

Thames – Sydenham and Region Drinking Water Source Protection Source Protection Committee Discussion Paper

Report to Chair and members
Thames – Sydenham and Region
Source Protection Committee

Agenda # 2009.04.6.b1 revised

Cc SP Management Committee

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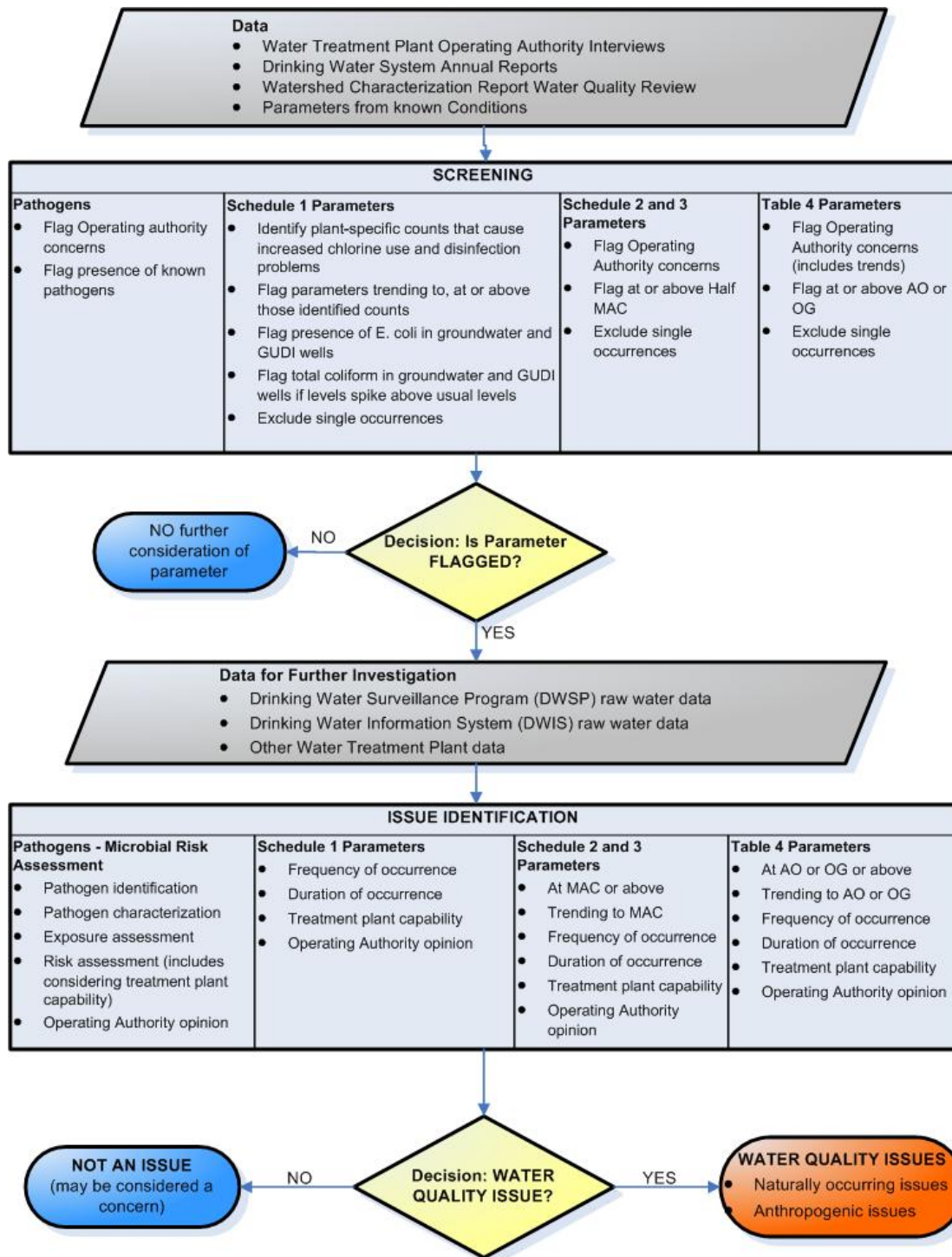
Re: Issues Evaluation Methodology

Background

- **Rule 114** (Clean Water Act Technical Rules, December 2008) defines a water quality issue as a parameter in the raw water source at the intake or well in a concentration that deteriorates or trends towards a deterioration of raw water quality for drinking purposes
- Parameters are from Schedules 1, 2, 3 (Ontario Drinking Water Quality Standards) or Table 4 (Technical Support Document for Ontario Drinking Water Standards, Objectives and Guidelines).
 - Schedule 1: microbial parameters (indicator of potential pathogens)
 - Schedule 2: chemical parameters,
 - Schedule 3: radio-nuclide parameters,
 - Table 4: physical and chemical parameters
- **Maximum Acceptable Concentrations (MACs)**: Ontario drinking water standards for Schedule 1, 2 and 3 parameters beyond which human health may be adversely affected
- **Half MAC**: the level at which a Schedule 2 parameter in the treated water is flagged for increased sampling and testing requirements (under Regulation 170/03 - Section 13-5, Safe Drinking Water Act, 2002)
- **Aesthetic Objectives (AO)**: the level at which Table 4 parameters (such as taste and turbidity) may affect the taste, odour or color of water or interfere with good water quality control practices
- **Operational Guidelines (OG)**: the level at which Table 4 parameters (such as alkalinity and hardness) may negatively effect the efficient and effective treatment, disinfection and distribution of the water

Discussion

- Water quality issues evaluation methodology was discussed at the last SPC meeting on February 13, 2009.
- The proposed issues evaluation methodology is outlined in the attached flow chart, including the main components of an initial screening, further investigation and final decision on whether a parameter is an issue or not
- The proposed issues evaluation methodology including a detailed discussion paper and the attached flow chart will be provided to municipal technical contacts and consultants to obtain their feedback. Once their feedback has been considered this will be provided to the consultants as direction for their immediate initiation of this work. The version provided to the consultants will be presented to the SPC at the June 2009 meeting.



March 31, 2009
Version 1.1

Figure: Proposed Issues Evaluation Methodology