ATTACHMENT "A" – PROTOCOL FOR ALARM SOUNDING INSIDE HOMES

1.0 INTRODUCTION

As a precautionary measure to ensure that combustible gas associated with the former Sabiston Landfill Site (the Site) is not accumulating inside buildings on the adjacent properties and creating potentially hazardous conditions; the City of Markham has installed real time monitoring system with alarm capabilities at two Bayview Golf Course buildings and select residential properties.

The protocol includes a brief description of the monitoring system and procedures to be followed by Tervita in response to warning alarm conditions.

1.1 COMBUSTIBLE GAS MONITORING SYSTEM

Indoor air gas monitoring units (RKI Beacon 410 Model) installed at the Maintenance Office (Building A) and Staff Lounge (Building B) at the Bayview Golf Course and at selected residential properties surrounding the Site will continuously monitor indoor gas (methane, oxygen, carbon dioxide) concentrations. Figure 1 shows the locations of the buildings and associated residential properties.

The warning alarm level is calibrated to sound when a concentration of 20 percent LEL methane in air is detected at the gas sensor, a level five times lower than the concentration at which methane becomes combustible in air. When methane gas is detected at the warning alarm level, the alarm will sound a 94 db signal and the strobe light will flash.

The monitoring devices have been plugged into a standard electrical outlet and must remain plugged in to be functional. Provided the "power" light is on and the LCD screen is displaying information, the monitoring unit is functioning properly. A copy of the RKI Beacon 410 Gas Monitor Operator's Manual is included in Appendix A for reference.

Calibration of the monitoring system would be carried out by Maxim Environmental and Safety Inc. once every six (6) months.

2.0 RESPONSE PROTOCOL

The warning alarm level is initiated at a methane concentration above **20 percent of the LEL**. The warning alarm will continue to sound until the concentration of combustible gas reads below 20 percent of the LEL, or the alarm is silent by pressing the reset switch. The occupants of the buildings will be provided with Tervita's emergency dispatch number (1-800-327-7455) and

advised to call this number in the event that an alarm condition is triggered. The occupant shall open the windows to allow the building to ventilate and if they feel safer they can evacuate the building until Tervita arrives; otherwise, they can wait inside the building until otherwise notified by Tervita to evacuate the building. Once contacted, Tervita will deploy Emergency Service personnel and equipment (see below) to the scene. A generic decision flowpath for the Response Protocol is presented on Figure 2.

It should be noted that if any methane concentration reading exceeds 50 percent LEL, Tervita should advised the occupants to evacuate the building immediately and Tervita should contact Emergency Services by calling 911 from a safe location.

In response to the occurrence of a warning alarm (i.e., methane concentration detected **greater than 20 percent LEL**)**,** the following steps shall be undertaken:

1. **Tervita** upon entry into the building will assess for natural gas odours (i.e., methyl mercaptans) which may be indicative of a natural gas leak. If evidence of natural gas odours are detected, the building should be evacuated immediately and **Tervita** shall contact Enbridge Gas by calling 1-866-763-5427 from a safe location.
2. **Tervita** will perform preliminary assessment to confirm methane concentrations inside the building by checking the LED display of the RKI Beacon instrument – verify that methane concentration is above 20 percent LEL and that an actual alarm condition has been triggered.
3. Once it has been confirmed that an alarm condition has been triggered, **Tervita** will perform a detailed gas survey utilizing portable gas detection instrument (see specification below). The detailed gas survey will consist of measuring methane concentrations at various locations in each room of the building to confirm that methane is actually present (i.e., not due to false alarm) and to determine if there is a continuing source of methane gas and where it may be entering the structure.
4. If the gas survey indicates methane gas concentrations are greater than 50 percent LEL at any location, then **Tervita** shall make sure the building is evacuated immediately and the City of Markham Emergency Services Department should be contacted by calling 911 from a safe location. **Emergency Services** will confirm that the building has been evacuated and will provide a positive ventilation system (i.e., opening windows and doors) to deliver fresh air into the building.
5. If the results of the detailed gas survey indicate that methane concentrations are all **less than 1 percent LEL**, then the condition is likely the result of a false alarm. In this case, **Tervita** should reset the RKI Beacon and routine monitoring resumed.
6. If the results of the detailed gas survey confirm that consistently detectable concentrations of methane **above 1 percent LEL** are present in the building for a duration of at least 15 minutes, **Tervita** should perform additional gas monitoring to

determine the potential sources. This will involve conducting a more detailed methane gas survey including checking of floor drains, floor cracks, crawl spaces, etc.

7. If the source is attributable to a crack, hole, floor drain or any other breach in the foundation, then **Tervita** should implement temporary measures to seal the breach using appropriate materials such as silicon caulking or plastic sheeting sealed with duct tape.
8. Following implementation of any temporary repairs, **Tervita** should monitor and record methane concentrations in the building using the RKI Beacon and portable gas detection instrument at 10 minute intervals for a period of one (1) hour. If the concentrations remain below detectable concentrations (i.e., 1 percent LEL) during this time, **Tervita** should reset the RKI Beacon system and routine monitoring may be resumed. If the results of the gas monitoring indicate that consistently detectable concentrations of methane above 1 percent LEL are present in the building for a duration of at least 15 minutes then **Tervita** should repeat Steps 6 and 7 as necessary to identify and seal additional sources of methane.
9. Details of any incident response and gas survey should be logged by **Tervita** and City staff and AMEC should be informed of the occurrence as soon as possible. Refer to Appendix B for contact information. **AMEC** will make arrangements with the building occupant to perform a follow-up inspection to complete maintenance and calibration of the RKI Beacon instrument and to download the gas monitoring data to facilitate a more detailed evaluation of gas concentration trends in the building and design permanent remedial measures if required. It is noted that false warning alarms may be an indication that calibration or servicing of the sensing equipment may be required.

