2010 5502 - Winnebago
Rockford/United Recovery

EPA Region 5 Records Ctr.
352035

cc: Rockford Files
Bob Gowler
Sherry Otto

April 12, 1984

Mrs. Etta Hayter
910 Watts Avenue
Rockton, IL 61072

Re: Water Well Analysis - Organics

Dear Mrs. Hayter:

Please find enclosed a copy of the report from the laboratory analysis on your well water sampled January 24, 1984. The results indicated that your well is affected by synthetic organic chemicals revealing at this point 105 parts per billion (ppb) 1,1,1-Trichloroethane, 1 ppb Trichloroethylene, 33 ppb 1,1-Dichloroethylene and 15 ppb 1,1-Dichloroethane.

There are currently no drinking water standards for any of the volatile organic chemicals (VOC's) of which 1,1,1-Trichloroethane, Trichloroethylene, 1,1-Dichloroethylene, and 1,1-Dichloroethane are a part. It has only been in the last few years that the U.S. EPA has started doing the necessary biomedical research so that standards may eventually be established. Thus far only 30 to 40 VOC's have been tested for health effects, many however only superficially. Health effects data is currently available for 6 VOC's: trichloroethylene, tetrachloroethylene, carbon tetrachloride, 1,1,1-trichloroethane, 1,2-dichloroethane and vinyl chloride.

I have enclosed the information that is available on these compounds which has been abstracted from the "Advanced Notice of Proposed Rule Making" issued by the U.S. EPA, March 1982. As you can see from this information trichloroethylene is confirmed carcinogens in animals and as such are considered to be a potential carcinogen in man. While the enclosed literature does not mention 1,1,-Dichloroethane, it also is a confirmed animal carcinogen. Acute and chronic health effects have a threshold level beyond which health risks are of concern; carcinogenic effects probably do not exhibit a threshold level, thus exposure to <u>any level may pose some measure of risk</u>. The preliminary suggested no adverse response level (SNARL) from the U.S. EPA for trichloroethylene 1,1-dichloroethylene, and 1,1,1-trichloroethane is 75 ppb, 70 ppb and 1000 ppb respectively for consumption over an extended period of time. The concentration of trichloroethylene and 1,1-dichloroethane projected to increase <u>the lifetime</u> cancer risk by one in 1 million is 4.5 ppb and 0.0066 ppb respectively (i.e. for the current levels of 1,1-dichloroethane in your well this would extrapolate to a risk from <u>lifetime consumption</u> to about 1 in 444). The U.S. EPA is currently considering establishing a recommended maximum contaminant level (RMCL) in drinking water for trichloroethylene in the range of 5 to 500 ppb and for 1,1,1-trichloroethane of 1000 ppb. The U.S. EPA is currently studying 1,1-dichloroethylene and 1,1-dichloroethane and does not have a range they are considering for an RMCL on these compounds yet.

RECEIVED
MAY 02 1984
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

It is possible that concentrations of the compounds in your well water may change. In addition, the combination of compounds may complicate the risk assessment procedure in that with exposure to more than one compound you can only assume an additive effect when in reality there is some likelihood of a promotive or synergistic response. Promotive or synergistic responses are impossible to quantify from individual chemical compound toxicological data.

It is recommended that consideration be given to an alternative water supply for drinking and cooking purposes. If you must use your water it is recommended that it be boiled vigorously for at least 10 minutes; since trichloroethylene, 1,1,1-trichloroethane and the other compounds are volatile, boiling will evaporate these compounds thus reducing their concentration in the water. In doing so, the hood over the stove should be used to carry most of the moisture vapor outside. As I find additional information pertinent to your situation it will be forwarded.

This Department is continuing to work with the Illinois Department of Public Health and the Illinois Environmental Protection Agency on the identification of the source(s) of these contaminants. In the process, we will keep you informed of any significant changes in our investigation of this matter. In the meantime, should you have any questions in regard to any of this information, please let us know.

