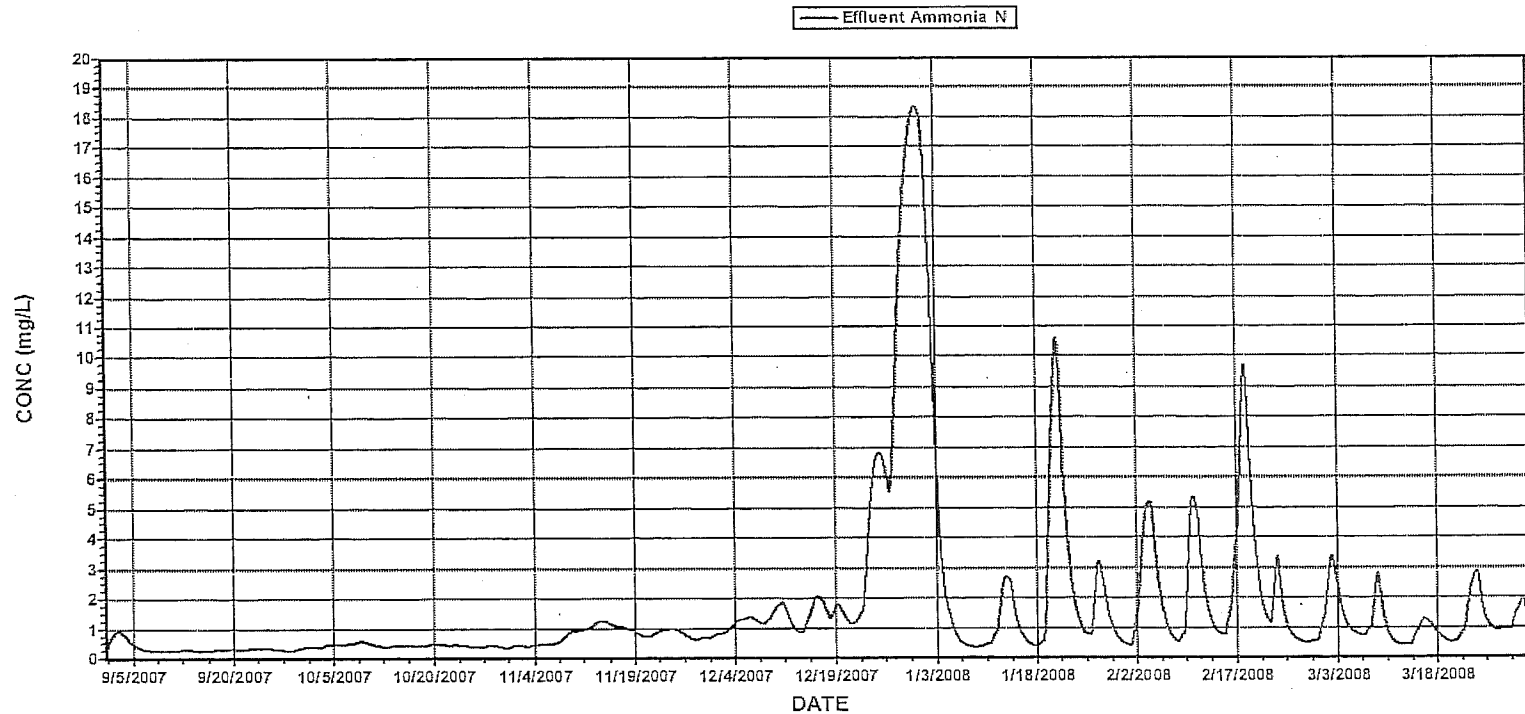
Scenario	Max. Effluent Conc., mg/L		Explanation
	Ammonia-N	Nitrate-N	
1	5	NA	The AccuWeb system was intended to meet a 5 mg/L ammonia-n limit. Although it was also intended to meet a 10 mg/L nitrate-n limit, substantial removal of nitrate has not occurred and it is possible that the nitrate limit could be substantially relaxed in the new permit.
2	1	NA	It is likely that a stringent ammonia-n limit will be included in the new permit.
3	1	10	This scenario includes the stringent ammonia-n limit and the existing nitrate-n limit of 10 mg/L.
4	1	2	This scenario includes the stringent ammonia-n limit and a stringent nitrate-n limit intended to minimize algae growth stimulation in the South Yuba River.

