

(PG.1)

The Honourable Jeff Yurek,
Minister of the Environment for Ontario,
June 7th, 2021.

Dear Minister,

On July 13^{th, 2020}, Mr. Michael Gravelle MPP for Thunder Bay Superior North wrote to your office on my behalf asking you to look into a serious matter in Hornepayne Ont.

I automatically assume that you as a reasonable man would expect your ministry officers to respond to the concerns of Ontarians in a likewise reasonable manner, unfortunately, Minister this is not the case in this matter.

The following is the record of treatment I have received from your Sudbury and Sault Ste Marie Offices of the MECP to date, should you find it less than reasonable as I do, then I ask for your correction of the same.

(1) On July 13th 2020, Mr. Gravelle sent an email to your office requesting that it give consideration to the concerns I raise with regard to CN Rail pollution in Hornepayne, and specifically assist in finding the missing Ground Water Study.

66 days later

(2) Sept. 17th, Water Compliance Supervisor Managhan, Sudbury Office responds with an email letter.

Next Day

(3) Sept 18th I respond, sending a letter listing my concerns in detail.

125 days later

(4) Jan 21st, 2021, I send an email to Supervisor Managhan asking if she got my letter. Her response was "no". My letter went to her office and she is working from home. I sent a copy electronically.

6 days later

(5) Jan 27th, Supervisor Managhan responds, she is sending me to the Sault Ste Marie Office,

1 day later

(6) Jan 28th, I protest having dealt with that office back in 2010. They were in fact obstructive at that time. I ask for her to put me in contact with a ministry Hydrologist at some other office. (to no avail).

14 days later

(7) Feb 11th, 2021, I email Supervisor Ron Dorscht of the Sault Ste Marie MECP Office, listing my concerns and asking for an explanation concerning the Ground Water Study that went missing from his Office.

(PG.2)

32days later

(8) March 15th, I email Supervisor Dorscht, asking for a response.

22 days later

(9) April 6th, 2021, I email Mr. Gravelle asking for assistance again to get a response from Supervisor Dorscht.

(10) April 12th, Mr. Gravelle sends an email to Supervisor Dorscht asking him to respectfully respond.

Same Day

(11) April 12th, Supervisor Dorscht responds complaining that my old phone number no longer works, while this is true it is not a legitimate excuse considering his office has had my email add. since 2010, and he also received that email address again on or about Jan 27th, 2021, from his colleague Supervisor Managhan in Sudbury when she referred my concerns to him.

10 days later

(12) April 22nd, I complain about Mr. Dorscht's failure to include any response to the missing Ground Water Study. I get an automatic response saying he's out of the office until the 26th.

The same day

(13) I recognize the name of Kirk Crosson in that office as being a cc'd on one of Dorscht's emails, he was one of the officers I dealt with back in 2010 and at that time he was working the Hornepayne file, I send him an email hoping to get a reasonable response.

The next day

(14) April 23rd Kirk Crosson, emailed me back saying Lillian Keen is now the inspector for Hornepayne and that he has copied her.

6 days later

(15) April 29th, I email Lillian Keen asking if she received the email from Crosson.

39 days later

(16) There still is no response from Lillian Keen.

On April 19th 2021, Supervisor Dorscht sent an email and in it he states, "I am unable to put you in direct contact with a staff hydrogeologist" no explanation why, he further goes on to state that the municipal wells in Hornepayne were identified as (GUDI). He further states they were therefore vulnerable to "bacteriological contamination" and this, he offers as an explanation for the decision of the Municipality to decommission the Town Wells and access Moonlight Lake as a new water source for the town. (please see his email attached and marked with letter A)

Even as a lay person in such matters, I am aware of the fact that all water is subject to "bacteriological contamination". Mr. Dorscht's statement that the wells were decommissioned based upon supposition, that they might become bacteriologically contaminated, if accurate would require all