Respectfully,

J. Maichle Bacon, M.P.H., R.S.
Director, Environmental Health

Originated by:

Steve Johnson, R.S.
Environmental Health Inspector

SJ/sm

Enc.

RECEIVED

MAY 02 1984

E.P.A. — D.L.P.C.
STATE OF ILLINOIS

2010350 2 Winnebago
Rockton/United Recovery

April 10, 1984

Mr. & Mrs. Trull
900 North Prairie
Rockton, IL 6072

Re: Water Sample Results -
Volatile Organic Chemicals

Dear Mr. & Mrs. Trull:

This letter is to transmit the findings of a drinking water sample collected January 24, 2984 by a representative from the Winnebago County Department of Public Health. The water sample was submitted to the toxicology department of the Illinois Department of Public Health laboratory in Chicago for analysis for the presence of volatile organics compounds (VOC). As you can see by the enclosed copy of the laboratory report, that the analysis identified a trace amount of trans-1,2-dichloroethylene.

These findings should not be viewed with too much concern in that these are extremely low levels that could easily be missed except for the tremendous sensitivity of the analytical technique. Such trace amounts can be picked up routinely from plastic plumbing, pressure tank liners (bladder type), and even from being transported or stored near other samples with significant levels of such compounds. As a consequence, it is not known for certain whether this finding is connected wih the problem along Watts Avenue.

However, you should be aware that it appears groundwater movement is to the west in that immediate area; therefore, it is possible that the wells on your property may be influenced in the future. Because of this possibility it is important to continue the monitoring of your well water and will be accomplished with the assistance of the Illinois Department of Public Health.

If you should have any questions regarding these results, please call this Department (962-5098) or the Illinois Department of Public Health (987-7511).

Respectfully,

J. Maichle Bacon, M.P.H., R.S.
Director, Environmental Health

Originated by:

Steve Johnson, R.S.
Environmental Health Sanitarian

SJ/sm

Enc.

RECEIVED
MAY 02 1984
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

RECEIVED
APR 25 1984
ILL. E.P.A. — D.L.P.C.
STATE OF ILLINOIS

20103502-Winnebago
Rockton/Mrs. Recovery

April 12, 1984

RECEIVED
MAY 02 1984
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

Mr. & Mrs. Kenneth Lowery, Jr.
1004 Watts Avenue
Rockton, IL 61072

Re: Water Well Analysis - Organics

Dear Mr. & Mrs. Lowery:

Please find enclosed a copy of the report from the laboratory analysis on your well water sampled January 24, 1984. The results indicated that your well is affected by synthetic organic chemicals revealing at this point 4 parts per billion (ppb) 1,1,1-Trichloroethane, 1 ppb Trichloroethylene and 11 ppb 1,1-Dichloroethane.

There are currently no drinking water standards for any of the volatile organic chemicals (VOC's) of which 1,1,1-Trichloroethane, Trichloroethylene, and 1,1-Dichloroethane are a part. It has only been in the last few years that the U.S. EPA has started doing the necessary biomedical research so that standards may eventually be established. Thus far only 30 to 40 VOC's have been tested for health effects, many however only superficially. Health effects data is currently available for 6 VOC's: trichloroethylene, tetrachloroethylene, carbon tetrachloride, 1,1,1-trichloroethane, 1,2-dichloroethane and vinyl chloride.