Ammonia Addition Strategy



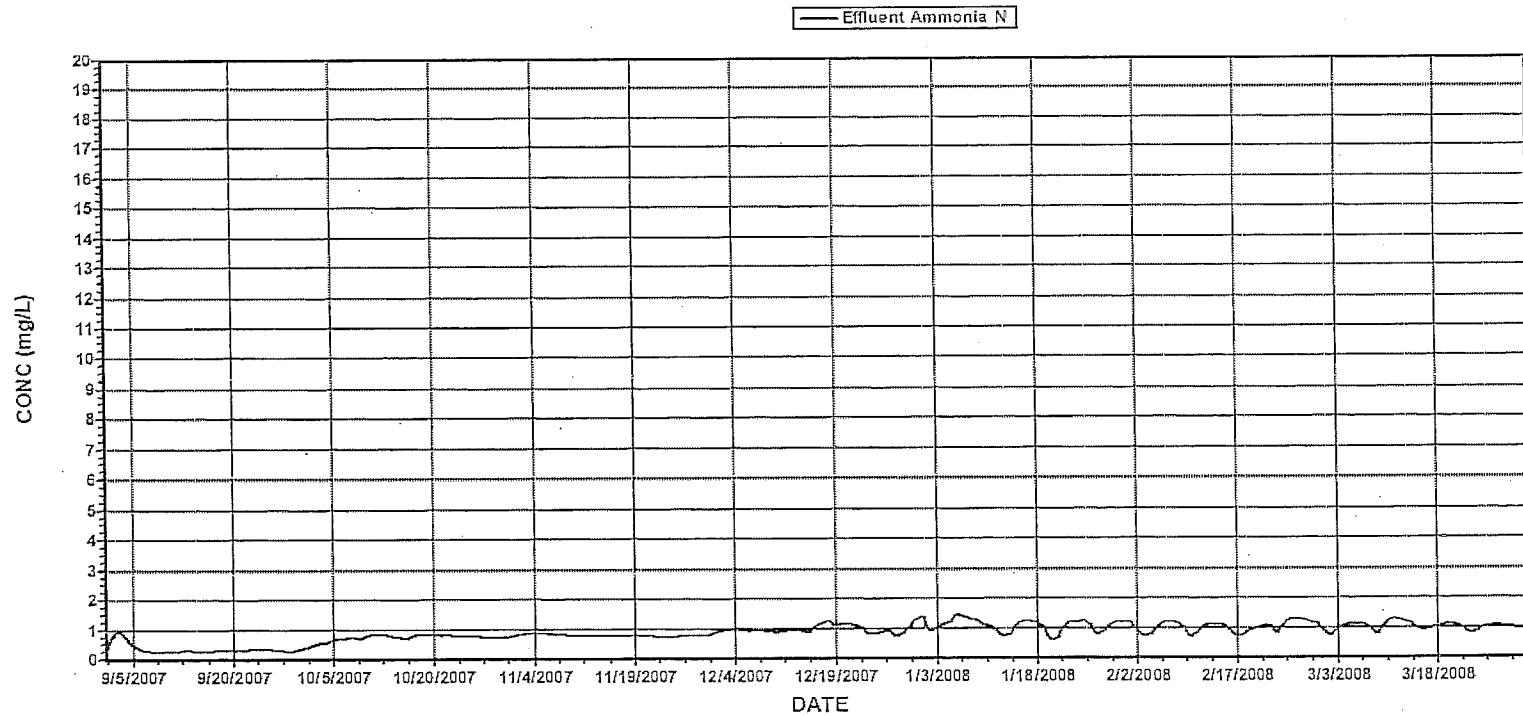
Process Simulation Results for Effluent Ammonia-N Without Supplemental Ammonia Feed

