



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

May 19, 2015

Mr. Anthony Robinson
4252B United Street
Greensboro, NC

RE: Indoor Air Sampling Results-4252B United Street, Nottingham Apartments, Greensboro
West Market Street Storage
Greensboro, Guilford County, NC
NONCD0002948

Dear Mr. Robinson:

Between May 6 and May 13, 2015, Hart & Hickman, an engineering company working for a developer of the property next door collected an indoor air sample from your apartment. Concentration of detected tetrachloroethylene exceeds the State's residential indoor air Screening Level. But the calculated total risk shows no indications that adverse health effects are a concern (see attached Health Risk Evaluation conducted by our Toxicologist). Therefore, no other actions are needed for your apartment at this time.

If you have any questions regarding this letter, please feel free to call me at (919) 707-8213 or e-mail me at qu.qi@ncdenr.gov.

Sincerely,

Qu Qi
Division of Waste Management, NCDENR

Enclosures: Health Risk Evaluation
Indoor Air Sampling result

cc: Sharon Cihak - Guilford County Dept. of Health and Human Services



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

May 19, 2015

Mr. Robert Dunham
4252A United Street
Greensboro, NC

RE: Indoor Air Sampling Results - 4252A United Street, Nottingham Apartments, Greensboro
West Market Street Storage
Greensboro, Guilford County, NC
NONCD0002948

Dear Mr. Dunham:

Between May 6 and May 13, 2015, Hart & Hickman, an engineering company working for a developer of the property next door collected an indoor air sample from your apartment. Concentrations of detected contaminants did not go over the State's residential indoor air Screening Levels (see attached Health Risk Evaluation conducted by our Toxicologist). Therefore, no other actions are needed for your apartment at this time.

If you have any questions regarding this letter, please feel free to call me at (919) 707-8213 or e-mail me at qu.qi@ncdenr.gov.

Sincerely,

Qu Qi
Division of Waste Management, NCDENR

Enclosures: Health Risk Evaluation
Indoor Air Sampling result

ec: Sharon Cihak - Guilford County Dept. of Health and Human Services



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

May 19, 2015

Mr. Daniel Granados
4250D United Street
Greensboro, NC

RE: Indoor Air Sampling Results – 4250D United Street, Nottingham Apartments, Greensboro
West Market Street Storage
Greensboro, Guilford County, NC
NONCD0002948

Dear Mr. Granados:

Between May 6 and May 13, 2015, Hart & Hickman, an engineering company working for a developer of the property next door collected an indoor air sample from your apartment. Concentration of detected tetrachloroethylene did not go over the State's residential indoor air Screening Levels (see attached Health Risk Evaluation conducted by our Toxicologist). Therefore, no other actions are needed for your apartment at this time.

If you have any questions regarding this letter, please feel free to call me at (919) 707-8213 or e-mail me at qu.qi@ncdenr.gov.

Sincerely,

Qu Qi
Division of Waste Management, NCDENR

Enclosures: Health Risk Evaluation
Indoor Air Sampling result

cc: Sharon Cihak - Guilford County Dept. of Health and Human Services



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

May 19, 2015

Ms. Joy Trotter
4252D United Street
Greensboro, NC

RE: Indoor Air Sampling Results - 4252D United Street, Nottingham Apartments, Greensboro
West Market Street Storage
Greensboro, Guilford County, NC
NONCD0002948

Dear Ms. Trotter:

Between May 6 and May 13, 2015, Hart & Hickman, an engineering company working for a developer of the property next door collected an indoor air sample from your apartment. Concentrations of detected contaminants did not go over the State's residential indoor air Screening Levels (see attached Health Risk Evaluation conducted by our Toxicologist). Therefore, no other actions are needed for your apartment at this time.

If you have any questions regarding this letter, please feel free to call me at (919) 707-8213 or e-mail me at qu.qi@ncdenr.gov.

