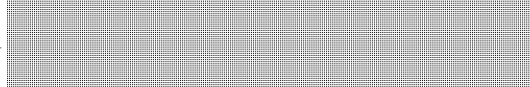
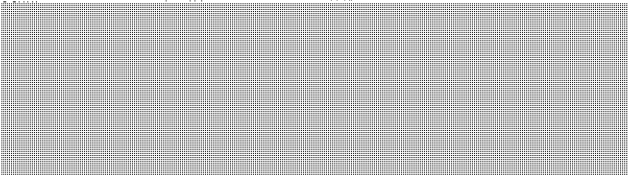


From

- Nick Coleman CN 11am, Jan 6/03
  - recoverable amount
  - spilled amount
- Public Affairs @ CN also contacted by 

- Nov 18/02 → will send me info distributed

s.21



s.21 **From:** Arnold Laine  
**To:** Mark Puumala; TODD Kondratt  
**Date:** 7/8/02 1:33PM  
**Subject:** April 2000 Review of CN-Hornepayne effluent sampling frequency

Todd, [REDACTED]

Maureen called this AM and was asking if we had anything on file with regard to a recent review where we may/may not have allowed a reduction in sampling frequency for CN-Hornepayne. CN's consultant KGS had forwarded a memo to Ed Bil April 5/00 requesting the reduction in sampling, and Ed had fax'd a copy to the Unit, attention to me for review. If I remember right, did I not have you dealing with this area. Do you remember if I forwarded this FAX to you, and if so did you complete the review? KGS has claimed that they were provided direction from the Ministry allowing the reduction but the Sault office has no record of this and apparently neither does CN. This is in support of an occurrence report, especially if they reduced sampling on their own volition. Could you check your records to see if you completed a review, and if so, did you support or reject their request.

Mark, I also seem to remember having discussions about this issue with someone in the Groundwater Unit as well but I can't remember who: Shawn? you? Do you have any record in the Groundwater files with regard to the reduction of sampling frequencies at this site?

Could you please forward your replies directly to Maureen  
Thx in advance  
Arnie

**CC:** Maureen Burtch

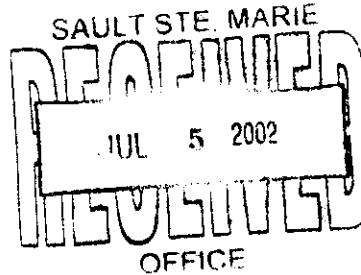
**From:** Alisdair Brown  
**To:** Maureen Burtch  
**Date:** 9/3/02 11:04AM  
**Subject:** CN- Hornepayne

Maureen,

Mark and I had a look, and the groundwater unit in T.Bay doesn't seem to have a file on CN-Hornepayne. If your file has any previous memos from the ground water unit, maybe you could check if the memos have a file reference, and I could take another look.

Alisdair

June 14, 2002



File No. 02-434-04.200

Ontario Ministry of Environment  
Sault Ste. Marie District Office  
70 Foster Drive, Suite 610  
Sault Ste Marie, ON P7A 6V4

ATTENTION: Ms. Maureen Birch  
Environmental Officer

RE: CN Hornepayne Yard  
West End Remedial System  
No. 4-0052-98-006  
Request to Amend Certificate of Approval

Dear Ms. Birch:

KGS Group, on behalf of Canadian National Railway, are pleased to provide you with this letter requesting an amendment to the present Certificate of Approval No. 4-0052-98-006 for the West End Remedial System at the CN Hornepayne Yard, located in Hornepayne, Ontario.

The present C of A requires that there are weekly inspections of the system. Specifically the C of A states in Section 4, subsection (4):

"The Owner shall supplement the monitoring in subsection (1) with visual inspections which shall include, but not be limited to the following:

- (A) A weekly inspection of the effluent from the Discharge Control Gate during discharge of treated water for any visible oil sheen;
- (B) A weekly inspection of the level of material in the recovered product storage tank."

The Discharge Control Gate was replaced in the fall of 2000, as detailed in the KGS Group letter to you dated June 14, 2002. The new control structure has effectively eliminated any uncontrolled discharge of effluent to the Jackfish Creek. It has also increased the retention time of effluent within the discharge ditch allowing for increased attenuation of hydrocarbon components within the effluent. Also, no sheen was observed on effluent at the discharge point of the concrete control structure during any of the inspections conducted in 2001.