(PG.3)

water sources in the province to be abandoned for new ones. However the new ones would also be subject to bacteriological contamination like the old ones were and subsequently, they too would have to be abandoned for new ones again, but once again because they too would be subject to contamination they would have to be also abandoned, ad infinitum. It is also common knowledge that moving from wells to a surface water source, significantly increases the risk of bacteriological contamination, as was the case in Hornepayne. It is difficult to accept his very flawed rational as having any credibility or accuracy, it seems more like a standard off the cuff rambling to dismiss the annoying public. Mr. Dorscht's over simplistic response also fails to address my major concern which is, where is the Ground Water Study that went missing from his office, were the proper prescribed forms filled out to permit it from being removed from the record. He ignores my demand for an answer offering no comment; clearly he hopes to avoid the matter, his tactic obvious, and I add less than admirable for a Supervisor Officer of the MECP. When Supervisor Managhan, of the Sudbury office decided the matter was outside of her jurisdiction and informed me that she was forwarding my concerns to her Sault Ste Marie office I objected. In an email dated Jan 28 2021, I made a request that she send me to any other MECP Office in the province other than the Sault office for the following good reason. On Jan 4th, 2014, I was in touch with a Supervisor Trisha Westman and Sr. Environmental In Officer; Kirk Crosson of that office searching for information related to this matter, in particular any documentation concerning soil samples or drill results. I received an email from Crosson on Jan 7th in which he states, "I have taken a look at the 2012 annual report for this site and did not see any soil sampling information". (please see email attached and marked with letter) A subsequent (FOI) request on June 25th, 2016 resulted in a large quantity of material including the 2012 annual report that Crosson made reference to and it did in fact contain very specific soil sample results. I also found soil sample results in the 2011, 2013 annual reports; all of which verified large plumes of diesel fuel in and on CN property. Was it coincidental that the material Supervisor Westman and Sr. Environmental Officer Crosson, could not find in their records the material that confirmed large amounts of very concentrated pollution at several locations on CN property? When I looked into the 2012 annual report it was not difficult to find the information, it was all contained in appendix "C Drill Log" exactly where you would expect to find it.(please see attached emails marked with letters B, C, D, E, F).

Since that experience, I have been of the opinion that the Sault office is more committed to hiding information than it is to sharing any material with inquiring parties.

I conclude Dorscht's response to date is consistent with past exchanges and would seem to preclude any possibility of gaining any documentation or clarification related to any of the anomalies in this matter, from himself or his office. The record of that office and his "bacteriological contamination explanation" so suspect and frail. I will not bother to challenge his professional credibility by asking him to address any of the concerns expressed in the assessment of the matter by Dr. Steve Earle, PhD. (please see email dated Oct 28th 2019 marked with letters G, H, I)

(PG.4)

Note, I used to work for a Supervisor like Mr. Dorscht, poor fellow died a horrible death on account of over exposure to preparation H, because a little helped, he thought taking a bath in it would cure his problem.

I ask the Minister, to date, is this response to my concerns from your offices in Sudbury and Sault Ste Marie reasonable and acceptable in your view? I think I know the answer.

As the record will show the water rate payers of Hornepayne are currently paying off a ten point six million dollar debt, incurred as a result of the municipality's decision to access a new water source at Moonlight Lake some distance from the community. It is my contention that the only reason for that decision was because CN Rail's pollution had infiltrated the aquifer that the town wells were located in and it was beyond any doubt, going to increase in concentration that would exceed provincial standards. (Please see attached doc marked J were a Mr. John Conlin Senior Project Manager for the Municipality, makes reference to petroleum products)

My hope with regard to *contacting* your ministry was to put a reasonable question before a MECP Hydrogeologist in hopes of gaining more clarity in this matter. To be more precise, the question I wanted a response to was the following " Mr. MECP Hydrogeologist , based upon the geology and hydrogeology in the Hornepayne area, can you give me any scientifically based reason why the millions of liters of CN's pollution, free product in the ground that has been spreading for over fifty plus years, WOULD NOT spread through the relatively short distance to the downgrade aquifer, that supplied the municipal wells in Hornepayne and within that aquifer reach concentrations that would exceed provincial standards"? A very reasonable question based upon the related factors involved and the serious ramifications that would result from such an occurrence, would you not agree?