I have enclosed the information that is available on these compounds which has been abstracted from the "Advanced Notice of Proposed Rule Making" issued by the U.S. EPA, March 1982. As you can see from this information trichloroethylene is a confirmed carcinogens in animals and as such are considered to be a potential carcinogen in man. While the enclosed literature does not mention 1,1-dichloroethane, it also is a confirmed animal carcinogen. Acute and chronic health effects have a threshold level beyond which health risks are of concern; carcinogenic effects probably do not exhibit a threshold level, thus exposure to any level may pose some measure of risk. The preliminary suggested no adverse response level (SNARL) from the U.S. EPA for trichloroethylene and 1,1,1-trichloroethane are 75 ppb and 1000 ppb respectively for consumption over an extended period of time. There has not been a SNARL established for 1,1-dichloroethane. The concentration of 1,1-dichloroethane projected to increase the lifetime cancer risk by one in 1 million is 0.0066 ppb; the current concentration of 1,1-dichloroethane in your well (11 ppb), although identity is uncertain, extrapolates to a risk from lifetime consumption to about 1 in 605. The U.S. EPA is currently considering establishing recommended maximum contaminant levels (RMCL's) in drinking water for 1,1,1-trichloroethane of 1000 ppb, and for trichloroethylene in the range of 5 to 500 ppb. The U.S. EPA is currently studying 1,1-dichloroethane and does not have a range they are considering for an RMCL yet.

It is possible that concentrations of the compounds in your well water may change. In addition, the combination of compounds may complicate the risk assessment procedure in that with exposure to more than one compound you can only assume an additive effect when in reality there is some likelihood of a promotive or synergistic response. Promotive or synergistic responses are impossible to quantify from individual chemical compound toxicological data.

It is recommended that consideration be given to an alternative water supply for drinking and cooking purposes. If you must use your water it is recommended that it be boiled vigorously for at least 10 minutes; since these are volatile compounds, boiling will evaporate these compounds thus reducing their concentration in the water. In doing so, the hood over the stove should be used to carry most of the moisture vapor outside. As I find additional information pertinent to your situation it will be forwarded.

This Department is continuing to work with the Illinois Department of Public Health and the Illinois Environmental Protection Agency on the identification of the source(s) of these contaminants. In the process, we will keep you informed of any significant changes in our investigation of this matter. In the meantime, should you have any questions in regard to any of this information, please let us know.

Respectfully,

J. Maichle Bacon, M.P.H., R.S.
Director, Environmental Health

Originated by:

Steve Johnson, R.S.
Environmental Health Inspector

SJ/sm

Enc.

RECEIVED

MAY 02 1984

E.P.A. -- D.L.P.C.
STATE OF ILLINOIS

2010 SSU2-Winnebago
Rockton/Un. Recovery

April 11, 1984

Mr. John Jones
913 Watts
Rockton, IL 61072

Re: Water Sample Results --
Volatile Organic Chemicals

Dear Mr. Jones:

This letter is to transmit the findings of a drinking water sample collected January 24, 1984 by a representative from this Department. The water sample was submitted to the toxicology department of the Illinois Department of Public Health laboratory in Chicago for analysis for the presence of volatile organics compounds (VOC). As you can see by the enclosed copy of the laboratory report, that the analysis identified a trace amount of 1,1,1-Trichloroethane.

These findings should not be viewed with too much concern in that these are extremely low levels that could easily be missed except for the tremendous sensitivity of the analytical technique. Such trace amounts can be picked up routinely from plastic plumbing, pressure tank liners (bladder type), and even from being transported or stored near other samples with significant levels of such compounds. It is difficult to determine whether these findings are connected with the problem affecting the southern end of Watts Avenue. However, because of the possibility that it may be related to this groundwater contamination problem, it is important to continue the monitoring of your water well. This can be accomplished with the assistance of the Illinois Department of Public Health.

This Deparatment is continuing to work with the Illinois Department of Public Heath and the Illinois Environmental Protection Aency on the identification of the source(s) of these contaminants. In the process, we will keep you informed of any significant changes in our investigation of this matter. In the meantime, should you have any questions in regard to any of this, please let us know.

Respectfully,

J. Maichle Bacon, M.P.H., R.S.
Director, Environmental Health

Originated by:

Steve Johnson, R.S.
Environmental Health Sanitarian

SJ/sm

Enc.