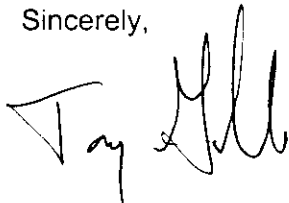
The volume of free product being recovered and stored in the 25,000 L waste oil storage tank has decreased since the systems commissioning in 1998 (1998 – 11,300 L, 1999 – 30,300 L, 2000 – 19,710 L, 2001 – 8,700L). Due to the passive nature of the remedial system, it is expected that the yearly volume of recovered free product will remain similar to 2001 and will most likely decrease. The majority of the free product collected by the system is from April to early June with little recovery occurring throughout the remainder of the year.

Modifications to the skimmer unit have all but eliminated the collection of water in conjunction with free product. As a result, the volume of fluid to be collected during an operating year will be well within the capacity of the storage tank. Also, all piping to the tank from the skimmer unit is metal, and has shown no signs of any leakage.

Given the above, it is requested that the present C of A be amended to allow for bi-weekly inspections (every two (2) weeks) of the effluent discharge and the level of material in the storage tank.

We trust that the above information is adequate for your requirements. Should you require further information, please do not hesitate to contact the undersigned at (807) 345-2233.

Sincerely,

A handwritten signature in black ink, appearing to read 'Tony Gallo', written in a cursive style.

Tony Gallo, M.Sc., P.Biol.  
Project Co-ordinator

/mc

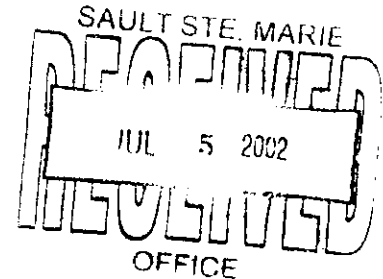
cc: Nick Coleman, Environmental Officer - Canadian National Railway  
Kimber Osiowy - KGS Group, Winnipeg

June 14, 2002

File No. 02-434-04.200

Ministry of Environment  
Sault Ste. Marie District Office  
70 Foster Drive, Suite 610  
Sault Ste Marie, ON P7A 6V4

ATTENTION: Ms. Maureen Birch  
Environmental Officer



RE: CN Hornepayne Yard  
West End Remedial System  
New Effluent Control Structure  
Certificate of Approval No. 4-0052-98-006

Dear Ms. Birch:

KGS Group, on behalf of Canadian National Railway, is pleased to provide you with the following information pertaining to upgrades to the West End Remedial System conducted in the fall of 2001.

The Remedial System incorporates a control structure at the end of a polyvinyl chloride lined discharge trench to control system effluent discharge to the Jackfish Creek. The existing concrete control structure was found to be ineffective in retaining effluent within the drainage ditch and in controlling discharge of effluent to the Jackfish Creek. As a result the existing structure was replaced with a new structure in the fall of 2001. The new structure was placed in the same location as the previous structure. Details of the new structure are provided on the attached drawing. Based on observations made during the 2001 operating year and the current 2002 operating year, the new structure is working as per design, increasing retention time of effluent within the ditch as well as allowing for the controlled discharge of effluent to the Jackfish Creek.