The matter is factually simplistic, consider the following {1} the conservative estimate of CN contaminates, 3 million liters in and on the ground. (2) the Town wells were in a (GUDI) aquifer less than 1 km away. (3) established, ground water between the several contaminated sites on CN's property moves directly towards the aquifer which housed the wells. (3) the Time Factor allotment in this matter for the pollution to reach the aquifer, in excess of fifty years. With these established factors any reasonable minded person would conclude it was a fait accompli; the municipal wells were doomed, and contamination was inevitable.

The actions of the various entities involved in this sordid, mishandled affair in Hornepayne constitutes, a callus, calculated, self-serving moral obscenity. The first responsible party is CN, for their decades of releasing pollutants into the environment without safeguards, the second responsible party, is consecutive municipal administrations in Hornepayne for failing to represent and protect the interests of the community first in this matter. This breach of trust by elected officials went so far as to include a fraud that resulted in a debt burden of 10.6

(PG5)

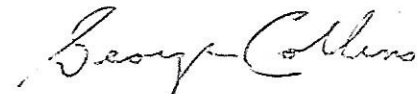
million dollars on the backs of the rate payers for the cost of a new water source from Moonlight Lake. Also responsible for this disgrace, the Sault office of the MECP, from whose office the Ground water study went missing. They had all the necessary information at hand to stop the cover up, but to this date they claim "bacteriological contamination" not pollution for the decisions made. Not any less responsible for this abomination, are the professionals within the various Engineering Firms involved for their manipulation of facts within the various publicly funded studies. Together these entities shifted CN's liability on to the backs of an uninformed, innocent, trusting community, a final state of affairs that would offend the conscience of any decent character. The debt burden, put on this small community, makes water rates a deterrent for new businesses or people considering taking up residence in Hornepayne. Health concerns for people living near and on the polluted ground has never been assessed; undoubtedly in the future the community will suffer more ramifications as a result of this pollution, but based upon the record to date, accountability by the parties responsible still remains only a distant potential.

Minister, I apologize for the demand on your time, I also realize there are aspects of this matter that are beyond your jurisdiction, but the injustice in this matter requires me to ask for your assistance in (1) finding the missing Ground Water Study and (2) with regard to my question on page4, para4, would you put me in touch with a MECP Hydrogeologist that would answer my question.

Thanking you in advance for the same and wishing you and yours well, always.

Sincerely,

George Collins.



CC To:

Mr. Michael Gravelle, MPP Thunder Bay Superior North.

The Honourable Patty Hajdu, P.C. M.D. MP Thunder Bay –Superior North.

Ms. Roussel, Canadian Environmental Law Association (CELA).

Environment North, Thunder Bay.

Environmental Advocacy, Carmen Patey, Sudbury.

<carmenjoy40@yahoo.ca>; Cameron, Brian (MECP) <Brian.Cameron@ontario.ca>

Subject: RE: Hornepayne, CN Pollution.

Mr. Collins,

I left you a voice mail today.

I am unable to put you in direct contact with a staff hydrogeologist.

As you have been previously advised, the municipal wells were identified as GUDI (Groundwater under the direct influence of surface water), and therefore vulnerable to bacteriological contamination. As such, the municipality, like many other municipalities in the same situation across the province, looked at various options to ensure a safe drinking water supply.

MECP issued permits based on the option chosen by the municipality. The decision for the new water supply was not driven industrial contamination.

Our office has a planned inspection this year for CN Rail yard and will continue to evaluate and address environmental concerns at the site.

Ron Dorscht

Ron Dorscht, B.E.S.

