

CANADA,  
PROVINCE OF ONTARIO,  
CENTRAL WEST REGION.

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INDICTMENT

IN THE SUPERIOR COURT OF JUSTICE

HER MAJESTY THE QUEEN

against

STAN KOEBEL AND FRANK KOEBEL

STAND CHARGED:

That Stan Koebel and Frank Koebel, between May 3 and 23, 2000, inclusive, at the Municipality of Brockton, in the said Region, did commit a common nuisance by failing to discharge a legal duty, namely,

1. by operating Well 7 without a chlorinator;
2. by failing to properly monitor, sample and test the well water supplying the Town of Walkerton; and,
3. by failing to accurately record the required information in the logs or other record-keeping mechanisms, and more particularly, by inaccurately completing the Daily Operating Sheet for Well 7 for May 2000, knowing that it would be relied on as if genuine

and thereby endangering the lives, safety or health of the public, contrary to section 180(1)(a) of the *Criminal Code of Canada*;

Dated this            day of November, 2004, at Walkerton, Ontario.

\_\_\_\_\_  
Counsel acting on behalf of the Attorney  
General of Ontario



*R. v. Koebel and Koebel*

AGREED STATEMENT OF  
FACT



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## A. Introduction

Pursuant to section 655 of the *Criminal Code*, counsel admit the following facts alleged against each person charged for the purpose of dispensing with proof thereof.

### 1. The Former Town of Walkerton

In May of 2000, Walkerton was part of the Municipality of Brockton, following a recent amalgamation. The former town had approximately 4800 people. It was, and still is, the county seat for Bruce County.

The Walkerton Public Utilities Commission (PUC) was responsible for the operation of the town's water and electricity resources. It had done so since 1951. There were three Commissioners. In May of 2000, the Commissioners were:

- a) Mayor David Thomson (ex-officio);
- b) James Kieffer (Commission Chair); and,
- c) Richard Field.

The Commissioners told police investigators that they felt that they had little knowledge of actual PUC operations. The Commissioners relied on Stan Koebel, the General Manager of the PUC, to operate, maintain and inform them about both water and electricity resources.

As of May 30, 2000 the Walkerton Public Utilities Commission had 2383 accounts. The Commission supplied water to the vast majority of Walkerton residential, commercial, and public buildings.

A common nuisance is "public" if it materially affects the reasonable comfort and convenience of a class of people. It is not necessary to establish that every member of the class has been injuriously affected as long as a representative cross-section has been so affected. Accordingly, as the reasonable comfort and convenience of a representative cross-section of Walkerton PUC water customers were injuriously affected by the events of May 2000, it is a class of persons sufficient to come within the scope of the term 'public', as used in section 180 of the *Criminal Code*.

## 2. Stan Koebel and Frank Koebel

Stan Koebel and Frank Koebel are brothers. They were born and raised in the former Town of Walkerton. Stan is the elder brother. They are the sons of Frank Koebel Sr., who was a foreman at the Walkerton Public Works Department in the 1970's.

Stan Koebel joined the Walkerton PUC in 1972 at 19 years of age. He began as a general labourer, and in 1976 became a hydro lineman. In 1981 he was promoted to foreman. In 1988 he took over from Ian McLeod as manager. In 1988 he obtained a Level 2 certification for the operation of a water distribution system through a voluntary grand-parenting process. He was upgraded to Level 3 in 1996, after the Walkerton water distribution system was upgraded to a Level 3 system. Again, the upgrade was accomplished through a grandparenting process, without the need for a course or an examination.

Frank Koebel joined the PUC in 1975 at 17 years of age. In 1988 he replaced his brother as foreman when Stan became manager. At that time, he too obtained his Level 2 certification for the Walkerton water distribution system through the grand-parenting process. When the system was upgraded to Level 3, he was also given a Level 3 certification, without the need for a course or examination.

Consequently, the vast majority of Stan and Frank Koebel's training and knowledge of municipal water operation was derived from long standing practices of the Public Utilities Commission and its former manager.

Stan Koebel and Frank Koebel were the only licensed operators who regularly worked on the Walkerton water distribution system. Municipal employee Robert McKay had a Level 1 license, but rarely worked with the water system. Allan Buckle, who did not have a licence, often assisted the Koebel brothers with the water system.

## 3. The Walkerton Well System

In May of 2000 the Town of Walkerton was supplied water from three wells: Well 5, Well 6, and Well 7.

Well 5 was located in Walkerton, off Wallace Street near the PUC Office. The well was drilled by Davidson Well Drilling in 1978 to a depth of 15.2 meters. It was surrounded by institutional and commercial buildings to the north, east, and south, and by farmland on the west. The chlorinator at Well 5 used liquid chlorine.

Prior to the tenure of Stan Koebel and Frank Koebel as manager and foremen, respectively, and from its inception, Well 5 was recognized to be vulnerable to surface contamination. In November of 1978 representatives from the provincial Ministry of the Environment (MOE) met with the Walkerton PUC including the former manager Ian Macleod, PUC engineering consultants and representatives from the Town of Walkerton to express their concern about this vulnerability. The importance of maintaining proper chlorine residuals was expressed at

that time, as well as in ensuing MOE Inspection Reports. The MOE also stressed that land use ought to be controlled in the vicinity of the vulnerable Well. Neither of the Koebels had any authority to control land use in the vicinity of Well #5. Further, in the months leading up to May of 2000 there had been a number of adverse bacteriological samples, which were indicators of contamination.

Well 6 is located outside of Walkerton, north east of the intersection of County Road 2 and County Road 3. It was drilled by Davidson Well Drilling in 1982 to a depth of 72.2 meters. Soon after it was built there was some evidence that it too was vulnerable to surface contamination, as a nearby private pond drained when the pump was turned on. However, the extent of its vulnerability was significantly lower than at Well 5.

Well 7 is located just north of Well 6. Davidson Well Drilling drilled it in 1987 to a depth of 76.2 meters. It was the primary well for the Town of Walkerton. Like Well 6, it used a gas chlorination system. There is little evidence of surface contamination of Well 7.

None of the wells were equipped with automatic chlorine or turbidity monitors. (Turbidity is defined as the cloudy appearance of water caused by the presence of suspended matter.) A computer system (SCADA – System Control and Data Acquisition system or, also referred to as Supervisory Control and Data Acquisition system) monitored and recorded the pumping rates of the wells and water levels in the two standpipes, but did not provide any information on water quality. There is no evidence the SCADA system was operating improperly, had malfunctioned, or had been tampered with through May of 2000.