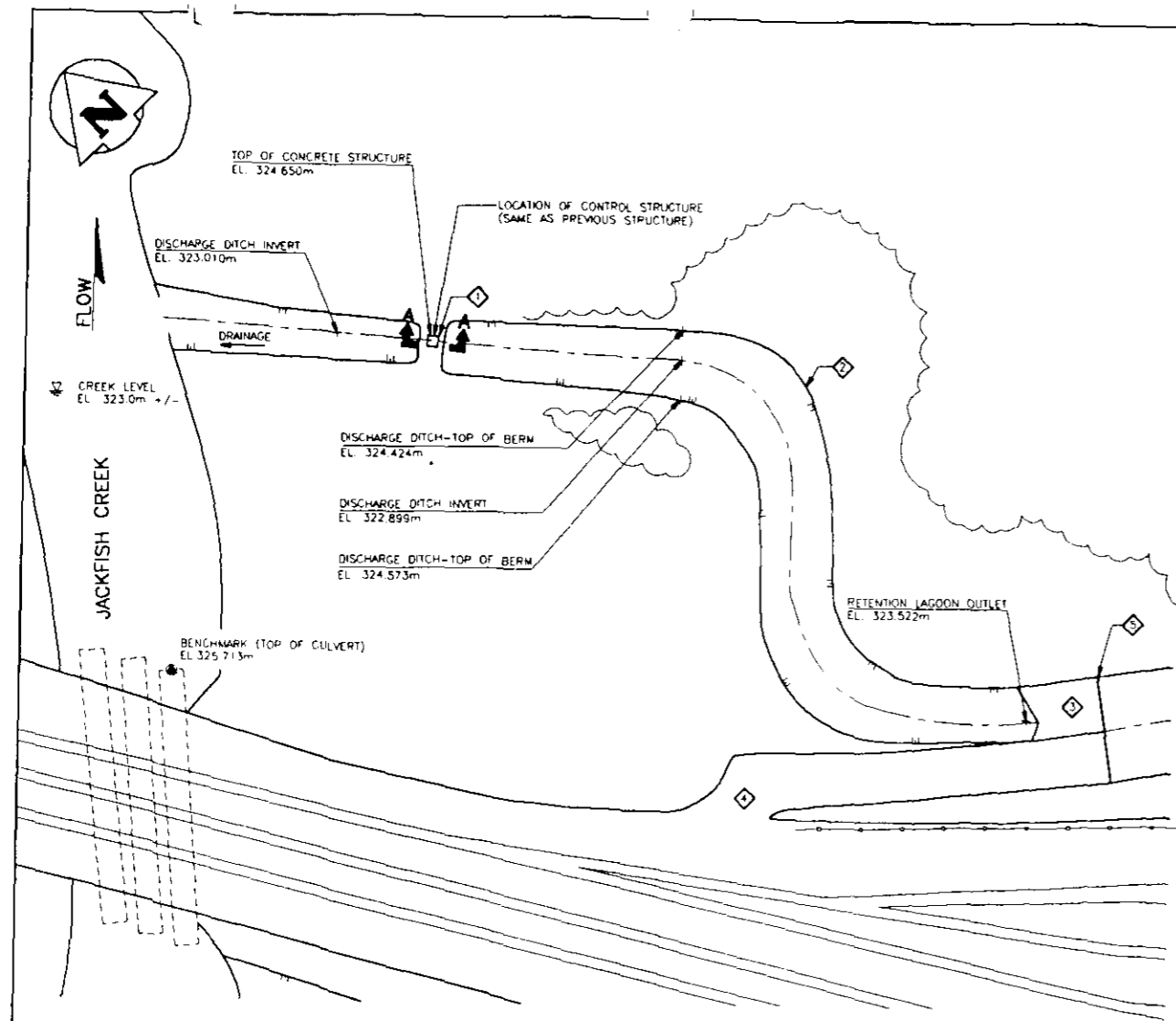
We trust that the information provided meets your requirements. Should you have any questions, please contact the undersigned at (807) 345-2233.

Sincerely,

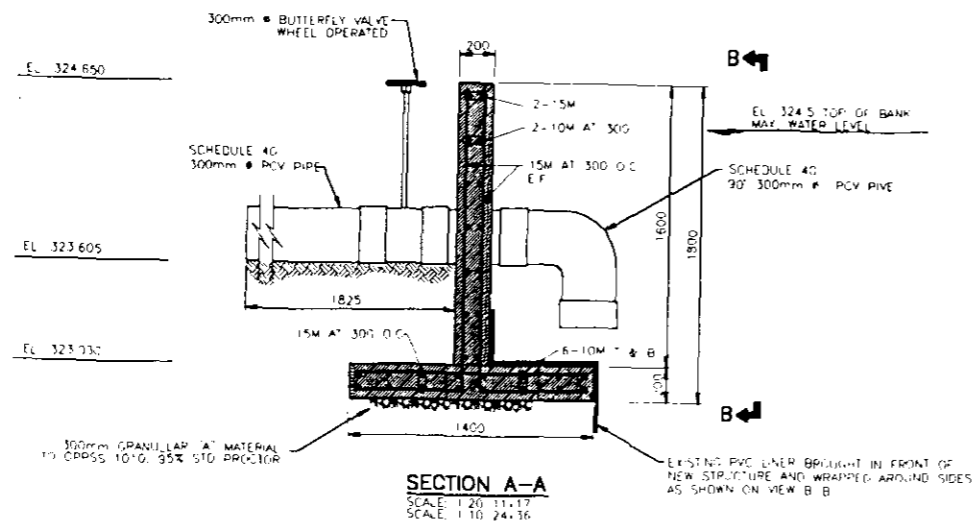
Tony Gallo, M.Sc., P.Biol.  
Project Co-ordinator