Supervisor

Sault Ste. Marie Area Office

Ministry of the Environment, Conservation and Parks

(705)254-8145



We want to hear from you. How was my service? You can provide feedback at 1-888-745-8888

From: George J Collins <grampabug7@hotmail.com>

Sent: April 19, 2021 9:00 AM

To: Dorscht, Ron (MECP) <Ron.Dorscht@ontario.ca>; Michael Gravelle MPP <mgravelle.mpp.co@liberal.ola.org>; Managhan, Marnie (MECP) <Marnie.Managhan@ontario.ca>; MECP-NR-Director-Issues (MECP) <ENE-NR-Director-Issues@ontario.ca>; Krystal-Anne Roussel Montgomery <articling@cela.ca>; Carmen <carmenjoy40@yahoo.ca>

Subject: Hornepayne, CN Pollution.

CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.

Mr. Dorscht, Supervisor ,MOECP, Sault Ste Marie, Ont.

"B"

From: Gail Collins [mailto:grambug7@sympatico.ca]
Sent: January-06-14 11:58 AM
To: Bottineau, Nicole (ENE)
Subject: Re: General Inquiry

From: Bottineau, Nicole (ENE)
Sent: Monday, January 06, 2014 9:57 AM
To: grambug7@sympatico.ca
Subject: RE: General Inquiry

I observed workmen taking samples both on CN property an on town property immediately surrounding there property. Hope this helps and thank you for your interest.
Hi George,

Thank you for contacting Ministry of the Environment. To direct/answer your email appropriately, do you know what location in Hornepayne Ontario was the soil samples taken from?

Thank you,

Nicole Bottineau
Ministry of the Environment
Public Information Centre
2nd Floor, MacDonald Block
900 Bay Street, Room M2-22
Toronto Ontario, M7A 1N3
Tel: 416-325-4000
Toll Free: 1-800-565-4923
Fax: 416-314-6713

From: grambug7@sympatico.ca [mailto:grambug7@sympatico.ca]
Sent: January 4, 2014 9:03 AM
To: PICEmail (ENE)
Subject: General Inquiry

George Collins has submitted the following feedback:

Iam interested in obtaining results all ,of soil sampling done in Hornepayne Ont. by KGB of Tbay for CN Soil samples were taken both on and off their property . Any help I thank you for.

**** *Individual has also requested a reply* ****

Below is the individual's contact information:

Name: George Collins
E-Mail: grambug7@sympatico.ca
Phone: 8072283011
Address: box 533
City: hornepayne

Crosson, Kirk (ENE)

From: Crosson, Kirk (ENE)
Sent: January-07-14 9:57 AM
To: Westman, Trisha (ENE)
Subject: George Collins question, CN Hornepayne soil sampling
Attachments: GCmo.pdf; GCemail.pdf

I have attached the past question and work order from this member of the public (CN rail Hornepayne Retiree). The Hornepayne CN Yard has an industrial sewage works approval 3528 831QWT was last amended on April 29, 2010. The approval focus is on surface and groundwater monitoring programs at this site. I have taken a look at the 2012 annual report for this site and did not see any soil sampling information. To learn more about KGS activities at this site he can contact Nick Tropea (KGS Group) 807-623-2195 or ntropea@kgsgroup.com or Aaron Stadnyk at CN Environment 416-575-3647 or aaron.stadnyk@cn.ca

"D"
K. H. P. R. L. W.

