

Treatment Chemical Checklist

Erosion and Sediment Control (ESC) Department

Name: _____

Date: _____

Project No: _____

When submitting the following information to the Township of Langley for acceptance, please include the Treatment Chemical Checklist with your submission.

- Material Safety Data Sheet and technical specifications including ecological toxicity data from the Treatment Chemical manufacturer. Testing to be current (within 5 years) and for the chemical being used onsite^{1 2}
- A field testing kit for the Treatment Chemical, sensitive to one-tenth the LC50 of said Treatment Chemical for the most locally applicable species of aquatic organism noted on the Material Safety Data Sheet²
- Anticipated normal dose rate
- Detailed description of any apparatus used with the Treatment Chemical. The following items must be included in the submission:

calibrated chemical injection system

date of chemical being used and expiry date

pH treatment unit to be included with any water treatment system

sand filtration unit to be included with any water treatment system

settlement tank size and how many are required

proposed sampling port location

flow monitoring device to be installed on inlet pipe; data to be recorded weekly (available to Township upon request)

an automated sensor for NTU and pH readings with either system shut off or re-circulation when elevated levels are detected

automatic fail-safe shutoff

schematic to verify components and sequencing of the system

- Operations manual (only required if requested by Township staff)
- A list of qualified individuals permitted to operate the apparatus

^{1, 2} Test protocol to be used: Environment Canada (1990), EPS 1/RM/9 with 1996 & 2007 amendments

- <https://www.canada.ca/en/environment-climate-change/services/wildlife-research-landscape-science/biological-test-method-publications/acute-lethality-effluents-rainbow-trout.html>
- https://publications.gc.ca/collections/collection_2013/ec/En49-24-1-9-eng.pdf

² Target species: oncorhynchus mykiss (rainbow trout)