/mc  
Enclosure

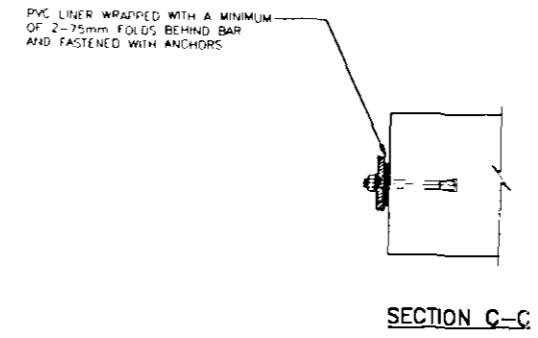
c.c. Nick Coleman – Environmental Officer, Canadian National Railway  
Jeff Frank – Waves



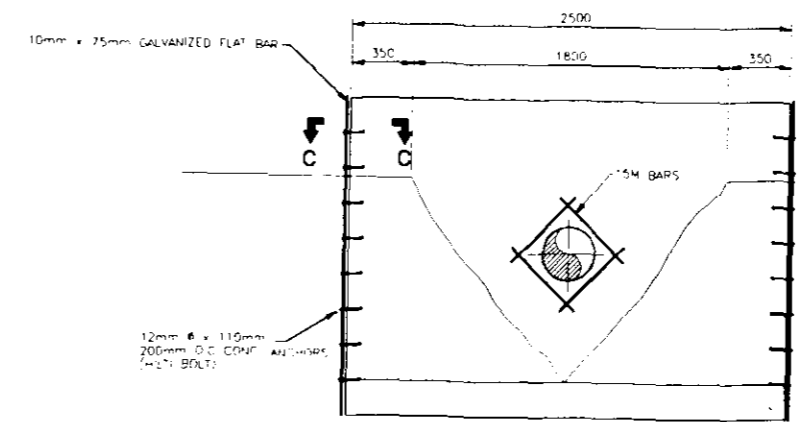
**PLAN**  
SCALE: 1:1000 11'x17"  
SCALE: 1:500 24'x36"



**SECTION A-A**  
SCALE: 1:20 11'x17"  
SCALE: 1:10 24'x36"



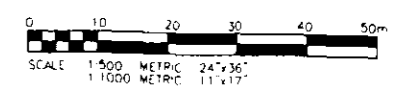
**SECTION C-C**



**VIEW B-B**  
SCALE: 1:20 11'x17"  
SCALE: 1:10 24'x36"

- KEY NOTES:**
- ◇ EXISTING CONCRETE DISCHARGE CONTROL STRUCTURE, C/W 300mm PVC PIPE & 300mm WHEEL OPERATED BUTTERFLY VALVE LOCATED AS SHOWN. DISCHARGE ELEVATION=323.605m
  - ◇ LINED DISCHARGE DITCH SEE DWG 97-434-01C5, SECTION C
  - ◇ ASY/PARKING PAD SEE DWG 97-434-01C3
  - ◇ ACCESS RAMP SEE DWG 97-434-01C3
  - ◇ SHEET PILE WEIR SEE DWG 97-434-01S1

- LEGEND:**
- BERM
  - CENTERLINE OF DITCH
  - UNDER DRAINS
  - BURIED ELECTRICAL CABLE
  - BENCHMARK
  - + SURVEY POINTS



AB 01/05/02	AS-BUILT
0 21/07/97	ISSUED FOR TENDER
NO. 0 / M / Y	DESCRIPTION

**REVISIONS / ISSUE**

NO.	DESCRIPTION
(A)	SECTION LETTER OR DETAIL NUMBER IS DRAWN
(B)	DRAWING WHERE SECTION OR DETAIL WAS INDICATED
(A)	DRAWING WHERE SECTION OR DETAIL WAS INDICATED
(B)	DRAWING WHERE SECTION OR DETAIL WAS INDICATED
(A)	SECTION OR DETAIL SHOWN ON SAME DRAWING