#### 4. The Contamination

Shortly before May of 2000, approximately 70 tonnes of manure containing both e. coli O157:H7 and campylobacter jejuni was spread over fields near Well 5. These bacterial strains in the manure were tested and compared to the strains found in numerous victims. The strains were found to be identical. Hydrogeological testing after May 2000 confirmed a path by which contaminated water could travel from the surface of the fields into the water supply being pumped from Well 5.

There was also an exceedingly large volume of rainfall in Walkerton between May 8 and May 12, 2000. In the ordinary course, a similar volume of rain would not be expected to fall for sixty (60) years. May 12 was the worst night, during which more than 70 mm fell. The heavy rainfall swept the pathogenic bacteria in the manure from the adjacent farm fields into the soil and fractured bedrock surrounding Well 5 and from there into the water being pumped from Well 5.

According to the SCADA system, Well 5 was in operation May 1, May 2, and May 9 to May 15. Thus, it is likely a large amount of the water supplied to users served by the Walkerton PUC on those dates was contaminated water from Well 5.

28. The Crown expects to file a number of Victim Impact Statements from victims and their families at the sentencing phase of the case.

29. An investigative study of the outbreak of gastroenteritis associated with the Walkerton water tragedy was conducted by the Bruce Grey Owen Sound Health Unit (BGOSHU) with the assistance of Health Canada and the Ontario Ministry of Health and Long Term Care. The purpose of the investigation was to determine the scope, the likely cause and the contributing causes of the outbreak. The Report was dated October 10, 2000.

30. The Report referred to the events in Walkerton as "the first documented outbreak of *Escherichia coli* O157:H7 infection associated with a municipal water supply in Canada". It further stated as follows:

A series of unfortunate circumstances occurred to cause an outbreak of this magnitude. These included heavy rains accompanied by flooding, *E coli* O157:H7 and *Campylobacter* spp present in the environment, a well subject to surface water contamination, and a water treatment system that may have been overwhelmed by increased turbidity.

31. Dr. Andrea Ellis was one of the authors of the BGOSHU study. In interviews with OPP investigators, Dr. Ellis stated that she worked in the Division of Enteric Food-borne and Water-borne Diseases for Health Canada, Centre for Infectious Disease Prevention and Control, in charge of Outbreak Response and Issues Management. Dr. Ellis told the OPP that it was not very common to have an *e. coli* O157:H7 outbreak in municipal water and that a number of factors contributed to the tragedy. She identified the following as key factors:

- a) rainfall
- b) elevation of the fields in relation to Well (#5)
- c) turbidity documented in Well 5 generated by adjacent swamp when the swamp is full
- d) Well #5 was turned on
- e) surface water was pulled into the well
- f) chlorinator overcome by turbidity and that would have allowed bacteria into the distribution system and caused this kind of widespread outbreak
- g) the available chlorine binds to the turbid water and is unavailable to kill bacteria

32. It was Dr. Ellis' opinion that upping the chlorine dramatically would not necessarily have helped in the face of that kind of heavy rainfall flooding and with the kind of turbidity entering the well with those kinds of bacteria present. It was also Dr. Ellis' opinion that she did not think upping the chlorine dramatically would have prevented this tragedy by any means.

33. It therefore cannot be said that the criminal conduct of Stan Koebel and Frank Koebel, and more particularly, their failure to properly monitor, sample and test the well water supplying the Town of Walkerton, was, in law, a significant contributing cause of the deaths and injuries caused by the contamination of Walkerton's municipal water supply.

34. It was also Dr. Ellis' opinion that the time factor is a critical element in any outbreak – the sooner you have a boil water notice or advisory in place and it is communicated, the more



illness is going to be prevented. For example, if the contamination results were reported immediately to the Public Health Unit, less people would have been exposed to the contamination and less would have become ill. Based on a mathematical model, it was also Dr. Ellis' opinion, that if the boil water advisory was backed up to May 17<sup>th</sup>, 2000, assuming an incubation period of between 2 to 10 days and full compliance with the boil water advisory, the range of the reduction of the number of cases was estimated to be between 200 and approximately 630 cases.

## **B. Common Nuisance – Section 180(1)(a) of the *Criminal Code***

Stan Koebel and Frank Koebel have plead guilty to one count of common nuisance, contrary to section 180(1)(a) of the *Criminal Code* as follows:

**That Stan Koebel and Frank Koebel, between May 3 and 23, 2000, inclusive, at the Municipality of Brockton, in the said Region, did commit a common nuisance by failing to discharge a legal duty, namely,**

- 1. by operating Well 7 without a chlorinator;**
- 2. by failing to properly monitor, sample and test the well water supplying the Town of Walkerton; and,**
- 3. by failing to accurately record the required information in the logs or other record-keeping mechanisms, and more particularly, by inaccurately completing the Daily Operating Sheet for Well 7 for May 2000, knowing that it would be relied on as if genuine**

**and thereby endangering the lives, safety or health of the public, contrary to section 180(1)(a) of the *Criminal Code of Canada*;**

### **1. Particular #1 - Law**

**That Stan Koebel and Frank Koebel, between May 3 and 23, 2000, inclusive, at the Municipality of Brockton, in the said Region, did commit a common nuisance by failing to discharge a legal duty, namely,**

- 1. by operating Well 7 without a chlorinator;**

36. Stan Koebel, as manager of the Walkerton PUC was an "operator-in-charge" according to Regulation 435/93 of the *Ontario Water Resources Act*. The definition of "operator-in-charge" in section 1 of the Regulation was:

...an operator who,

- a) has responsibility for the overall operation of a facility,
- b) sets operational parameters for a facility or for a process that controls the effectiveness or efficiency of a facility, or
- c) directs or supervises operators in a facility;

37. Frank Koebel, as foreman of the Walkerton PUC, was also an "operator-in-charge" under Regulation 435/93, as he had responsibility for the overall operation of the facility when authorized by Stan Koebel, and he directed and supervised operators in the facility, namely, Allan (Al) Buckle and Robert (Bob) McKay.

38. As "operators-in-charge" of the Walkerton water distribution system, Stan Koebel and Frank Koebel had a legal duty under section 19 of the Regulation to:

- (a) take all steps reasonably necessary to operate the processes within his or her responsibility in a safe and efficient manner in accordance with the relevant operation manuals;
- (b) ensure that the processes within his or her responsibility are measured, monitored, sampled, and tested in a manner that permits them to be adjusted when necessary;
- (c) ensure that records are maintained of all adjustments made to the processes within his or her responsibility; and
- (d) ensure that all equipment used in the processes within his or her responsibility is properly monitored, inspected, and evaluated and that records of equipment operating status are prepared and available at the end of every operating shift.

39. Further, under section 20(5) of the Regulation an "operator-in-charge" had a legal duty to record any service to the equipment:

(5) An operator-in-charge or a person authorized by an operator-in-charge shall record the following information in the logs or other record-keeping mechanisms in respect of each operating shift:

...  
6. Any equipment that was taken out of service or ceased to operate during the shift and any action taken to maintain or repair equipment during the shift.