RECEIVED
MAY 02 1984
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

2010 3502 - Winnebago
Rockton/United Recycling

April 12, 1984

RECEIVED
MAY 02 1984
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

Mr. William Altenberg
914 Watts Avenue
Rockton, IL 61072

Re: Water Well Analysis - Organics

Dear Mr. Altenberg:

Please find enclosed a copy of the report from the laboratory analysis on your well water sampled January 24, 1984. The results indicated that your well is affected by synthetic organic chemicals revealing at this point 19 parts per billion (ppb) 1,1,1-Trichloroethane, 24 ppb 1,1-Dichloroethylene and 2 ppb 1,1-Dichloroethane.

There are currently no drinking water standards for any of the volatile organic chemicals (VOC's) of which 1,1,1-Trichloroethane, 1,1-Dichloroethylene, and 1,1-Dichloroethane are a part. It has only been in the last few years that the U.S. EPA has started doing the necessary biomedical research so that standards may eventually be established. Thus far only 30 to 40 VOC's have been tested for health effects, many however only superficially. Health effects data is currently available for 6 VOC's: trichloroethylene, tetrachloroethylene, carbon tetrachloride, 1,1,1-trichloroethane, 1,2-dichloroethane and vinyl chloride.

I have enclosed the information that is available on these compounds which has been abstracted from the "Advanced Notice of Proposed Rule Making" issued by the U.S. EPA, March 1982. While the enclosed literature does not mention 1,1,-dichloroethane, it has been identified as an animal carcinogen and as such should be considered a potential human carcinogen. Acute and chronic health effects have a threshold level beyond which health risks are of concern; carcinogenic effects probably do not exhibit a threshold level, thus exposure to any level may pose some measure of risk. The preliminary suggested no adverse response level (SNARL) from the U.S. EPA for 1,1-dichloroethylene and 1,1,1-trichloroethane is 70 ppb and 1000 ppb respectively for consumption over an extended period to time. There has not been a SNARL established for 1,1-dichloroethane. The concentration of 1,1-dichloroethane projected to increase the lifetime cancer risk by one in 1 million is 0.0066 ppb; the current level of 1,1-dichloroethane in your well (2 ppb), although identity is uncertain, extrapolates to a risk from lifetime consumption of about 1 in 3333. The U.S. EPA is currently considering establishing a recommended maximum contaminant level (RMCL) in drinking water for 1,1,1-trichloroethane of 1000 ppb. The U.S. EPA is currently studying 1,1-dichloroethylene and 1,1-dichloroethane and does not have a range they are considering for an RMCL on these compounds yet.

It is possible that concentrations of the compounds in your well water may change. In addition, the combination of compounds may complicate the risk assessment procedure in that with exposure to more than one compound you can only assume an additive effect when in reality there is some likelihood of a promotive or synergistic response. Promotive or synergistic responses are impossible to quantify from individual chemical compound toxicological data.

It is recommended that consideration be given to an alternative water supply for drinking and cooking purposes. If you must use your water it is recommended that it be boiled vigorously for at least 10 minutes; since they are all volatile compounds, boiling will evaporate these compounds thus reducing their concentration in the water. In doing so, the hood over the stove should be used to carry most of the moisture vapor outside. As I find additional information pertinent to your situation it will be forwarded.

This Department is continuing to work with the Illinois Department of Public Health and the Illinois Environmental Protection Agency on the identification of the source(s) of these contaminants. In the process, we will keep you informed of any significant changes in our investigation of this matter. In the meantime, should you have any questions in regard to any of this information, please let us know.

Respectfully,

J. Maichle Bacon, M.P.H., R.S.
Director, Environmental Health

Originated by:

Steve Johnson, R.S.
Environmental Health Inspector

SJ/sm

Enc.