Sincerely,

Qu Qi
Division of Waste Management, NCDENR

Enclosures: Health Risk Evaluation
Indoor Air Sampling result

cc: Sharon Cihak - Guilford County Dept. of Health and Human Services



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

May 19, 2015

Mr. Hamzat Ongunlade
4252C United Street
Greensboro, NC

RE: Indoor Air Sampling Results - 4252C United Street, Nottingham Apartments, Greensboro
West Market Street Storage
Greensboro, Guilford County, NC
NONCD0002948

Dear Mr. Ongunlade:

Between May 6 and May 13, 2015, Hart & Hickman, an engineering company working for a developer of the property next door collected an indoor air sample from your apartment. Concentrations of detected contaminants did not go over the State's residential indoor air Screening Levels (see attached Health Risk Evaluation conducted by our Toxicologist). Therefore, no other actions are needed for your apartment at this time.

If you have any questions regarding this letter, please feel free to call me at (919) 707-8213 or e-mail me at qu.qi@ncdenr.gov.

Sincerely,

Qu Qi
Division of Waste Management, NCDENR

Enclosures: Health Risk Evaluation
Indoor Air Sampling result

cc: Sharon Cihak - Guilford County Dept. of Health and Human Services



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

May 19, 2015

Mr. Henry Fitzhugh
4250C United Street
Greensboro, NC

RE: Indoor Air Sampling Results - 4250C United Street, Nottingham Apartments, Greensboro
West Market Street Storage
Greensboro, Guilford County, NC
NONCD0002948

Dear Mr. Fitzhugh:

Between May 6 and May 13, 2015, Hart & Hickman, an engineering company working for a developer of the property next door collected an indoor air sample from your apartment. Concentrations of detected contaminants did not go over the State's residential indoor air Screening Levels (see attached Health Risk Evaluation conducted by our Toxicologist). Therefore, no other actions are needed for your apartment at this time.

If you have any questions regarding this letter, please feel free to call me at (919) 707-8213 or e-mail me at qu.qi@ncdenr.gov.

Sincerely,

Qu Qi
Division of Waste Management, NCDENR

Enclosures: Health Risk Evaluation
Indoor Air Sampling result

cc: Sharon Cihak - Guilford County Dept. of Health and Human Services



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

May 19, 2015

Mr. Tydell Powell
4250A Unite Street
Greensboro, NC

RE: Indoor Air Sampling Results- 4250A Unite Street, Nottingham Apartments, Greensboro
West Market Street Storage
Greensboro, Guilford County, NC
NONCD0002948

Dear Mr. Powell:

Sampling results from a study at 3939 West Market Street, Greensboro, North Carolina (the Site) indicate that soil and groundwater at the site are contaminated with hazardous substances, including trichloroethylene (TCE). Information on this chemical is provided with this letter. The Site was formerly a dairy product facility with an on-site fleet maintenance building, where the contamination has been confirmed. The Nottingham Apartments are located adjacent to the Site. The presence of contaminated vapor in buildings generally occurs when there is migration of volatile chemicals from contaminated groundwater or soil into an overlying building.

Between May 6 and May 13, 2015, Hart & Hickman, an engineering company working for a developer of the West Street Storage property, collected an indoor air sample from your apartment. Concentrations of TCE in this sample exceeded the state's acceptable level for residential indoor air (see attached Health Risk Evaluation conducted by our Toxicologist). Because of the detection of these chemicals in air in your home, installation of an air filter system is necessary for your apartment. As a temporary measure, the air filter system can be installed to immediately reduce the contaminant concentrations in your apartment. Because the concentrations detected in your apartment are not much higher than the state's action level, the air filter will likely be sufficient to treat the air to safe levels. The system should be operated as instructed. Alternatively, you may choose to stay at a local hotel until the air filter system has reduced the TCE concentration to a safe level. The Division of Waste Management will pay for the cost of the hotel stay at a rate of no more than \$100.00. Please contact me at the phone number at the end of this letter to arrange for temporary alternative accommodations.