40. Stan Koebel and Frank Koebel acknowledge by their guilty plea that each failed to discharge his legal duties under the Regulation, more particularly, subsections 19(a)(c)(d) and subsection 20(5), by operating Well 7 without a chlorinator.



41. Additionally, each accused acknowledges by his guilty plea that he breached his legal obligation under section 217 of the *Criminal Code*. Section 217 states:

Every one who undertakes to do an act is under a legal duty to do it if an omission to do the act is or may be dangerous to life.

42. By accepting their positions as manager and foreman, respectively, of the Walkerton Public Utilities Commission, Stan Koebel and Frank Koebel undertook to perform the necessary acts associated with their positions. One such act was to operate the Walkerton PUC water distribution system in a safe manner. By running Well 7 without a chlorinator, Stan Koebel and Frank Koebel breached their legal duty to operate the water distribution system in a safe manner. Providing unchlorinated water to the users of the Walkerton PUC water distribution system endangered the lives, safety and health of the public.

43. The MOE informed licensed operators of water distribution systems about the possible dangers of unchlorinated water in numerous ways. In 1987 an updated version of the *Chlorination of Potable Water Supplies* was released. Paragraph 1.1 of the bulletin stated:

Disinfection, to kill pathogenic organisms, is the most important step in any water treatment process. In Ontario it is usually accomplished by adding chlorine. This chemical has many other uses in water treatment such as coagulation aid, taste and odour control and maintenance of water quality in the distribution system, but its primary purpose is disinfection.

44. In paragraph 4.0 the bulletin stated:

... Wherever chlorination is required, the Ministry of the Environment and the Medical Officer of Health must be notified immediately if unchlorinated or inadequately chlorinated water (total residual below 0.2 or 0.5 mg/L or level required) is directed to the distribution system...

45. In 1994 the *Ontario Drinking Water Objectives* were revised. Paragraph 1.1 read:

The primary purpose of Drinking Water Objectives is to protect public health. Water intended for human consumption should not contain disease-causing organisms or hazardous concentrations of toxic chemicals or radioactive parameters...

46. Paragraph 2.1 stated:

...Policy 15-15 states that all water works within the Province of Ontario which utilize ground waters as a source of raw water shall be provided with a treatment process consisting of disinfection...



47. Paragraph 3.1 stated:

Microbiological quality of drinking water is the most important aspect of drinking water quality because of its association with waterborne diseases. Typhoid fever, cholera, enteroviral disease, bacillary and amoebic dysenteries, and many varieties of gastrointestinal diseases can all be transmitted by water...The introduction of a well managed water treatment system with effective filtration and disinfection, maintenance of an adequate disinfectant residual and the implementation of bacteriological surveillance programs to ensure the delivery of safe drinking water have demonstrated effectiveness in eliminating water-related illnesses. Occasional outbreaks of waterborne diseases emphasize the continuing importance of strict supervision and control over the microbiological quality of drinking water supplies.

48. Paragraph 4.1.1. stated:

...in addition, the operator must ensure that the disinfection process is functioning properly at all times...

49. In addition to this general information, Stan Koebel was sent letters on at least three occasions, as described in the following paragraphs, about the risk to the public of unchlorinated water. He was also spoken to in person in February of 1998 by MOE staff.

50. In a letter dated June 23, 1995 Willard Page, District Manager for the MOE, wrote to Stan Koebel concerning the minimum recommended sampling for water works. In paragraph one he wrote:

All water supplies are susceptible to some extent to bacteriological contamination at their supply source or within the water works...Such contamination could become a health hazard to consumers serviced by the system...

51. On February 1, 1996 MOE Inspector John Apfelbeck's Report on the Walkerton PUC water distribution system was sent to Stan Koebel. He acknowledged receipt by return letter and promised compliance. Under section 17, titled "General Comments", John Apfelbeck wrote:

A review of the bacteriological results for samples collected from water in the distribution system during 1995 has confirmed that escherichia coli bacteria, ranging in numbers of one to four, were present in one or more of the samples collected on three sampling occasions. The presence of escherichia coli bacteria is an indicator of unsafe drinking water. The results of special samples collected subsequent to these sampling occasions confirmed the water to be safe for drinking. The instances of escherichia coli bacteria present in samples collected in the distribution system, emphasize

the importance of ensuring that an adequate chlorine residual is maintained in water in the distribution system at all times.

52. On May 6, 1998 the MOE forwarded Inspector Michelle Zillinger's report on the Walkerton water distribution system to Stan Koebel.

53. Under Section 4.0, titled "Policy Assessment", Michelle Zillinger noted that there had been 8 adverse samples since 1995 to the Inspection date. She continued on to note:

Escherichia coli bacteria ranging in number from one to four were present in a significant number of treated water samples; from both wells #5 and #7 and at several locations in the distribution system. The presence of e. coli bacteria is an indicator of "unsafe" drinking water quality. The relatively high incidence of adverse bacteriological water quality sample results emphasizes the need to maintain an adequate chlorine residual throughout the distribution system at all times.

54. Under Section 6.0, titled "Sampling Program", Zillinger wrote:

Monitoring of chlorine residual levels for this waterworks is particularly important given the relatively high incidence of adverse bacteriological sample results and the associated need to continuously maintain an adequate disinfectant residual...

55. Finally, under Section 10.0, titled "Action Required" Zillinger wrote:

A minimum total chlorine residual of 0.5 mg/l, after 15 min. contact time, must be maintained in the water discharged to the distribution system for all active wells, at all times...

56. In addition to stating the importance of maintaining proper chlorine residuals in writing, Michelle Zillinger spent considerable time with Stan Koebel during the Inspection in February of 1998. She expressed her concern about the high number of adverse bacteriological samples from both Well 5 and Well 7 and instructed Stan Koebel that it was crucial to maintain proper chlorine residuals at both wells and in the distribution system. On July 14, 1998 Stan Koebel responded in writing to Michelle Zillinger's Report, promising compliance with the deficiencies noted in paragraph 10.0. He even went so far as to thank her for her training with regard to the data summary forms.

57. Frank Koebel was not a direct recipient of correspondence from the MOE. However, he did attend a conference in May of 1993 entitled "Equipment maintenance and safety aspects of small water systems." During that conference there was a presentation on chlorination systems given by David Durant. During that presentation Mr. Durant, among other things, talked about the importance of chlorinator maintenance.