Crosson, Kirk (ENE)

From: Westman, Trisha (ENE)
Sent: January-07-14 10:53 AM
To: Pretty, Susan (ENE)
Cc: Crosson, Kirk (ENE)
Subject: PIC inquiry: George Collins question, CN Hornepayne soil sampling

Hi Susan,

Here is some suggested wording for a response to George:

In response to the inquiry regarding soil sampling in and around the CN property in Hornepayne, the ministry does not have any soil sampling data in our local files for this site as we have not required soil sampling for this site in recent years. As discussed in previous correspondence, historical contamination has been identified at the site. A treatment system has been put into place to treat contaminated groundwater and stormwater prior to discharge to the Jackfish River as a means of controlling the impact of the diesel and oil contamination. As per the treatment system approval, the company is required to monitor ground and surface water and submit annual reports to the ministry. Soil monitoring is not a requirement of the current approval; therefore the ministry has not received any soil analysis data. KGS Group is the environmental firm currently under contract with CN to assist with environmental monitoring. To learn more about the site he may wish to contact Nick Tropea (KGS Group) 807-623-2195 or ntropea@ksgsgroup.com or Aaron Stadnyk at CN Environment 416-575-3647 or aaron.stadnyk@cn.ca.

Cheers,
Trish

From: Westman, Trisha (ENE)
Sent: January 7, 2014 10:08 AM
To: Pretty, Susan (ENE)
Subject: PIC inquiry: George Collins question, CN Hornepayne soil sampling

Hi Susan,

In response to your email earlier this week regarding the question that came through PIC, please see Kirk's response below. We are not aware of soil sampling being carried out at the site. We have responded to a minister's letter from this individual in the past – see work order attached.

Let me know if this is sufficient info,

Trish

From: Crosson, Kirk (ENE)
Sent: January 7, 2014 9:58 AM
To: Westman, Trisha (ENE)
Subject: George Collins question, CN Hornepayne soil sampling

I have attached the past question and work order from this member of the public (CN rail Hornepayne Retiree). The Hornepayne CN Yard has an industrial sewage works approval 3528-83LQWT was last amended on April 29, 2010. The approval focus is on surface and groundwater monitoring programs at this site. I have taken a look at the 2012 annual report for this site and did not see any soil sampling information. To learn more about KGS activities at this site he can

'E'

APPENDIX C
DRILL LOGS

CLIENT **CANADIAN NATIONAL**
 PROJECT **CN HORNEPAYNE YARD - EAST END DRILLING**
 SITE **HORNEPAYNE YARD**
 LOCATION See Site Plan

JOB NO. **02-434-04.600**
 GROUND ELEV. **327.05 m, Geodetic**
 TOP OF PVC ELEV. **326.91 m**
 WATER ELEV. **325.68 m, 16/08/02**
 PRODUCT ELEV. **325.70 m, 16/08/02**
 DATE DRILLED **01/08/02**

DRILLING METHOD **125 mm ø Solid Stem Auger, Acker SX Drill Rig**

ELEV. (m)	DEPTH (m)	GRAPHICS	DESCRIPTION AND CLASSIFICATION	PIEZ. LOG/ BACKFILL	DEPTH (m)	SAMPLE TYPE NUMBER	FIELD HEADSPACE TEST Photoionizable Vapours (ppm) ○ 500 1000 1500 2000	FIELD SOIL TEST (PETROFLAG) Diesel Fuel (ppm) ○ 1000 2000 3000 4000
326.44	0.5		SAND AND GRAVEL FILL - Dark grey, damp, compact, well graded, fine grained sand to coarse grained gravel.			1	321	
	1.0		SANDY SILT FILL - Dark grey, moist, some sand, trace fine grained gravel, trace clay. -some organic matter between 1.2 and 1.5 m		0.81 0.78	2	180.2	
325.53	1.5		PEAT - Dark brown, moist, soft, some silty clay, petroleum hydrocarbon odour.			3	304.4	
324.51	2.5		SANDY SILT - Olive grey, damp, some sand, trace fine grained gravel, petroleum hydrocarbon odour.			4	326.2	
323.65	3.0		SAND - Light grey to olive grey, wet, well graded, fine to coarse grained, trace fine grained gravel, trace silt.		3.20	5	214	
323.39	3.5		SILT - Light grey, wet, soft, some clay, trace fine grained sand.			6	74.7	
322.48	4.5		END OF HOLE @ 4.57 m		4.44 4.57			
	5.0		Note: 1. Well flush mounted to grade.					
	5.5							
	6.0							
	6.5							