**KGS GROUP** CONSULTING ENGINEERS & PROJECT MANAGERS  
WINNIPEG (204) 896-1209  
THUNDER BAY (807) 345-2233

**CN CANADIAN NATIONAL**

**HORNEPAYNE RAIL YARD PRODUCT RECOVERY SYSTEM**

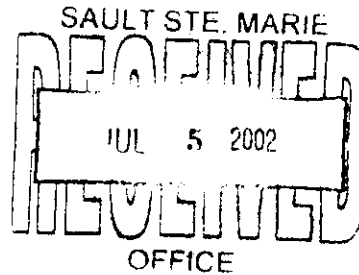
**CONCRETE OUTFALL STRUCTURE**

DESIGNED	M.G.	DRAWN	C.C.	CHECKED	K.C.
DATE	1/5/01	DATE	JUN 22/03		
PROJECT NO.	02-434-04.200 01				AB

PVC PIPE NO. 02-434-04 01 WAB 999  
4x45' STRUCT SCALE 500

June 14, 2002

File No. 02-434-04.200



Ministry of the Environment  
Northern Ontario Region  
70 Foster Drive, Suite 610  
Sault Ste Marie, ON  
P7A 6V4

ATTENTION: Ms. Maureen Birch

RE: S. 53 Ontario Water Resources Act Approval  
Canadian National Homepayne Yard  
Proposed Reduction of Effluent Sampling Frequency  
West End Remediation - Certificate No. 4-0052-98-006

Dear Ms. Birch:

KGS Group is pleased to submit this revised letter, on behalf of Canadian National, with respect to a proposed reduction in effluent sampling frequency at the control gate specified in the above-noted Certificate of Approval (C of A).

Subsection (1) of section (4) in the present C of A dictates that a grab sample of effluent shall be collected from the discharge control gate on a monthly basis. Subsection (3) of section (4) states that after a minimum of six (6) months of monitoring results, the monitoring frequency in subsection (1) of section (4) may be changed to a frequency as the Ministry of Environment District Manager may specify in writing.

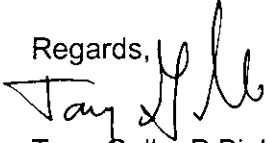
The historical laboratory results for West End DRS clean water effluent samples are presented in the attached Table 1. A total of sixteen (16) sampling events have been conducted between 1997 and 2001. During this time the C of A criterion for total oil and grease (15mg/L) was exceeded on only three occasions. The first appears to be an anomaly. The remaining two were a result of seepage past the discharge control structure. The seepage problem was corrected in 2001 with the installation of a new discharge control structure.

Please note that the sampling frequency was changed for the 2000 and 2001 operating years to three times annually as per our initial request in April 2000. As well in 2001, after the installation of the new discharge control structure, there were two sampling events where there was no effluent due to lack of groundwater flow (extremely dry conditions).

Based on the results presented in Table 1, KGS Group requests that the sampling frequency of effluent from the control gate be reduced from monthly to three times per year (spring, summer, fall).

Please review this letter and accompanying data, if you have any questions or comments, please contact the undersigned.

Regards,



Tony Gallo, P.Biol.  
Project Co-ordinator

/kb  
Attachment

cc: Nick Coleman, Environmental Officer - Canadian National  
Jeff Frank - WAVES Inc.  
Kimber Osiowy - KGS

J:\00434gen\0043404letmoe

**HISTORIC EFFLUENT QUALITY DATA  
WEST END REMEDIAL SYSTEM  
CANADIAN NATIONAL HORNEPAYNE YARD  
HORNEPAYNE, ONTARIO**

Sample	Date	TOG (mg/L)	MOG (mg/L)	TEH (mg/L)	TPH (mg/L)	Benzene (mg/L)	Toluene (mg/L)	thylbenzene+m-p-Xylen (mg/L)	o-Xylene (mg/L)
WSW-2 <sup>(2)</sup>	06/12/98	1	<1	-	<0.1	-	-	-	-
	10/08/98	2	1	0.183	<0.1	<0.0002	<0.0002	<0.0002	<0.0004
	11/04/98	-	-	0.622	<0.1	0.0005	<0.0002	<0.0002	0.00127
	5/4/99 <sup>(1)</sup>	8	2	1.9	<0.1	0.0022	0.0031	0.0012	0.0041
	06/03/99	1	<1	0.26	<0.1	<0.0002	<0.0002	<0.0002	<0.0004
	07/09/99	29	2	15	<0.1	0.0007	0.0002	0.0003	0.0014
	08/09/99	6	<1	<0.1	<0.1	<0.0002	<0.0002	<0.0002	<0.0004
	09/22/99	3	1	0.8	<0.1	<0.0002	<0.0002	<0.0002	<0.0004
	9/29/99 <sup>(1)</sup>	5	2	1.6	-	<0.0002	<0.0002	<0.0012	0.0041
	10/08/99	11	1	6.4	<0.1	0.00066	<0.0002	0.00056	<0.0017
	04/26/00	18	-	10	<0.01	0.00165	<0.0002	<0.0002	<0.0004
	05/02/00	18	-	2.9	<0.01	0.00252	0.00024	0.00069	0.00276
	08/30/00	8	-	<0.01	<0.01	<0.0002	<0.0002	<0.0002	<0.0004
	06/05/01	2	1	0.27	<0.01	<0.0002	<0.0002	<0.0002	<0.0004
	08/09/01	No Flow							
09/30/01	No Flow								
C of A		15	-	-	-	-	-	-	-
Interim PWQO		-	-	-	-	0.1	0.0008	0.008	0.03