58. MOE Guidelines were for the assistance of water treatment plant operators but did not have the force and effect of law. The MOE was empowered to issue an enforcement order to



remedy deficiencies identified in inspections. No enforcement order was issued in relation to the Walkerton water system. By their plea of guilty, Stan and Frank Koebel acknowledge their role in the failure to implement these advised precautions.

## 2. Particular #1 - Evidence

On May 3, 2000 Bob McKay and Al Buckle met Frank Koebel at Well 7. Frank Koebel instructed them to remove the chlorinator from the well. Bob McKay saw Al Buckle 'snip the line' between the chlorinator and the well before leaving to attend a funeral. Al Buckle told McKay that the chlorinator was not running again until May 19. Time sheets of Al Buckle and Frank Koebel support McKay's statement. Al Buckle's time sheets show eight (8) hours on Thursday May 18 and four (4) hours on Friday May 19 spent on "Pump Maintenance", while Frank Koebel's time sheets show six (6) hours on Thursday May 18 and two (2) hours on Friday May 19 also for "Pump Maintenance". Stan Koebel's Report to the Walkerton Public Utilities Commission on May 18 2000 also supports McKay's statement. It indicates "We are currently rebuilding the chlorine equipment at our Well #7 pumphouse."

Tim Hawkins and Steve Lorley were employees of the Walkerton PUC in May 2000. They stated it was the usual routine for Stan Koebel to attend at the PUC Shop most mornings to give instruction to Frank Koebel and/or other employees regarding their daily assignments. During May 2000, Hawkins observed a chlorinator sitting on the workbench in the PUC Shop for "weeks". He believed it was from either Well 6 or Well 7 as it was a gas chlorinator.

Vivian Slater, an employee in the Walkerton PUC Office, stated that on the Friday before the long weekend in May 2000 (May 19) Stan Koebel announced at the end of the day that they had installed the chlorinator. Stan Koebel's announcement corresponds with Al Buckle's conversation with Bob McKay, as well as the time sheets of Buckle and Frank Koebel, referred to above.

In May 2000, Ed Houghton was the Director of the Collingwood PUC. He stated that he called Stan Koebel on May 22 and offered his assistance. Houghton attended Walkerton May 23 and 24. He spent a significant amount of time with the Koebel brothers. During that time, Stan Koebel told him that Well 7 had been operating without a chlorinator from May 14 to 17, as they were rebuilding it.

Terry Hockley was also an employee of the Collingwood PUC. He attended Walkerton with Ed Houghton. He stated that he was present when Stan Koebel told Ed Houghton that Well 7 had been operating without a chlorinator from May 14 to 17.

On May 23, 2000 at 2:15 pm in the Brockton Municipal Council Chambers, there was a meeting about the e. coli outbreak. Present were Dr. M. McQuigge, David Patterson, Bill Twaddle, Mariella Vigneux, Mary Sellars, Phil Bye, David Thomson, James Kieffer, Richard Radford, David Jacobi, Wilf Lane, Jack Rutz, Audrey Webb, and Stan Koebel. During the meeting, Dr. McQuigge confronted Stan Koebel about information he had received from David Patterson about a chlorinator malfunctioning. Although persons present have slightly

different recollections of the conversation, the minutes taken by Mary Sellars and Richard Radford indicate that Stan Koebel said the problem might be a malfunctioning chlorinator. Further, Dr. McQuigge, David Patterson and Phillip Bye specifically recall Stan Koebel saying that the chlorinator had been not working properly for some time. However, Stan Koebel did not say that the chlorinator of Well #7 had been removed from the water distribution system for periods of time in May of 2000 when that well was pumping water into the system, according to the SCADA system.

65. There is no apparent explanation for operating Well 7 without a chlorinator. Two chlorinators were purchased in November of 1998 from U.S. Filter. Both gas chlorinators were new and only compatible for use with Well 6 and Well 7. Bob McKay stated that one of the new chlorinators was installed at Well 6 in 1999, and that the second was still lying around the shop when he observed Al Buckle remove the old chlorinator from Well 7 on May 3, 2000.

66. Further, increased levels of chlorination did result in citizen complaints regarding the taste and odour of the treated water. The police investigation discovered four (4) documented complaints.

67. According to the SCADA records, Well 7 was operating May 3 to 9 and May 15 to 19. Well 7 was the only well operating in the Town during these times, except for a few hours on May 15 when Well 5 was also on. Consequently, the Town of Walkerton was supplied unchlorinated water for all of those days.

68. According to Janice Hallahan, Secretary-Treasurer of the Walkerton PUC, Stan Koebel was at work up to and including May 4, 2000. He did not return to the PUC office until May 15 2000, as he was away at a conference in Windsor. Therefore, Stan Koebel was at work when the chlorinator was removed from Well 7 on May 3; he was also at work on May 4; and, he was also at work from May 15 to May 17. While Stan Koebel was away, Frank Koebel, as foreman, was in charge. Thus, Frank Koebel was in charge of the Walkerton PUC water distribution system while the chlorinator for Well 7 was off-line from May 4 until Stan Koebel's return on May 15.

### 3. Particular #2 - Law

**That Stan Koebel and Frank Koebel, between May 3 and 23, 2000, inclusive, at the Municipality of Brockton, in the said Region, did commit a common nuisance by failing to discharge a legal duty, namely,**

...

**2. by failing to properly monitor, sample and test the well water supplying the Town of Walkerton; and,**



69. Stan Koebel, as manager of the Walkerton PUC was an "operator-in-charge" under Regulation 435/93 of the *Ontario Water Resources Act*. See Paragraph 29 of this Synopsis.

70. Frank Koebel, as foreman of the Walkerton PUC, was also an "operator-in-charge" under Regulation 435/93. See Paragraph 30 of this Synopsis.

71. The legal duties of "operators-in-charge" under section 19 of the Regulation are set out in Paragraph 31 of this Synopsis.

72. By their plea of guilty, Stan Koebel and Frank Koebel acknowledge that each of them failed to discharge their duties under subsections 19(a) and 19(b) of the Regulation by not properly monitoring, sampling and testing the water supplying the Town of Walkerton by the Walkerton PUC water distribution system.

73. The MOE informed licensed operators of water distribution systems about the importance of properly monitoring, sampling, and testing the water in numerous ways.

74. In 1987 an updated version of the *Chlorination of Potable Water Supplies* was released. In paragraph 3.1.2 the bulletin stated:

...The chlorine residual test must be performed as frequently as needed to ensure that an adequate chlorine residual is maintained at all times. Such considerations as raw water quality and the resultant variation in chlorine demand, and changing flow rates must be taken into account.

75. Further, under paragraph 3.1.3. titled "Determination", a detailed step-by-step explanation of how to properly take chlorine residual tests is outlined.