REF COURTS 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

SAMPLE TYPE **AUGER GRAB**

CONTRACTOR **Paddock Drilling Ltd.**

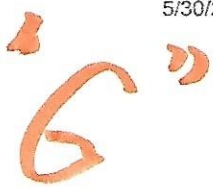
INSPECTOR **T. GALLO**

APPROVED _____

DATE **06/03/02**

5/30/2021

Mail - George J Collins - Outlook



Re: Comments on reports concerning the pre-existing water works at Hornepayne ON

George J Collins <grampabug7@hotmail.com>

From: Steven Earle <Steven.Earle@viu.ca>

Sent: October 28, 2019 06:55 PM

To: George J Collins <grampabug7@hotmail.com>

Subject: RE: Comments on reports concerning the pre-existing water works at Hornepayne ON

Hi George

You can use the following (edited from the original). Please date it to the original date that I sent it to you.

Steve

Date:

To: George J. Collins

Re: Hornepayne Ontario Water Supply

I have reviewed the January 2001 first engineer's report on the Hornepayne water works by Engineering Northwest Ltd. (ENL) and the September 2002 hydrogeological study by KGS Group. I've also had a quick look at the 2006 slide presentation on the CN yards by KGS Group, and the March 2014 report on the CN yards by KGS Group.

In my opinion, the 2001 ENL report provides a brief but sufficient overview of the nature of the Hornepayne water works at the time, although the lack of any reference to the petroleum spill issues in the CN yards is puzzling.

On the other hand, the 2002 hydrogeological report by KGS seems to fall well short of the stated goal of determining if the Hornepayne wells represent a GUDI source.

GUDI is defined by the US EPA as any groundwater with significant occurrence of insects, macro organisms, algae, or large-diameter pathogens such as *Giardia lamblia* or *Cryptosporidium*. Other indicators include groundwater with significant and relatively rapid

shifts in water characteristics that correlate closely to climatological or surface water conditions, including turbidity, temperature, conductivity or pH.

In Ontario recommendations for the evaluation of GUDI include:

- a) using particle counters to demonstrate that the water consistently contains significantly less than 100 particles per ml in the size range 10 microns and greater,
- b) confirming that the particle count is not likely to change during "storm, season or other regular environmental changes", and
- c) determining if the raw water is characterized by good microbiological quality.

In their 2002 study KGS did not follow the EPA or Ontario procedures for evaluating the GUDI situation at Hornepayne. Instead, it appears that they relied mostly on inference and hearsay.

For example, in section 5.3 (p. 19), they state that "it is apparent that fluctuations in the groundwater table are directly linked to fluctuations in the elevation of surface in Hornepayne Creek, and Spurline Lake.", but since there are no data presented on groundwater levels, there is no basis for making this statement. They go on to say that "The proximity of the unconfined aquifer and municipal production wells to the creek suggest that a distinct connection between aquifer groundwater levels and well groundwater would be expected." Again, there are no data to support this statement. Further in the same paragraph there is reference to a conversation with an OCWA staff member to the effect that groundwater and surface water elevations "generally correspond". It seems that nobody - not the OCWA, nor KGS, nor the Township - made any effort to collect actual data that would support these statements. In the next paragraph they state that continuous water level measurements could not be obtained from the production wells to correlate with data for the creek. Of course active production wells cannot be used to monitor groundwater levels, but supply wells 1 and 2, which were not being pumped at the time, could have been used to collect such data.

The main methods used by KGS for assessing GUDI status were the 50-day fixed-radius method, and the USGS Well-head Aquifer Evaluation Model (Section 5.3), and they used these analyses to conclude that the wells are GUDI. Both of these methods are based on assumptions concerning aquifer thickness, porosity and permeability, and neither involved any type of on-site analysis or testing. Although there is no reason to indicate that the assumptions are invalid, they are only assumptions, and neither method provides actual proof of GUDI status.