RECEIVED

MAY 02 1984

E.P.A. — D.L.P.C.
STATE OF ILLINOIS

2010 3502 - Winnebago
Rockton/United Recovery

April 12, 1984

Mr. & Mrs. Thomas Marx
905 Watts Avenue
Rockton, IL 61072

Re: Water Well Analysis - Organics

Dear Mr. & Mrs. Marx:

Please find enclosed a copy of the report from the laboratory analysis on your well water sampled January 24, 1984. The results indicated that your well is affected by synthetic organic chemicals revealing at this point 2 parts per billion (ppb) 1,1,1-trichloroethane, 3 ppb tetrachloroethylene and less than 1 ppb chloroform.

There are currently no drinking water standards for any of the volatile organic chemicals (VOC's) of which 1,1,1-Trichloroethane, Tetrachloroethylene and chloroform are a part. It has only been in the last few years that the U.S. EPA has started doing the necessary biomedical research so that standards may eventually be established. Thus far only 30 to 40 VOC's have been tested for health effects, many however only superficially. Health effects data is currently available for 6 VOC's: trichloroethylene, tetrachloroethylene, carbon tetrachloride, 1,1,1-trichloroethane, 1,2-dichloroethane and vinyl chloride.

I have enclosed the information that is available on these compounds which has been abstracted from the "Advanced Notice of Proposed Rule Making" issued by the U.S. EPA, March 1982. As you can see from this information trichloroethylene and tetrachloroethylene are confirmed carcinogens in animals and as such are considered to be potential carcinogens in man. Acute and chronic health effects have a threshold level beyond which health risks are of concern; carcinogenic effects probably do not exhibit a threshold level, thus exposure to <u>any level may pose some measure of risk</u>. The preliminary suggested no adverse response level (SNARL) from the U.S. EPA for tetrachloroethylene (PCE) is 20 ppb for consumption over an extended period of time. The concentration of PCE projected to increase the <u>lifetime cancer risk</u> by one in 1 million is about 3.5 ppb, which is considered an acceptable level of risk in many toxicological studies. The U.S. EPA is currently considering establishing a recommended maximum contaminant level (RMCL) in drinking water for PCE in the range of 5 to 500 ppb and for 1,1,1-trichloroethane of 1000 ppb.

RECEIVED

MAY 02 1984

E.P.A. — D.L.P.C.

It is possible that concentrations of the compounds in your well water may change. In addition, the combination of compounds may complicate the risk assessment procedure in that with exposure to more than one compound you can assume an additive effect when in reality there is some likelihood of a promotive or synergistic response. Promotive or synergistic responses are impossible to quantify from individual chemical compound toxicological data.

It is recommended that consideration be given to an alternative water supply for drinking and cooking purposes. If you must use your water it is recommended that it be boiled vigorously for at least 10 minutes; since tetrachloroethylene and 1,1,1-trichloroethane are volatile compounds, boiling will evaporate these compounds thus reducing their concentration in the water. In doing so, the hood over the stove should be used to carry most of the moisture vapor outside. As I find additional information pertinent to your situation it will be forwarded.

This Department is continuing to work with the Illinois Department of Public Health and the Illinois Environmental Protection Agency on the identification of the source(s) of these contaminants. In the process, we will keep you informed of any significant changes in our investigation of this matter. In the meantime, should you have any questions in regard to any of this information, please let us know.

Respectfully,

J. Maichle Bacon, M.P.H., R.S.
Director, Environmental Health

Originated by:

Steve Johnson, R.S.
Environmental Health Inspector

SJ/sm

Enc.

RECEIVED

MAY 02 1984

E.P.A. — D.L.P.C.
STATE OF ILLINOIS

20103502-Winnebago
Rockton/United Recovery

RECEIVED
MAY 02 1984
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

April 12, 1984

Mr. Clifford McHone
918 Watts Avenue
Rockton, IL 61072

Re: Water Well Analysis - Organics

Dear Mr. McHone:

Please find enclosed a copy of the report from the laboratory analysis on your well water sampled January 24, 1984. The results indicated that your well is affected by synthetic organic chemicals revealing at this point 175 parts per billion (ppb) 1,1,1-Trichloroethane, 76 ppb 1,1-Dichloroethane, 16 ppb 1,1-Dichloroethylene, less than 1 ppb Trichloroethylene, and less than 1 ppb tetrachloroethylene.