76. Section 5.0 of the *Chlorination Bulletin* stated that the operator must notify the MOE and MOH of adverse samples that indicate unsafe drinking water pursuant to the definition contained in the *Ontario Drinking Water Objectives*. The Bulletin indicated:

When the results from bacteriological samples collected from the distribution system indicate "unsafe water quality" on the basis of the Ontario Drinking Water Objectives (ODWO)...the procedures to follow immediately are:

- 1) Notify the Ministry of the Environment (increased chlorine residuals may be advised),
- 2) Collect special samples (ODWO, p.11) to confirm the results and determine the extent of the contamination. Chlorine residuals should also be recorded.

...

If these samples still show unsatisfactory water quality, the Medical Officer of Health and the Ministry of the Environment must be notified...

77. In 1994 the *Ontario Drinking Water Objectives* were revised. Paragraph 1.1 read:

The primary purpose of Drinking Water Objectives is to protect public health. Water intended for human consumption should not contain disease-causing organisms or hazardous concentrations of toxic chemicals or radioactive parameters...

78. Paragraph 3.1 stated:

Microbiological quality of drinking water is the most important aspect of drinking water quality because of its association with waterborne diseases. Typhoid fever, cholera, enteroviral disease, bacillary and amoebic dysenteries, and many varieties of gastrointestinal diseases can all be transmitted by water... The introduction of a well managed water treatment system with effective filtration and disinfection, maintenance of an adequate disinfectant residual and the implementation of bacteriological surveillance programs to ensure the delivery of safe drinking water have demonstrated effectiveness in eliminating water-related illnesses. Occasional outbreaks of waterborne diseases emphasize the continuing importance of strict supervision and control over the microbiological quality of drinking water supplies.

79. Section 4 of the *Objectives* contained information about the sampling, analysis and corrective action of water distribution systems. It included:

Samples are taken from water supply systems primarily to determine whether the water is safe for human consumption. These samples must therefore be representative of the supply as a whole. If samples are carelessly collected or taken from locations that are not representative of the whole system, then the purpose of sampling is defeated. Unrepresentative sampling may even be dangerous because it can give rise to unjustified confidence in the quality of the water...

...It is important to note that a single sample is of limited value. The most a single sample can show is the water quality at the time of sampling. Therefore, it is necessary that repeat samplings be performed and complete records be maintained in order to get an adequate picture of the conditions in the water supply...

80. Under paragraph 4.1 it stated:

Contamination by sewage or excrement presents the greatest danger to public health associated with drinking water, and microbiological testing provides the most sensitive means for the detection of such pollution. Contamination is often intermittent and may not be revealed by the examination of a single



sample. Proper supervision of a water supply is usually based on results of multiple microbiological samples.

81. Under paragraph 4.1.1. it stated:

Sampling frequency and location should be sufficient to maintain a proper supervision of the water supply's microbiological quality...

...In systems treating surface or ground water, samples should be taken from the raw water source and from the point at which treated water enters the distribution system. In these systems sampling should be at least weekly in systems serving populations up to 10,000 and more often in larger systems. In addition, the operator must ensure that the disinfection process is functioning properly at all times. In ground water systems that only disinfect, water samples shall be taken and examined not less than once per week from the source and all points at which water enters the distribution system.

82. Paragraph 4.1.1. also included a chart outlining the minimum amount of samples to be taken and how often.

83. Paragraph 4.1.2. outlined the indicators of unsafe drinking water, and paragraph 4.1.3.1 indicated what sampling needed to be undertaken by the operators should any indications of either unsafe or deteriorating water quality be present.

84. Stan Koebel was informed of the importance of properly monitoring, sampling, and testing the water being pumped from the wells on a number of occasions as described below.

85. In MOE Inspector Brian Jaffray's 1992 Inspection Report, weekly bacteriological quality monitoring was listed as one of three deficiencies. It was recommended that the bacteriological water quality monitoring be upgraded as detailed in an attached Schedule, which mandated weekly samples of both raw and treated water at the plant/wells, as well a samples from throughout the distribution system, to a total of 13 samples per month.

86. In a letter addressed to Stan Koebel, dated June 6, 1995, from Willard Page, District Manager for the MOE, he wrote:

To determine whether the water supplied is continually safe for human consumption a monitoring program must be maintained on an on-going basis. The Ministry of the Environment and Energy's publication Ontario Drinking Water Objectives (as revised in 1994) provides a series of recommendations which stipulate the minimum level of sampling to be performed at municipal water works...

You must notify the District manager by telephone or facsimile as soon as possible of any occurrence of the following:

a) bacteriological examination results which indicate unsafe drinking water in either the treated water or distribution system....

...I feel it is essential that the monitoring program be implemented and maintained and trust that the operating authority will take the necessary action to comply...

87. In a letter dated June 23, 1995 Willard Page wrote to Stan Koebel again. In paragraph one he wrote:

All water supplies are susceptible to some extent to bacteriological contamination at their supply source or within the water works...Such contamination could become a health hazard to consumers serviced by the system. In order to ensure the people of Ontario have a reliable supply of safe drinking water, a comprehensive sampling program has been established for all water works in the province.

...

The owner must notify the Ministry of the Environment and Energy's Owen Sound District Office as soon as possible of the occurrence of any treated water or distribution system bacteriological analysis which indicates unsafe drinking water quality...

88. Appendix A to Mr. Page's letter set out the minimum sampling requirements for the Town of Walkerton.

89. On February 1, 1996 MOE Inspector John Apfelbeck's Report on the Walkerton water distribution system was sent to Stan Koebel. He acknowledged receipt of it by return letter and promised compliance. Under Section 6.1 John Apfelback noted that the Walkerton PUC was not complying with the bacteriological sampling and testing requirement as outlined in the *Ontario Drinking Water Objectives*.

90. In February of 1998, MOE Inspector Michelle Zillinger inspected the Walkerton water distribution system and met at length with Stan Koebel. During that meeting she told Stan about the deficiencies she observed and the changes that were needed to bring the system up to standard. The requested changes included the sampling requirements that were still not being met.

91. On May 6, 1998 the MOE forwarded Inspector Michelle Zillinger's report on the Walkerton water distribution system to Stan Koebel. Under section 6.1 Zillinger noted:

Sampling requirements for this waterworks have been established through the Ministry's minimum sampling program for waterworks. This program was communicated to the operating authority in Ministry correspondence dated June 23, 1995. The Ministry's January 29, 1996 plant inspection report also identified the requirement to implement the minimum recommended sampling program.



The operating authority's current water quality monitoring program does not meet the requirements of the minimum recommended sampling program. Specifically, only 8-9 bacteriological samples are collected from the distribution system monthly. Based on the town of Walkerton's service population of approx. 5000, a total of 13 samples must be collected from the distribution system each month. Until just recently, the operating authority had not completed any monitoring of chlorine residual levels in the distribution system. Chlorine residual concentrations should be tested in connection with all bacteriological monitoring in the distribution system. The minimum recommended sampling program specifies the following...