The U. S. Environmental Protection Agency (USEPA) plans to conduct additional testing of the air in the affected apartments to determine if a permanent solution is necessary. That testing will proceed immediately, and we will keep you informed of the progress.

If you have any questions regarding this letter, please feel free to call me at (919) 707-8213 or e-mail me at qu.qi@ncdenr.gov.

Sincerely,



Qu Qi
Division of Waste Management, NCDENR

Enclosures: Health Risk Evaluation
Indoor Air Sampling result
TCE Fact Sheet

cc: Sharon Cihak - Guilford County Dept. of Health and Human Services



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

May 19, 2015

Ms. Abladede Gagnon
4250B Unite Street
Greensboro, NC

RE: Indoor Air Sampling Results- 4250B Unite Street, Nottingham Apartments, Greensboro
West Market Street Storage
Greensboro, Guilford County, NC
NONCD0002948

Dear Ms. Gagnon:

Sampling results from a study at 3939 West Market Street, Greensboro, North Carolina (the Site) indicate that soil and groundwater at the site are contaminated with hazardous substances, including trichloroethylene (TCE). Information on this chemical is provided with this letter. The Site was formerly a dairy product facility with an on-site fleet maintenance building, where the contamination has been confirmed. The Nottingham Apartments are located adjacent to the Site. The presence of contaminated vapor in buildings generally occurs when there is migration of volatile chemicals from contaminated groundwater or soil into an overlying building.

Between May 6 and May 13, 2015, Hart & Hickman, an engineering company working for a developer of the West Street Storage property, collected an indoor air sample from your apartment. Concentrations of TCE in this sample exceeded the state's acceptable level for residential indoor air (see attached Health Risk Evaluation conducted by our Toxicologist). Because of the detection of these chemicals in air in your home, the installation of an air filter system is necessary for your apartment. As a temporary measure, the air filter system can be installed to immediately reduce the contaminant concentrations in your apartment. Because the concentrations detected in your apartment are not much higher than the state's action level, the air filter will likely be sufficient to treat the air to safe levels. The system should be operated as instructed. Alternatively, you may choose to stay at a local hotel until the air filter system has reduced the TCE concentration to a safe level. The Division of Waste Management will pay for the cost of the hotel stay at a rate of no more than \$100.00. Please contact me at the phone number at the end of this letter to arrange for temporary alternative accommodations.

The U. S. Environmental Protection Agency (USEPA) plans to conduct additional testing of the air in the affected apartments to determine if a permanent solution is necessary. That testing will proceed immediately, and we will keep you informed of the progress.

If you have any questions regarding this letter, please feel free to call me at (919) 707-8213 or e-mail me at qu.qi@ncdenr.gov.

Sincerely,

A handwritten signature in cursive script, appearing to read "Qu Qi".

Qu Qi
Division of Waste Management, NCDENR

Enclosures: Health Risk Evaluation
Indoor Air Sampling result
TCE Fact Sheet

cc: Sharon Cihak - Guilford County Dept. of Health and Human Services



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

May 19, 2015

Mr. Jim Merritt
Nottingham Apartment
Unite Street
Greensboro, NC

RE: Indoor Air Sampling Results- 4250(ABCD) and 4252(ABCD) Unite Street, Nottingham Apartments, Greensboro
West Market Street Storage
Greensboro, Guilford County, NC
NONCD0002948

Dear Mr. Merritt:

Sampling results from an investigation at 3939 West Market Street, Greensboro, North Carolina (the Site) indicate that soil and groundwater at the site are contaminated with hazardous substances, including, trichloroethylene (TCE). Information on this chemical is provided with this letter. The Site was formerly a dairy product facility with an on-site fleet maintenance building, where the contamination has been confirmed. The Nottingham Apartments are located adjacent to the Site. Contaminated vapor intrusion into buildings generally occurs when there is migration of volatile chemicals from contaminated groundwater or soil into an overlying building.