BioWin Chart

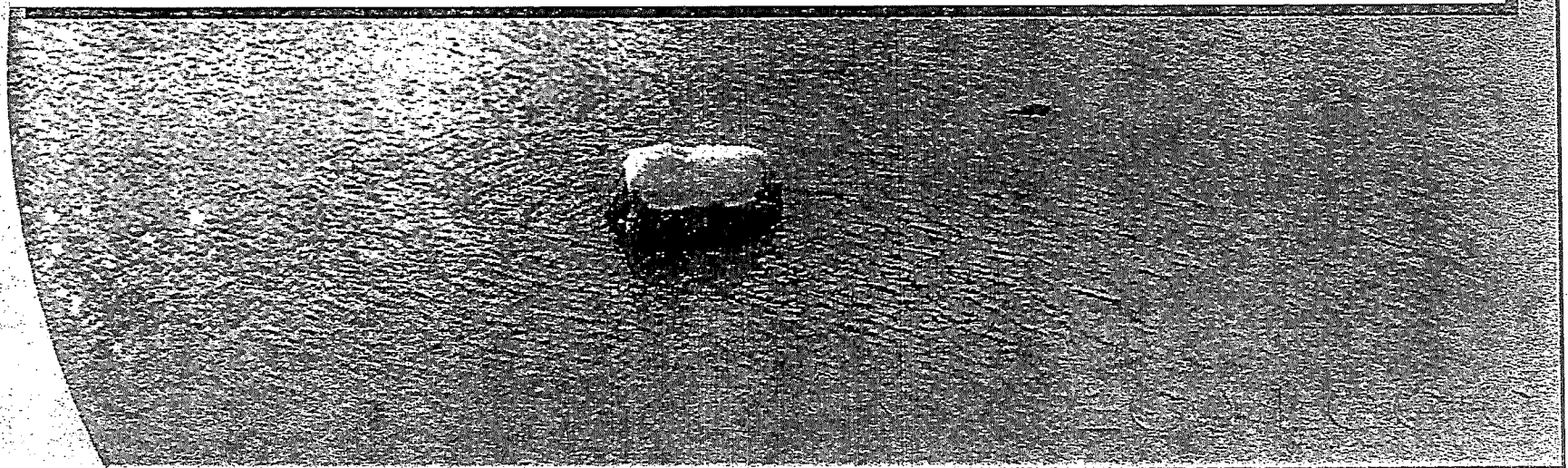
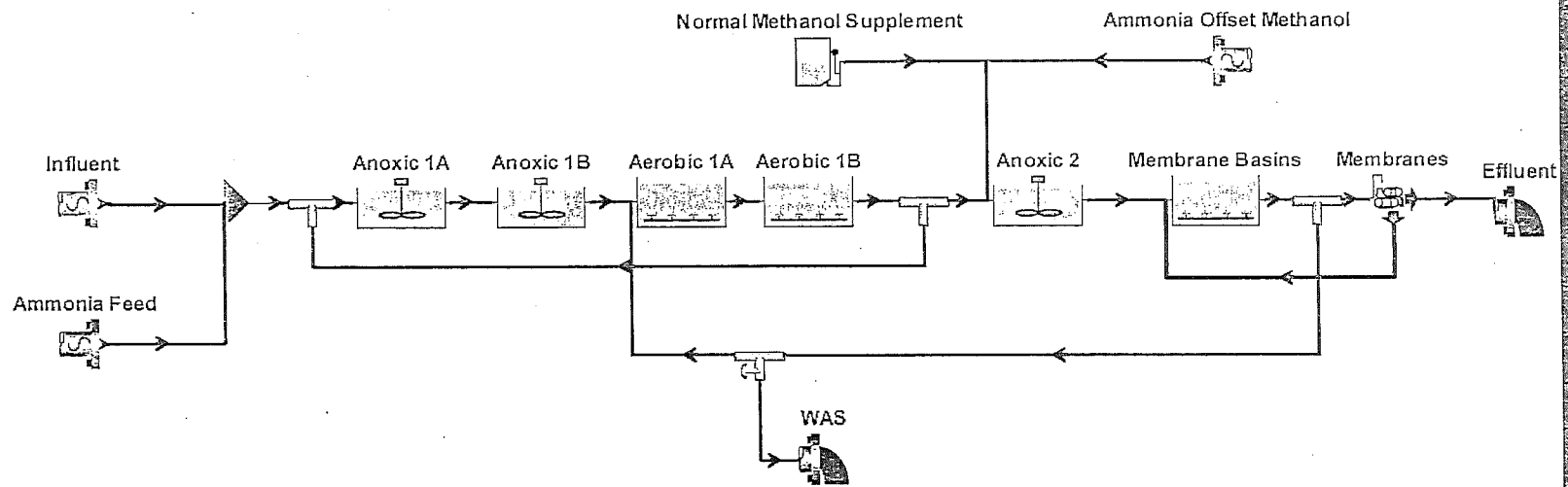


