# Comments On Ministry Of Environment, Lands And Parks' Draft Policy Dated July 23 1993, For Development And Application Of Waste Discharge Criteria Based On Best Available Control Technology (BACT)

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West Coast Environmental Law Association (WCELA) provides legal services to members of the public who are concerned about threats to the environment. WCELA and the West Coast Environmental Law Research Foundation provide legal representation, promote law reform, provide legal education, conduct legal research and maintain a library of environmental legal materials.

We appreciate the opportunity to participate in the Ministry of Environment, Lands and Parks' review of waste discharge criteria (WDC) based on best available control technology (BACT). Our comments below are in response to the Draft Policy dated July 23, 1993 (the "Draft Policy").

## GLOSSARY OF DEFINITIONS

### GENERAL

We recommend that the definitions used in the final version of the policy correspond to the definitions that will be included in the proposed B.C. *Environmental Protection Act*, to the extent that it is possible to do so at this time.

### BACT

The Draft Policy contains a definition of BACT at page 2 that differs from the definition in the legislation discussion paper on the proposed B.C. *Environmental Protection Act [(1) -- 1. . New Approaches to Environmental Protection in British Columbia: A*

*Legislation Discussion Paper*, Ministry of Environment, Lands and Parks, April 27, 1992.]. In that document, BACT is defined as:

"currently available state-of-the-art control technology which is proven to be successful in reducing waste discharges and has been applied for at least one year in similar facilities in the province or in other relevant jurisdictions. Control technology refers to all of the following: raw materials, fuels, process technology and pollution control equipment or devices used to minimize both generation and discharge of wastes." [(2) -- 2. . *Ibid,* at p. 44.]

We recommend that the definition in the Draft Policy be amended to reflect this broader definition, clarifying that BACT is not simply an end-of-pipe approach.

## BACT vs. BAT

To better reflect a broader definition that clearly emphasizes pollution prevention as well as pollution control, we suggest adopting the term Best Available Technology (BAT) rather than Best Available Control Technology (BACT).

## SPECIFIC DEFINITIONS

**"criteria"**: the reference to "financial" factors should be changed to "economic" factors, to reflect that this consideration would be more than merely the actual cost of installing equipment. It should also take into account the potential economic costs of environmental degradation that could result from criteria and standards that are too lax to protect the environment. This definition also refers to the "protection ... of the current and potential use of the environment." It should be changed to "protection of the environment" since the use of the environment does not need to be protected.

**"environment"**: we recommend a much broader definition of environment, possibly corresponding to the definition which will be used in the proposed B.C. *Environmental Protection Act*. For example, the Yukon *Environment Act* uses the following broad definition:

"environment" means

> (a) air, land and water;
>
> (b) all organic and inorganic matter and living organisms, including biodiversity within and among species;
>
> (c) the ecosystem and the ecological relationships;
>
> (d) buildings, structures, roads, facilities, works, artifacts;
>
> (e) all social and economic conditions affecting community life; and

(f) inter-relationships between or among any of the factors in paragraphs (a), (b), (c), (d), or (e). [(3) -- 3. . S.Y.T. 1991, c.5, s.2.]

In addition, any reference to "man" should be changed to "humans".

**"major modification"**: this definition should be amended to clarify that any increases will be dealt with on a cumulative basis, to avoid operators increasing their average daily waste loading by 9% on more than one occasion. The definition should also include operations that expand production by more than 10% even if the daily waste loading has not increased.

**"precautionary principle"**: we recommend strengthening this definition by replacing the definition in the Draft Policy with the following definition:

**"precautionary principle** -- the principle that requires environmental protection measures to anticipate, prevent and attack the causes of environmental degradation, recognizing that where there are threats of environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation."

**"waste management plan"**: we recommend that this term be replaced with "waste minimization plan" or "pollution prevention plan", to clarify that the preferred approach is to prevent pollution from occurring in the first place rather than better managing waste after it has been generated.

We also recommend that a definition for pollution prevention be added as follows:

**"pollution prevention** -- practices that reduce, avoid or eliminate from all sources the use, generation, or release of pollutants, including toxic substances, or the manufacture of products with polluting or toxic constituents. These practices include:

1. input substitution;

2. product reformulation;

3. production process redesign and modification;

4. production process modernization;

5. improved operation and maintenance of production processes;

6. reuse and extended use of pollutants and toxic substances through such methods as closed loop methods;

7. product substitution;

8. phase-out and ban of substances and classes of substances; and

9. in process recycling."

# OBJECTIVES OF THE BACT POLICY

The Draft Policy states that one of the objectives of the policy is to guide the development of WDC, based on BACT. We strongly object to developing WDC relying solely on BACT or any other technology based standard. There are two major problems with this approach:

1. BACT is not an appropriate approach for certain pollutants such as those which are toxic, persistent or bio-accumulative; and

2. WDC based solely on BACT do not force improvements in technology where these are needed in order to protect the environment.

The Draft Policy further states that one of the objectives is to guide the application of WDC on a province-wide basis. It also proposes that the WDC could be surpassed by more stringent requirements where warranted by site specific environmental conditions. The latter is a necessary component when setting province-wide WDC. However, it does not replace the need to set WDC for pollutants that cause a high level of concern based on environmental protection rather than existing technologies. [(4) -- 4. . See William J. Andrews, *Comments on B.C. Ministry of Environment's Draft Policy and Procedure for Updating Pollution Control Objectives Using "Best Available Control Technology"*, WCELA, January 31, 1991.

