

Ministry of Environment and Climate Change Strategy

BEST ACHIEVABLE TECHNOLOGY ASSESSMENT TO INFORM WASTE DISCHARGE STANDARDS **HANDOUT**

October 2021

What is a Best Achievable Technology (BAT)?

A best achievable technology is a technology that has been evaluated for its feasibility, reliability, controleffectiveness, and cost-effectiveness and is demonstrated to be best-suited to meet waste discharge standards for the protection of the environment and human health.

What is a BAT Assessment?

A BAT assessment is a report that reviews waste control technologies that have been proven in commercial application and whose risks are known. The assessment is a site-specific evaluation of waste control technologies while accounting for any specific operational, environmental, geographic conditions or economic viability. The resulting report will include an evaluation of the relevant technologies or processes in treating contaminants for the protection of the environment and human health, based on the following criteria: feasibility, reliability, controleffectiveness, and cost-effectiveness. The assessment will recommend a waste control technology for a sitespecific application based on the results of the criteria.

Will a BAT assessment be required for my permit application?

After you have entered the application process, the ministry will inform you at your pre-application meeting and within the application instruction document if you need to provide a BAT assessment report as part of your final application. The ministry will also provide the site specific details of needs to be included in the assessment.

How will the BAT Assessment be used?

The ministry will take the assessment into consideration when reviewing your final application for a waste discharge authorization. The BAT assessment may be used to establish discharge limits and other permit conditions.

What are the steps of a BAT assessment?

The ministry will determine if a BAT assessment is required for your application. You will be notified of the need for a BAT assessment during the preapplication meeting. If a BAT assessment is needed, the ministry will let you know what information is required for each of the steps to complete the BAT assessment:

> Step 1: Identification of information to be gathered for the BAT assessment

Step 2: Identify all potential technologies or options

Step 3: Screening for feasible options

Step 4: Describe and compare the reliability of each option

Step 5: Describe and compare the controleffectiveness of each option

Step 6: Describe and compare the cost-

effectiveness of each option

Step 7: Select BAT