Process Simulation Results for Effluent Ammonia-N With Supplemental Ammonia Feed

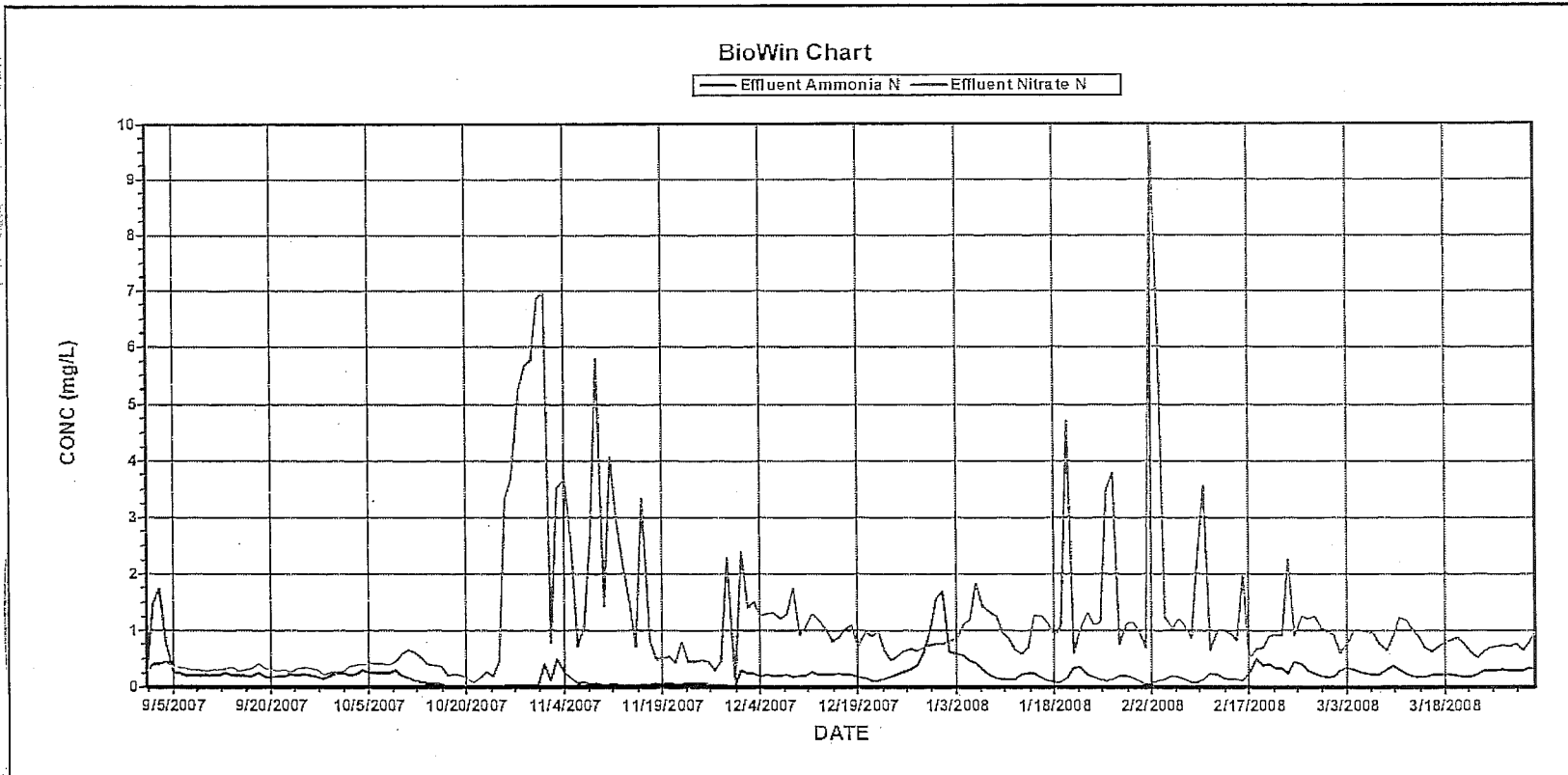
BioWin Chart



BioWin Model of 4-Stage MBR System for Nitrification and Denitrification



Simulation Results for 4-Stage MBR System



Biological Treatment System "Ballpark" Construction Cost

Ammonia-N Limit, mg/L	Nitrate-N Limit, mg/L	Biological Treatment System "Ballpark" Construction Cost, \$ Million
5	NA	0.5
1	NA	1.0
1	10	10 (a)
1	2	10 (a)