Monitoring of chlorine residual levels for this waterworks is particularly important given the relatively high incidence of adverse bacteriological sample results and the associated need to continuously maintain an adequate disinfectant residual...

...The operating authority should be aware that continued failure to meet the Ministry's sampling requirements will result in the issuance of a Direction pursuant to s.52(2) of the Ontario Water Resources Act. This direction will make the minimum recommended sampling program legally enforceable. Over the next several months, compliance in regards to this matter will be closely monitored by the Ministry.

Under Section 10.0 titled "Action Required", Zillinger wrote:

3. The operating authority must immediately modify its water quality monitoring program to meet the requirements of the Ministry's minimum recommended sampling program. Failure to meet all of the requirements of the program will result in the issuance of a s. 52(2) Ontario Water Resources Act Direction.

On July 14, 1998 Stan Koebel responded to the Zillinger Inspection Report. At point 3 he indicated:

We will be up to the minimum sampling program by the end of July 1998

Stan Koebel also asked for the applicable emergency numbers and contact persons from the Ministry and public health.

In his July 30 1998 response, Phil Bye, MOE Area Supervisor, Owen Sound Area office, wrote:

... After hours contingencies, contact - Ministry of the Environment Spills Action Center, Toronto. 24 hrs./day, 365 days/year 1-800-268-6060 ...

I recommend you contact the local Health Unit directly at their Walkerton office (881-1920), with regards to their applicable emergency contact information.

Frank Koebel was not a direct recipient of correspondence from the MOE. However, he did attend a conference in May of 1993 entitled "Equipment maintenance and safety aspects of small water systems." During that conference there was a presentation entitled "Distribution System Record Keeping" given by Bill Warwick, outlining the proper procedures for keeping records.

There were also operational signs posted at each of the Pump Houses. The signs were bought by the PUC from Edgar Wiebe of Utility Service Network in February 1998. The signs outlined what maintenance checks had to be done. There were 10 checks that had to be performed.

[See attached photographs of signs]



## No. 5 Pumphouse Maintenance Checks

Step	Action	Cautions/Comments
1	Check Sodium Hypochlorite Tank	Maximum 30 Gallons Water 5 Gallons Sodium Hypochlorite Check for Tank Leaks
2	Check and Record Sodium Hypochlorite Flow Rate and Tank Level	Bandwidth See at 50% = 0.13 GPH
3	Check Solenoid-Type Metering Pump	
4	Check and Record Sodium Hypochlorite Tank Contents (net gallons)	Ref: When Level in Tank is Empty
5	Check and Record Pressure Reading at Pump	65-70 psi (4.47-4.82 MPa)
6	Check and Record: Flow Rate Reading Total Flow Reading	250 GPM (1.05 M <sup>3</sup> /H)
7	Check and Record Pressure in Main Systems	30-40 psi (2.05-2.73 MPa)
8	Check and Record Draw Down on Well	Must be Less than 15 Feet (4.57 Meters)
9	Check Pump/Motor Operation for Vibrations, Heat, Oil Level, etc.	
10	Perform Chlorine Residual Test	Minimum 0.5 ppm



### No. 6 Pumphouse Maintenance Checks

Step	Action	Comments / Characteristics
1	Check Chlorine Gas Alarm	Green Light - OK Amber Light - Red Light -
2	Check and Record Chlorine Flow Rate	Bandwidth Between
3	Check Chlorine Pressure Differential	Gas Pressure from Chlorine Tank Must be Higher than Water Pressure
4	Check and Record Chlorine Tank Contents (net gallons remaining)	Replace if Pressure
5	Check and Record Pressure Reading	110-120 psi (750)
6	Check and Record Flow Rate Total Flow	500-750 GPM (230-300 LPM)
7	Check and Record Pressure in Main	45-65 psi (307)
8	Check and Record Draw Down	Must be Less than (10/7 Waters)
9	Check Pump Motor Operation Heat, Oil, Vibration	
10	Perform Chlorine Residual Test	Minimum

### No. 7 Pumphouse Maintenance Checks

Step	Action	Comments / Characteristics
1	Check Chlorine Gas Alarm	Green Light - OK Amber Light - Red Light -
2	Check and Record Chlorine Flow Rate	Bandwidth Between
3	Check Chlorine Pressure Differential	Gas Pressure from Chlorine Tank Must be Higher than Water Pressure
4	Check and Record Chlorine Tank Contents (net gallons remaining)	Replace if Pressure
5	Check and Record Pressure Reading	110-120 psi (750)
6	Check and Record Flow Rate Total Flow	500-750 GPM (230-300 LPM)
7	Check and Record Pressure in Main	45-65 psi (307)
8	Check and Record Draw Down	Must be Less than (10/7 Waters)
9	Check Pump Motor Operation Heat, Oil, Vibration	
10	Perform Chlorine Residual Test	Minimum



20

4. Particular #2 - Evidence

98. Although all water samples taken at the PUC were taken from the Walkerton municipal water supply, the PUC continuously and historically submitted samples with mislabeled locations. Thus, although the samples identified bacteriological presence, they did not identify the actual location in the system of the contamination.

99. Donald Herman who worked for the Walkerton PUC from 1975 until 1993, had often seen Frank Koebel take up to three samples from the same location, despite their being labelled as from another source. He had also observed Frank Koebel adding the weekend figures to the Well Daily Operating Sheets (DOS) Sheets on a Monday morning.

100. Tim Hawkins, who worked at the Walkerton PUC from 1980 until after the incident, had also noticed that on some Monday mornings the Daily Operating Sheets would not have been filled out for the previous Saturday and Sunday, despite Frank Koebel having been paid for monitoring the wells on the weekend.

101. Throughout the years, there were numerous examples of water samples taken from locations that did not exist. In September of 1998, water samples were apparently taken from 243 Durham Street, 353 Thomas Street, and 305 Durham Street - all non-existent addresses.

102. There were also numerous samples listed as taken from addresses where the residents of the property do not recall ever seeing a PUC employee taking water samples. Examples include 34 Elm Street in October of 1998, 1004 Yonge Street South in October of 1998, and 106 Alma Street in September of 1998. There were also reports of numerous samples being taken from the Knechtel's Food Market, however the owner indicated that he had not seen a sample being taken in over 10 years.