Between May 6 and May 13, 2015, Hart & Hickman, an engineering company working for a developer of the West Street Storage property collected indoor air samples from eight apartments. Concentration of TCE in two samples collected from 4250A and 4250B exceeded the State's acceptable level for residential indoor air (see attached Health Risk Evaluation conducted by our Toxicologist). Because of the detection of these chemicals in air in these apartments, mitigation is necessary for these units. As a temporary measure, an air filter system can be installed to immediately reduce the contaminant concentrations in these apartments. Because the concentrations detected in these apartment are not much higher than the State's action level, the air filter is likely to be sufficient to treat the air to safe levels. The system should be operated as instructed. Alternatively, the tenants in these apartments may choose to stay at a local hotel until the air filter system has reduced the TCE concentration to a safe level. The DWM will pay for the cost of the hotel stay at a rate of no more than \$100.00.

The US Environmental Protection Agency (USEPA) plans to conduct additional testing of the air in the affected apartments to determine if and what permanent solution is necessary and sufficient.

That testing will proceed immediately with your permission; we will keep you informed of the progress.

The concentrations of contaminants detected in the remaining six apartments did not exceed applicable the State's residential indoor air values (see attached Health Risk Evaluation conducted by our Toxicologist). Therefore, no other actions are needed for these apartments at this time.

If you have any questions regarding this letter, please feel free to call me at (919) 707-8213 or e-mail me at qu.qi@ncdenr.gov.

Sincerely,



Qu Qi
Division of Waste Management, NCDENR

Enclosures: Health Risk Evaluation
Indoor Air Sampling result
TCE Fact Sheet

cc: Sharon Cihak - Guilford County Dept. of Health and Human Services



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

May 18, 2015

TO: Qu Qi
NC Superfund Section

RE: Health Risk Evaluation
Nottingham Apartments
Apartment 4250A Indoor Air Sampling Results
Greensboro, NC

An indoor air sample was collected in apartment 4250A from May 6 to May 13, 2015 to evaluate the potential for vapor intrusion from the subsurface. Contaminant concentrations in the indoor air were evaluated for the risk of adverse health effects to residential occupants.

RECOMMENDATION: The trichloroethylene concentration exceeds the residential vapor intrusion screening value. Therefore, it is recommended that steps be taken to reduce the vapors to acceptable levels.

The health-based screening values used to determine if the air is suitable in a residential exposure scenario are the North Carolina Division of Waste Management Residential Vapor Intrusion Screening Values. The table below shows the contaminants and corresponding concentrations that were detected in the indoor air:

All contaminant concentrations are in $\mu\text{g}/\text{m}^3$.

Contaminant	4250A-447NS	Screening Value
Tetrachloroethylene	0.33	8.34
Trichloroethylene	2.6	0.417

$\mu\text{g}/\text{m}^3$ = micrograms of contaminant per cubic meter of air

Highlighted boxes indicate air concentrations that exceed the screening value.

David Lilley, Environmental Toxicologist
Division of Waste Management, NCDENR



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

May 18, 2015

TO: Qu Qi
NC Superfund Section

RE: Health Risk Evaluation
Nottingham Apartments
Apartment 4250C Indoor Air Sampling Results
Greensboro, NC

An indoor air sample was collected in apartment 4250C from May 6 to May 13, 2015 to evaluate the potential for vapor intrusion from the subsurface. Contaminant concentrations in the indoor air were evaluated for the risk of adverse health effects to residential occupants.

RECOMMENDATION: None of the contaminants detected exceeded the applicable air values. Therefore, there are no indications that adverse health effects are a concern and no restrictions are recommended at this time.

The health-based screening values used to determine if the air is suitable in a residential exposure scenario are the North Carolina Division of Waste Management Residential Vapor Intrusion Screening Values. The table below shows the contaminants and corresponding concentrations that were detected in the indoor air:

All contaminant concentrations are in $\mu\text{g}/\text{m}^3$.