Notes:

1. Samples taken as part of a surfacewater sampling program at CN Hornepayne Yard.
2. WSW-2 - Discharge to Jackfish Creek.

7 - Exceedance of Interim PWQO  
 - Exceedance of C of A

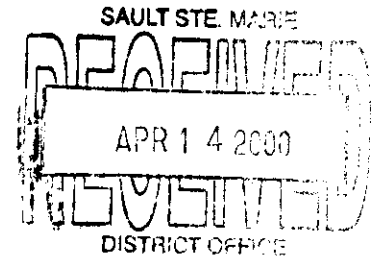
# KGS GROUP

April 5, 2000

KURTZMANIS ■ GRAUMANN ■ SMITH ■ MACMILLAN INC.  
CONSULTING ENGINEERS & PROJECT MANAGERS

File No. 00-434-04

Ministry of the Environment  
Northern Ontario Region  
747 Queen Street East  
Sault Ste Marie, Ontario  
P6A 2A8



ATTENTION: Mr. Ed Bil

RE: S. 53 Ontario Water Resources Act Approval  
Canadian National Hornepayne Yard  
West End Remediation - Certificate No. 4-0052-98-006  
Proposed Reduction of Effluent Sampling Frequency

Dear Mr. Bil:

KGS Group is pleased to submit this letter on behalf of Canadian National with respect to a proposed reduction in effluent sampling frequency at the control gate specified in the above noted Certificate of Approval (C of A).

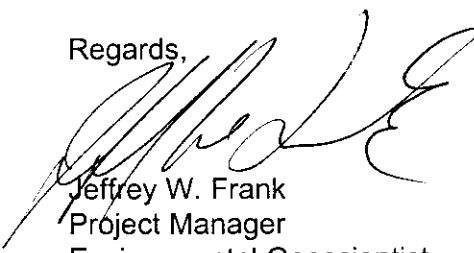
Subsection (1) of section (4) in the present C of A dictates that a grab sample of effluent shall be collected from the discharge control gate on a monthly basis. Subsection (3) of section (4) states that after a minimum of six (6) months of monitoring results, the monitoring frequency in subsection (1) of section (4) may be changed to a frequency as the Ministry of Environment District Manager may specify in writing.

Laboratory results for effluent samples are presented in the attached Table 1. Ten (10) sampling events have been conducted between 1997 and 1999. C of A criterion for total oil and grease was exceeded on only one occasion, July 7, 1999. The exceedance was an anomaly, as the remaining results are below the C of A criteria.

Based on the results presented in Table 1, KGS Group requests that the sampling frequency of effluent from the control gate be reduced from monthly to three times per year (spring, summer, fall).

If you have any questions or comments, please contact the undersigned.

Regards,



Jeffrey W. Frank  
Project Manager  
Environmental Geoscientist

TG/  
Attachment

cc: Nick Coleman – Environmental Officer, Canadian National

J:\00434gent\0043404letmoe

**TABLE 1**  
**SAMPLING RESULTS OF EFFLUENT FROM DISCHARGE CONTROL GATE**  
**WEST END - CANADIAN NATIONAL HORNEPAYNE YARD**  
**HORNEPAYNE ONTARIO**

<b>Sample Location</b>	<b>Date Sampled</b>	<b>TOG (mg/L)</b>
WSW 2	5/4/99	8
	6/3/99	1
	7/9/99	29
	8/9/99	6
	9/22/99	3
	9/29/99	5
	10/8/99	11
C of A Criteria		15

Notes:

WSW 2 - Discharge Control Gate

TOG - Total Oil and Grease

C of A - Certificate of Approval No. 4-0052-98-006

- Exceedance of Certificate of Approval criteria