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### PROVINCE-WIDE CRITERIA AND MINIMUM STANDARDS

We support the periodic review of WDC to determine the need for upgrading.

There also is a need for consistency of legally enforceable minimum waste discharge standards (WDS) throughout the province. Therefore, we support the development of province-wide minimum environmental standards, with provision for more stringent site specific requirements where needed for environmental or human health protection. In addition, the minimum WDS should be revised on a periodic basis, such as every five years, taking into account new information regarding the need for environmental protection as well as improvements to available technology.

# GUIDING PRINCIPLES: CRITERIA DEVELOPMENT

The policy for setting WDC should be based on a set of principles that provide guidance for developing all standards. We recommend incorporating the following principles:

a. the primary means of ensuring a clean environment should be pollution prevention;

b. where pollution prevention is not currently possible, pollution control should limit discharges at source through treatment rather than allowing their dilution in the environment or cross-media transfer;

c. the discharge of persistent or bio-accumulative toxic pollutants should be eliminated from all sources in British Columbia; and

d. the discharge of all pollutants should be controlled as a matter of responsible stewardship of the environment.

## LEVELS OF CONCERN

Establishing waste discharge criteria should take into account a different approach for pollutants associated with different levels of environmental concern.

Pollutants should be divided into three levels of concern:

a. persistent or bio-accumulative toxics, for which WDC would be zero;

b. other toxics, for which WDC would be based on Lowest Achievable Discharge Rate (LADR) -- defined as the most stringent emission limits set out in any competent jurisdiction in the world (unless it is shown to be unachievable) or the lowest discharges from any source with similar characteristics as achieved in practice; and

c. other pollutants, for which WDC would be based on BACT.

The Draft Policy states that one consideration reflected in the criteria will be the precept of minimizing the discharge of persistent toxic substances. We strongly recommend that this be revised to state that the goal is to eliminate the discharge of persistent or bio-accumulative toxic substances by setting the WDC for such substances at zero.

## COST-EFFECTIVENESS

The Draft Policy states that, when developing WDC, cost-effectiveness of applications will be considered when evaluating technologies. As long as zero discharge and LADR are used in appropriate circumstances, as set out above, we do not object to the use of cost-effectiveness in determining BACT. However, the full environmental and social costs of polluting must be taken into account in determining cost-effectiveness, not just the cost of the technology or equipment. Further, it is important that criteria for cost-effectiveness be established following an opportunity for public comment.

## OTHER JURISDICTIONS

The Draft Policy refers to comparing requirements to other relevant jurisdictions, particularly in North America. Any comparison to requirements in other jurisdictions should include the most progressive and stringent requirements in place. To ensure this occurs, requirements in European jurisdictions should be reviewed in this regard.

# GUIDING PRINCIPLES: CRITERIA APPLICATION

The Draft Policy provides that, where a waste management plan has been approved, less stringent standards may be specified for existing operations undergoing modifications as well as other existing operations. Any relaxation of standards should provide a mechanism for public input into the development of the plan, prior to its approval, and an opportunity for appeal of the less stringent standards by interested persons.

## WASTE MANAGEMENT PLANS

The Draft Policy states that less stringent standards can apply where a waste management plan provides overall equivalent or better protection of the receiving environment. This section should be amended to clarify whether this objective must be accomplished within the facility or whether it could be accomplished by out-of-facility pollution reduction for which credit would be given in the waste management plan. If the latter is intended, clear criteria must be set with provisions for public input and an appeal by interested persons.

# GUIDING PRINCIPLES: COMPLIANCE WITH SPECIFIED STANDARDS

The Draft Policy should provide that the Regional Environmental Protection Manager has the discretion to require waste dischargers to modify their proposed application of equipment, techniques or approaches if the Manager is not satisfied the waste discharge standards will be met. Also, the Manager should be able to require additional information be supplied if needed to determine whether standards will be met.

## ASSIMILATIVE CAPACITY

During the consultation process, there has been a great deal of discussion about whether standards should be as stringent in locations where pollutant loading is not a problem. The argument is that, in those locations, provided the assimilative capacity of the environment is not exceeded, standards need not be as stringent as in those locations where the environment is sensitive or other pollutants are already being discharged. We strongly recommend setting minimum waste discharge standards for the entire province, to ensure that pristine areas do not become more attractive for facilities operating with less stringent standards. This approach follows the pollution prevention principle.

## POLLUTION PREVENTION NETWORK

To support a pollution prevention approach in setting WDC, the province should establish a pollution prevention network. It could play a key role in disseminating information about emerging technology, breaking down existing barriers to pollution prevention initiatives, and encouraging pollution prevention programs within British Columbia industries. Establishing a network that incorporates and builds on existing initiatives would minimize the resources required.

## CONCLUSION

We appreciate the opportunity to comment on the Draft Policy and look forward to receiving the next version of the policy.

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End of Comments On Ministry Of Environment, Lands And Parks: Waste Discharge Criteria Based On BACT