103. Prior to 1996, provincial laboratories under either MOE or MOH conducted all water sample testing. The standard protocol as outlined in the Chlorination Bulletin was that the laboratory would notify the MOE and the Manager of the facility. The MOE would then contact the manager of the facility as well as the Regional Medical Officer of Health and give abatement instructions. GAP EnviroMicrobial Services Inc. (a former MOH water testing laboratory) tested Walkerton's water after the closure of the MOE and MOH testing labs in 1996 and followed the former practice of notifying the municipality and the MOE of adverse samples. GAP EnviroMicrobial Services Inc. maintained this practice until its closure in April 2000. Thus, before May of 2000, Walkerton PUC was alerted of adverse sample results by the lab and by MOE officials.

104. GAP EnviroMicrobial Services Inc. informed Stan Koebel in April 2000 that they would no longer be performing microbiological testing. Consequently, in May of 2000 Stan Koebel, on behalf of the Municipality of Brockton, contracted with London-based A&L Labs to test the Walkerton water samples. Robert Deakin was the President of A&L Labs and was the person who arranged the testing contract with Stan Koebel. According to Robert Deakin of A & L Labs, it was up the customer (in this case, the Walkerton PUC or Municipality of Brockton).



to instruct A&L about what further services, if any, were to be performed. Such further services could include further contacts. Mr. Deakin told police that Stan Koebel instructed A&L to report testing results to the PUC c/o him.

105. A&L Labs notified Stan Koebel on May 5, 2000 that water samples apparently taken from Well 5, raw and treated, had positive results for total coliforms. When the next set of samples arrived at A&L Labs on May 9, Robert Deakin noticed that there were no samples from Well 5 - the well that had tested positive the week before. The *Ontario Drinking Water Objectives* required the re-testing of samples from the same location after an adverse result.

106. On May 16, A&L Labs received water samples taken May 15. Robert Deakin noticed that once again there were no samples from Well 5. On May 16, he called Stan Koebel and asked why there were no samples from Well 5. Stan Koebel replied that Well 5 was off-line. However, the SCADA report for May 2000 indicated Well 5 was operating on May 1, May 2, and May 9 to May 15.

107. Early on May 17, 2000 Robert Deakin attended work at A&L Labs. He found out from employee Cathy Doyle that the May 15 samples were showing evidence of e. coli. He called Stan Koebel on his cell phone around 8:30 am but did not reach him.

108. At 10:14 am a fax was sent from A&L Labs to the Walkerton PUC indicating that the construction site water samples from the Hwy. 9 watermain construction site in Walkerton had failed. The Hwy 9 project had been the major focus of the PUC that spring. Delays in its completion would be costly to the PUC. The three samples taken tested positive for total coliform and e coli. It is important to note that the fax machine at A&L Labs was set 11 hours and 13 minutes ahead, so that a fax sent at 10:14 am would read as sent at 7:27 pm.

109. At 11:58 am Stan Koebel called Robert Deakin. Deakin advised Stan Koebel that the three "Rush" samples were positive for e coli and coliform bacteria. Deakin also indicated that the #7 treated sample, the 125 Durham St. sample and the 902 Yonge St. sample all tested positive for total coliform and e coli. He said the counts didn't look good either. He also indicated he would fax the final results as soon as the report was complete.

110. At 3:36 pm on May 17 the final report of the distribution system samples was sent to the Walkerton PUC. The results showed positive total coliform and an e. coli count in excess of 200 for the samples labelled Well #7 treated. The 125 Durham St. and 902 Yonge St. samples tested positive for total coliform and e coli. All parties, including Mr. Koebel, the PUC, the MOE and the Medical Officer of Health, did not know that A&L Labs was unaware of the notification protocol and maintained a policy of client confidentiality. A&L Labs, therefore, did not adhere to the requirements outlined in the ODWO.

111. A&L Labs did not notify the MOE of the adverse sample results of May 5 and May 17.

112. On May 19, James Schmidt, the public health inspector in the Walkerton Office, contacted Stan Koebel in the early afternoon. He told Stan that there were some children ill with cramping and diarrhea. He asked Stan Koebel if the water was okay and Stan replied that it was. Stan Koebel made no mention of the May 17 adverse results.

113 Later that same afternoon, another Ministry of Health (MOH) employee, David Patterson, contacted Stan Koebel and asked if the water was safe. He also asked if anything unusual had occurred with the water system recently. Stan Koebel provided David Patterson with contemporaneous chlorine residuals and told Mr. Patterson of construction activity. Stan Koebel stated that he would flush the system as a precaution. He did not include any information as to the May 17 adverse results. Mr. Patterson inferred from this information that the water was safe.

114 Stan Koebel began to implement the abatement activity normally prescribed by the MOE in response to adverse sample results - namely to flush the system and increase chlorine residual levels. He began the abatement activity at various locations in the water system on the evening of May 19, 2000 after his undertaking to Mr. Patterson. He continued throughout the weekend.

115 James Schmidt contacted Stan Koebel for a second time on the morning of May 20 and again was not notified of the May 17 results. David Patterson also called later that afternoon. Patterson asked if there had been any unusual events. He was not told of the May 17 sample results and concluded that the water system was safe after he was told by Stan Koebel of the increasing chlorine residuals.

116 Also on May 20, 2000 Bob McKay called the Spills Action Centre (SAC) of the MOE to warn them about the possibility of adverse samples. Chris Johnston from the SAC tried to contact Stan Koebel. At approximately 1:19 pm, Stan returned Chris Johnston's phone call. Stan Koebel was told of the anonymous complaint and asked if there have been any problems. He mentioned the water mains and that there had been some concern but said 'we're not finding anything'. At one point during the telephone call, Chris Johnston specifically asked Stan Koebel "...so you haven't had any adverse samples then?" Stan Koebel admitted to having "the odd one" but then went on to talk about the changeover from GAP EniroMicrobial Services Inc. to A&L Labs and the problems that had caused him. Stan Koebel did not mention the adverse test results showing a 200+ e. coli count. During the May 20<sup>th</sup> phone call Chris Johnston reminded Stan Koebel that he had a duty to notify the MOE of adverse samples. He replied that he was unaware of the obligation.

117 On the afternoon of May 21, the MOH issued a Boil Water Advisory. After the MOH had issued the Boil Water Advisory, David Patterson contacted Stan Koebel. Stan Koebel seemed upset that the Boil Water Advisory had been issued without his consultation. Patterson stated that they had no choice due to the number of illnesses.

118 On May 21 around 4:50 pm Chris Johnston called Stan Koebel again. He introduced himself as being from the MOE's Spills Action Center and reminded Koebel of their conversation the day before. Johnston asked about the 'minimal adverse sampling' that Stan had told him about and asked for paper copies. Chris Johnston told Stan Koebel "you have to send them in to us". Stan Koebel said that they were from two weeks ago, which was false. Mr. Johnston also explained the problems with the way Walkerton was listed in the MOE records, and how Owen Sound was the District Office.