In spite of not having shown any actual evidence for a hydraulic connectivity between surface water and the aquifers, KGS goes on to imply that there is a connection in section 6.3 where they state on p. 22 "... the close proximity and hydraulic connectivity of these surface water bodies [Bucknells Pond and Hornepayne Creek] to supply well No. 3 suggests that there is potential for microbiological impacts on the Township supply well." This point is repeated in section 6.5.

In section 8.4 of the report KGS used turbidity data to assess GUDI status. Turbidity levels in Well 3 water consistently lie between 0 and 1 NTU, and as such are within acceptable limits. The turbidity data show no evidence of a surface water – groundwater connection. For a 49-day period in May to July 2002 turbidity levels in Well 3 varied only slightly from 0.1 to 0.8 NTU, and in fact were highest during a low flow-period in Hornepayne Creek, and did not increase (in fact gradually decreased) during the weeks following a high-discharge event in the creek.

It is my opinion that the 2002 KGS study does not fulfill the stated goal of assessing the GUDI status of the water supply at Hornepayne. Instead of collecting data based on well-defined procedures, they relied on assumptions and hearsay to fall back on the principle that a well is GUDI unless proven to be otherwise. I believe that KGS did not adequately serve the Township in conducting this work.

The fact of the matter, however, is that there were periodic elevated coliform levels in the Well 3 water over the period from 1998 to 2002 (Figure 16), and for that reason alone treatment beyond what was being done in 2002 (only chlorination) was needed. (Note that there is no reason to think that the presence of coliform had anything to do with the water being GUDI or not.)

5/30/2021

Mail - George J Collins - Outlook

On the other hand, all of this is irrelevant because the Township subsequently made the decision to go elsewhere for water and are apparently unwilling to cooperate with you or anyone else in disclosing the rationale behind that decision. The "60% study" that you have so far been unable to access, might (or might not) provide you with the information you need to understand their decision, but until you get it (if you ever do), I don't think that there's much else that can be done.

Steven Earle, PhD.

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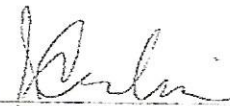
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- 9. Ken Fraser and Sandra Beatty indicated that there has been some concern in the past, and they have a concern about the possibility of petroleum products being in the groundwater from sources originating on or near the highway and CN Rail Yards. J. Conlin indicated that there is no indication, in the testing that was done on the well water, that there are any petroleum products that are in excess of Provincial Water Quality Standards. This is most likely the case, because the wells are upstream from any source of contamination, and the direction of groundwater flow would tend to be the same direction as the surface water flows.

Notes Prepared By:

AWS Engineers & Planners Corp.

per: 
 J. Conlin, P.Eng, MBA, RPP
 Senior Project Manager

JC/lfc

- cc: Susan Smith, Clerk - Township of Hornepayne
- Kathy Bembien, P.Eng. - Engineering Northwest Ltd.
- Alex Leong, P.Eng. - AWS Engineers & Planners Corp.
- Neil Beesley, P.Eng. - AWS Engineers & Planners Corp.

← This font statement of Conlin is a 100% misrepresentation of the facts. The Hornepayne Wells were directly down grade from the course of CN Collection and less than 1KM from the first very polluted site.

Re: Comments on reports concerning the pre-existing water works at Hornepayne ON

George J Collins <grampabug7@hotmail.com>

P.P.F. D.R. Earl Extra 1st & 2nd
Page - 3 pages on **Compt.**

From: Steven Earle <Steven.Earle@viu.ca>

Sent: October 28, 2019 06:55 PM

To: George J Collins <grampabug7@hotmail.com>

Subject: RE: Comments on reports concerning the pre-existing water works at Hornepayne ON

Hi George

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Steve

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