There are currently no drinking water standards for any of the volatile organic chemicals (VOC's) of which 1,1,1-Trichloroethane, Trichloroethylene, Tetrachloroethylene and 1,1-Dichloroethane are a part. It has only been in the last few years that the U.S. EPA has started doing the necessary biomedical research so that standards may eventually be established. Thus far only 30 to 40 VOC's have been tested for health effects, many however only superficially. Health effects data is currently available for 6 VOC's: trichloroethylene, tetrachloroethylene, carbon tetrachloride, 1,1,1-trichloroethane, 1,2-dichloroethane and vinyl chloride.

I have enclosed the information that is available on these compounds which has been abstracted from the "Advanced Notice of Proposed Rule Making" issued by the U.S. EPA, March 1982. As you can see from this information trichloroethylene and tetrachloroethylene are confirmed carcinogens in animals and as such are considered to be a potential carcinogen in man. While the enclosed literature does not mention 1,1-dichloroethane, it also is a confirmed animal carcinogen. Acute and chronic health effects have a threshold level beyond which health risks are of concern; carcinogenic effects probably do not exhibit a threshold level, thus exposure to <u>any level may pose some measure of risk</u>.

The preliminary suggested no adverse response level (SNARL) from the U.S. EPA for 1,1-dichloroethylene, 1,1,1-trichloroethane, trichloroethylene, and tetrachloroethylene are 70 ppb, 1000 ppb, 75 ppb and 20 ppb respectively for consumption over and extended period time. There has not been a SNARL established for 1,1-dichloroethane. The concentration of 1,1-dichloroethane projected to increase the lifetime cancer risk by one in 1 million is 0.0066 ppb; the current level of 1,1-dichloroethane in your well (76 ppb), although identity is uncertain, extrapolates to a risk

from lifetime consumption of about 1 in 88. The U.S. EPA is currently considering establishing recommended maximum contaminant levels (RMCL's) in drinking water for 1,1,1-trichloroethane of 1000 ppb and trichlorethylene and tetrachloroethylene in the range of 5 to 500 ppb. The U.S. EPA is currently studying 1,1-dichloroethylene and 1,1-dichloroethane and does not have a range they are considering for RMCL's on these compounds yet.

It is possible that concentrations of the compounds in your well water may change. In addition, the combination of compounds may complicate the risk assessment procedure in that with exposure to more than one compound you can only assume an additive effect when in reality there is some likelihood of a promotive or synergistic response. Promotive or synergistic responses are impossible to quantify from individual chemical compound toxicological data.

It is recommended that consideration be given to an alternative water supply for drinking and cooking purposes. If you must use your water it is recommended that it be boiled vigorously for at least 10 minutes; since trichloroethylene, 1,1,1-trichloroethane and the other compounds are volatile, boiling will evaporate these compounds thus reducing their concentration in the water. In doing so, the hood over the stove should be used to carry most of the moisture vapor outside. As I find additional information pertinent to your situation it will be forwarded.

This Department is continuing to work with the Illinois Department of Public Health and the Illinois Environmental Protection Agency on the identification of the source(s) of these contaminants. In the process, we will keep you informed of any significant changes in our investigation of this matter. In the meantime, should you have any questions in regard to any of this information, please let us know.

Respectfully,

J. Maichle Bacon, M.P.H., R.S.
Director, Environmental Health

Originated by:

Steve Johnson, R.S.
Environmental Health Inspector

SJ/sm

Enc.

RECEIVED
MAY 02 1984
E.P.A. — D.L.P.C.
STATE OF ILLINOIS

RECEIVED
APR 25 1984
ILL. E.P.A. - D.L.P.C.
STATE OF ILLINOIS