119. Also on May 21, David Patterson instructed James Schmidt to take samples from a number of locations within the Walkerton PUC water distribution system. Schmidt did so. David Patterson drove them to the London MOH Lab late that night. James Schmidt took and delivered a second set of samples the next day (May 22). The results of the first set of samples were ready the morning of May 23. The lab notified David Patterson around 8:45 am that two of the first set of twenty-one samples were positive for both coliforms and e. coli, and that the second set were looking bad too.

120. Stan Koebel did not mention the May 17 positive results to MOE until May 22. On May 22, John Earl of the MOE attended at the Walkerton PUC Office. He met with Stan Koebel and during the meeting asked for and received the May 17 test results.

121. David Patterson contacted Phil Bye of the MOE about the adverse test results obtained from the MOH samples around 9:00 am on May 23. Around 9:30 am, Patterson contacted Stan Koebel and confronted him with the MOH proof the water was contaminated. Patterson asked Stan Koebel when the system had last been tested. Stan Koebel replied May 15. When Patterson asked what the results were Stan Koebel became very quiet and replied that they had all failed. Stan Koebel said that he had found the fax on his desk on Saturday (May 20). Stan Koebel was crying and distraught. Patterson tried to console him. This conversation was the first time Stan Koebel notified MOH about the adverse results.

#### 5. Particular #3 - Law

**That Stan Koebel and Frank Koebel, between May 3 and 23, 2000, inclusive, at the Municipality of Brockton, in the said Region, did commit a common nuisance by failing to discharge a legal duty, namely,**

...

- 3. by failing to accurately record the required information in the logs or other record-keeping mechanisms, and more particularly, by inaccurately completing the Daily Operating Sheet for Well 7 for May 2000, knowing that it would be relied on as if genuine**

22. Stan Koebel, as manager of the Walkerton PUC was an "operator-in-charge" under Regulation 435/93 of the *Ontario Water Resources Act*. (See Paragraph 36.)

23. Frank Koebel, as foreman of the Walkerton PUC, was also an "operator-in-charge" under Regulation 435/93. (See Paragraph 37.)

24. The legal duties of "operators-in-charge" under section 19 of the Regulation were set out in Paragraph 38.



Further, under section 20(5) of the Regulation an "operator-in-charge" had a legal duty to record information in the logs, such as the Daily Operating Sheet:

(5) An operator-in-charge or a person authorized by an operator-in-charge shall record the following information in the logs or other record-keeping mechanisms in respect of each operating shift:

1. The date, the time period and the number or designation of the shift.
2. The names of all operators on duty during the shift.
3. Any departures from normal operating procedures that occurred during the shift and the time they occurred.
4. Any special instructions that were given during the shift to depart from normal operating procedures and the person who gave the instructions.
5. Any unusual or abnormal conditions that were observed in the facility during the shift, any action that was taken and any conclusions drawn from the observations. ...

By their plea of guilty, Stan Koebel and Frank Koebel acknowledge that each of them failed to discharge their duties under subsection 19(c) and subsection 20 of the Regulation. Both men failed to ensure that the records maintained of adjustments made to the processes within their responsibility were accurate.

#### 6. Particular #3 - Evidence

In May 2000, John Earl was a Senior Environmental Officer with the Ministry of the Environment, Owen Sound District. As a result of Bob McKay's May 20 phone call to the Spills Action Centre (SAC), on May 22 Earl was assigned to investigate Walkerton's water problems.

After a preliminary investigation, John Earl contacted Stan Koebel and arranged to meet with him at the Walkerton PUC Office at 4:00 pm. At that time he asked for and received a number of documents.

During their meeting John Earl also asked for the Daily Operating Sheets (DOS) for each of the three wells. Stan Koebel told him that they were not available at that time. John Earl told Stan Koebel that he would return for them the next day. Stan agreed to have them ready.

John Earl returned to the Walkerton PUC Office on May 23 at 10:30 am, where he met both Stan Koebel and Frank Koebel. Stan Koebel handed John Earl the May 2000 DOS Sheets for all three wells.

According to the DOS Sheet for Well 7, it was off on May 1, as well as May 3 to May 10. However, the computerized SCADA system indicated that Well 7 was running May 2 to May 9, and was off until May 15 when it was turned on again.

132. Also, the Well 7 DOS Sheet indicated chlorine residual levels and the amount of chlorine used in the previous 24 hours for May 11, 12, and 13. There are chlorine residuals also listed for May 18 and 19, when the evidence is that the chlorinator was off line during all of those days.
133. Further, the Well 7 DOS Sheet indicated that Stan Koebel checked Well 7 on May 3, 13, 20, 21, and 23.
134. Greg Dawson, a Forensic Document Examiner with the Centre of Forensic Sciences, determined after his examination of the documents that all of the writing on the Well 7 DOS Sheet belonged to Frank Koebel, except for the initials "S.K.", which could not be identified (but were proven not to belong to Stan Koebel).
135. Finally, when compared with the DOS Sheets for Well 5 and Well 6, it appeared that no Well was supplying the town water between May 3 and May 9. However, the SCADA system showed that Well 7 was the only well in operation during this time.
136. By his plea of guilty, Frank Koebel acknowledges that he inaccurately completed the Daily Operating Sheet for Well 7 for May 2000 knowing that it would be relied upon as genuine. He gave the inaccurate document to his brother Stan Koebel knowing that Stan intended to turn over the document to MOE investigator John Earl, which he did.
137. Stan Koebel was a party to the inaccurate completing of the DOS by Frank Koebel. On May 22, John Earl asked Stan Koebel for the DOS Sheets. Stan Koebel told Earl they were not available. When Earl came back the next day, Stan Koebel handed Earl the three inaccurate DOS Sheets as if they genuinely reflected the actual readings.
138. The effect of the notations on the inaccurate Well 7 DOS Sheet was to mislead the MOE. The inaccurate DOS made it appear that Well 7 was not pumping during the time when it was actually pumping without a chlorinator. The inaccurate DOS also made it appear that for the days Well 7 was listed as operating, it had a chlorinator when it did not. Both Stan Koebel and Frank Koebel were aware that the MOE would be relying on these documents as if they were genuine.
139. After the Walkerton Inquiry was called but prior to any evidence being called, Stan Koebel, through his counsel, informed Counsel for the Inquiry on August 17, 2000 of the inaccurate water sampling program, the removal of the chlorinator from Well 7 and the inaccuracy of the DOS, particularly, the chlorine measurements and the chlorine residuals.

DATED at Walkerton, this

day of November, 2004.

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Counsel for the Crown

DATED at Walkerton, this

day of November, 2004.

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Counsel for Stan Koebel

DATED at Walkerton, this

day of November, 2004.

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