Contaminant	4250C-448NS	Screening Value
Tetrachloroethylene	1.9	8.34
Trichloroethylene	0.071	0.417

$\mu\text{g}/\text{m}^3$ = micrograms of contaminant per cubic meter of air

David Lilley, Environmental Toxicologist
Division of Waste Management, NCDENR



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

May 18, 2015

TO: Qu Qi
NC Superfund Section

RE: Health Risk Evaluation
Nottingham Apartments
Apartment 4250B Indoor Air Sampling Results
Greensboro, NC

An indoor air sample was collected in apartment 4250B from May 6 to May 13, 2015 to evaluate the potential for vapor intrusion from the subsurface. Contaminant concentrations in the indoor air were evaluated for the risk of adverse health effects to residential occupants.

RECOMMENDATION: The trichloroethylene concentration exceeds the residential vapor intrusion screening value. Therefore, it is recommended that steps be taken to reduce the vapors to acceptable levels.

The health-based screening values used to determine if the air is suitable in a residential exposure scenario are the North Carolina Division of Waste Management Residential Vapor Intrusion Screening Values. The table below shows the contaminants and corresponding concentrations that were detected in the indoor air:

All contaminant concentrations are in $\mu\text{g}/\text{m}^3$.

Contaminant	4250B-449NS	Screening Value
Tetrachloroethylene	2.1	8.34
Trichloroethylene	4.4	0.417

$\mu\text{g}/\text{m}^3$ = micrograms of contaminant per cubic meter of air

Highlighted boxes indicate air concentrations that exceed the screening value.

David Lilley, Environmental Toxicologist
Division of Waste Management, NCDENR



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

May 18, 2015

TO: Qu Qi
NC Superfund Section

RE: Health Risk Evaluation
Nottingham Apartments
Apartment 4252B Indoor Air Sampling Results
Greensboro, NC

An indoor air sample was collected in apartment 4252B from May 6 to May 13, 2015 to evaluate the potential for vapor intrusion from the subsurface. Contaminant concentrations in the indoor air were evaluated for the risk of adverse health effects to residential occupants.

RECOMMENDATION: The tetrachloroethylene concentration exceeds the residential vapor intrusion screening value. However, the screening value assumes other chemicals are present that have similar health effects. A total risk has been calculated based on the single chemical present. There are no indications that adverse health effects are a concern and no restrictions are recommended at this time.

The health-based screening values used to determine if the air is suitable in a residential exposure scenario are the North Carolina Division of Waste Management Residential Vapor Intrusion Screening Values. The table below shows the contaminants and corresponding concentrations that were detected in the indoor air:

All contaminant concentrations are in $\mu\text{g}/\text{m}^3$.

Contaminant	4252B-450NS	Screening Value
Tetrachloroethylene	9.8	8.34

$\mu\text{g}/\text{m}^3$ = micrograms of contaminant per cubic meter of air

Highlighted boxes indicate air concentrations that exceed the screening value.

David Lilley, Environmental Toxicologist
Division of Waste Management, NCDENR



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

May 18, 2015

TO: Qu Qi
NC Superfund Section

RE: Health Risk Evaluation
Nottingham Apartments
Apartment 4252C Indoor Air Sampling Results
Greensboro, NC

An indoor air sample was collected in apartment 4252C from May 6 to May 13, 2015 to evaluate the potential for vapor intrusion from the subsurface. Contaminant concentrations in the indoor air were evaluated for the risk of adverse health effects to residential occupants.

RECOMMENDATION: None of the contaminants detected exceeded the applicable air values. Therefore, there are no indications that adverse health effects are a concern and no restrictions are recommended at this time.

The health-based screening values used to determine if the air is suitable in a residential exposure scenario are the North Carolina Division of Waste Management Residential Vapor Intrusion Screening Values. The table below shows the contaminants and corresponding concentrations that were detected in the indoor air:

All contaminant concentrations are in $\mu\text{g}/\text{m}^3$.