3.0 EQUIPMENT

1. Portable multi-gas detector capable of measuring methane (0-100 percent LEL range with 1 percent resolution). The gas detection instrument must be calibrated with methane in accordance with manufacturer's requirements and specifications.
2. Tools and supplies to temporarily seal cracks or holes in foundations or cap foundation drains (i.e., silicone caulk, plastic sheeting, duct tape).

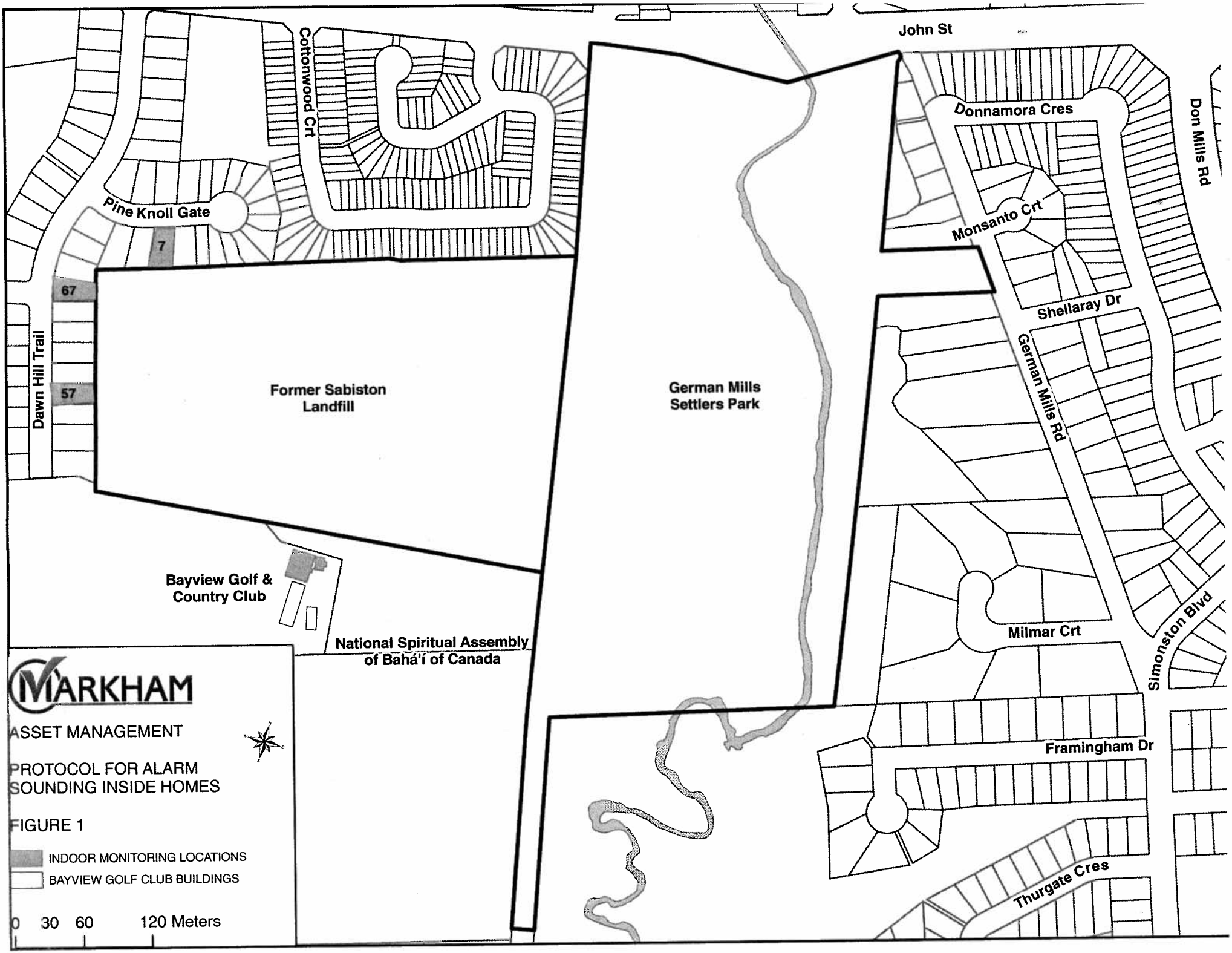
John St
Cottonwood Crt
Pine Knoll Gate
7
67
57
Dawn Hill Trail
Former Sabiston Landfill
German Mills Settlers Park
Donnamora Cres
Don Mills Rd
Monsanto Crt
Shellaray Dr
German Mills Rd
Bayview Golf & Country Club
National Spiritual Assembly of Bahá'í of Canada
Milmar Crt
Simonston Blvd
Framingham Dr
Thurgate Cres
MARKHAM
ASSET MANAGEMENT
PROTOCOL FOR ALARM SOUNDING INSIDE HOMES
FIGURE 1
INDOOR MONITORING LOCATIONS
BAYVIEW GOLF CLUB BUILDINGS
0 30 60 120 Meters

FIGURE 2
COMBUSTIBLE GAS RESPONSE PROTOCOL FLOWPATH