Contaminant	4252C-452NS	Screening Value
Tetrachloroethylene	0.15	8.34
Trichloroethylene	0.071	0.417

$\mu\text{g}/\text{m}^3$ = micrograms of contaminant per cubic meter of air

David Lilley, Environmental Toxicologist
Division of Waste Management, NCDENR



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

May 18, 2015

TO: Qu Qi
NC Superfund Section

RE: Health Risk Evaluation
Nottingham Apartments
Apartment 4252D Indoor Air Sampling Results
Greensboro, NC

An indoor air sample was collected in apartment 4252D from May 6 to May 13, 2015 to evaluate the potential for vapor intrusion from the subsurface. Contaminant concentrations in the indoor air were evaluated for the risk of adverse health effects to residential occupants.

RECOMMENDATION: None of the contaminants detected exceeded the applicable air values. Therefore, there are no indications that adverse health effects are a concern and no restrictions are recommended at this time.

The health-based screening values used to determine if the air is suitable in a residential exposure scenario are the North Carolina Division of Waste Management Residential Vapor Intrusion Screening Values. The table below shows the contaminants and corresponding concentrations that were detected in the indoor air:

All contaminant concentrations are in $\mu\text{g}/\text{m}^3$.

Contaminant	4252D-455NS	Screening Value
Tetrachloroethylene	0.22	8.34
Trichloroethylene	0.053	0.417

$\mu\text{g}/\text{m}^3$ = micrograms of contaminant per cubic meter of air

David Lilley, Environmental Toxicologist
Division of Waste Management, NCDENR



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

May 18, 2015

TO: Qu Qi
NC Superfund Section

RE: Health Risk Evaluation
Nottingham Apartments
Apartment 4252A Indoor Air Sampling Results
Greensboro, NC

An indoor air sample was collected in apartment 4252A from May 6 to May 13, 2015 to evaluate the potential for vapor intrusion from the subsurface. Contaminant concentrations in the indoor air were evaluated for the risk of adverse health effects to residential occupants.

RECOMMENDATION: None of the contaminants detected exceeded the applicable air values. Therefore, there are no indications that adverse health effects are a concern and no restrictions are recommended at this time.

The health-based screening values used to determine if the air is suitable in a residential exposure scenario are the North Carolina Division of Waste Management Residential Vapor Intrusion Screening Values. The table below shows the contaminants and corresponding concentrations that were detected in the indoor air:

All contaminant concentrations are in $\mu\text{g}/\text{m}^3$.

Contaminant	4252A-456NS	Screening Value
Tetrachloroethylene	1.7	8.34
Trichloroethylene	0.031	0.417
cis-1,2-Dichloroethylene	1.1	NS

$\mu\text{g}/\text{m}^3$ = micrograms of contaminant per cubic meter of air

NS – No Standard Established

David Lilley, Environmental Toxicologist
Division of Waste Management, NCDENR



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

May 18, 2015

TO: Qu Qi
NC Superfund Section

RE: Health Risk Evaluation
Nottingham Apartments
Apartment 4250D Indoor Air Sampling Results
Greensboro, NC

An indoor air sample was collected in apartment 4250D from May 6 to May 13, 2015 to evaluate the potential for vapor intrusion from the subsurface. Contaminant concentrations in the indoor air were evaluated for the risk of adverse health effects to residential occupants.

RECOMMENDATION: None of the contaminants detected exceeded the applicable air values. Therefore, there are no indications that adverse health effects are a concern and no restrictions are recommended at this time.

The health-based screening values used to determine if the air is suitable in a residential exposure scenario are the North Carolina Division of Waste Management Residential Vapor Intrusion Screening Values. The table below shows the contaminants and corresponding concentrations that were detected in the indoor air:

All contaminant concentrations are in $\mu\text{g}/\text{m}^3$.

Contaminant	4250D-445NS	Screening Value
Tetrachloroethylene	0.070	8.34

$\mu\text{g}/\text{m}^3$ = micrograms of contaminant per cubic meter of air

David Lilley, Environmental Toxicologist
Division of Waste Management, NCDENR