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Development of guidelines on best available techniques and provisional guidance on best environmental practices relevant to the provisions of Article 5 and Annex C of the Stockholm Convention on Persistent Organic Pollutants

CONSIDERATION OF ALTERNATIVES AS A KEY ELEMENT IN THE BAT/BEP EXPERT GROUP'S RECOMMENDATIONS TO THE STOCKHOLM CONVENTION FIRST MEETING OF THE CONFERENCE OF THE PARTIES

#### Note by the Secretariat

The attached was submitted by Mr. Jack Weinberg (International POPs Elimination Network) who coordinated its development. This note and the attached have not been formally edited.

<sup>&</sup>lt;sup>1</sup> UNEP/POPS/EGB.2/1.

# Consideration of Alternatives"

As a Key Element in the BAT/BEP Expert Group's Recommendations to Stockholm Convention COP1

A **Thought Starter Paper**, for discussion at the Second Meeting of the Stockholm Convention BAT/BEP Expert Group, prepared by: Jack Weinberg, Environmental Health Fund.

## **Summary**

This paper is a Thought Starter to be considered by the Second Meeting of the Stockholm Convention BAT/BEP Expert Group. It has the following elements:

**Introduction** – This is a brief statement on the historic character of the Stockholm Convention; the broad multi-stakeholder consensus that was achieved in its negotiation; and a plea that the consensus agreements reached during negotiation and adoption of the Convention be honored and not undermined.

**Background** – This section is a review of a disagreement that emerged at the first meeting of the Stockholm Convention BAT/BEP Expert Group over whether or not the *consideration of alternatives* is an element of BAT, as the Stockholm Convention defines this term. The section ends by welcoming the invitation from the Expert Group Co-Chairs requesting the preparation of this Thought Starter Paper and their assurance that this Paper will serve as the framework for a presentation and substantive discussion at the Second Expert Group meeting.

Why Consideration of Alternatives is a Critical Element of Stockholm Convention BAT – This is the first substantive part of the paper. It reviews and discusses the text of Convention Article 5 and Annex C in an effort to show that the consideration of alternatives is a critical aspect of Stockholm BAT as this is contemplated by the Convention text. It also relates consideration of alternatives – as this term appears in the Convention's discussion of BAT provisions – to the substitution provisions of Article 5 (c); and it additionally relates this term to the general expressions of intent of the Stockholm Convention that prioritize prevention and elimination, where feasible, in preference to measures that can only reduce and control, but that can not eliminate, the generation and release of by-product POPs.

How to Incorporate Consideration of Alternatives as a Key Component of Stockholm Convention BAT Guidelines – This section is the most important part of the Though Starter Paper. Everything that comes before presents reasons "why" it is important and necessary to incorporate consideration of alternatives into the guidelines on BAT to be presented to COP1 for consideration. Those

who already agree that this is needed can skip over everything else and start here. This section is written with the intent of providing a framework for a practical discussion on how one might prepare guidelines on Stockholm BAT implementation, for consideration by COP1, that incorporate a methodology for consideration of alternatives. The intended goal in preparing this section was to suggest a methodology that is based on Convention text and that is sufficiently flexible to take into account the different circumstances of different Parties. If this intended goal has been achieved, then the Though Starter Paper can be useful to the Expert Group in its preparation of BAT guidelines that will gain broad support from all Stockholm Parties. It is hoped that the "How" section of the Thought Starter Paper be the part that receives most of the discussion at the Second BAT/BEP Expert Group Meeting.

Incremental Cost Calculation/ An Afterward – This section begins a discussion that relates a possible methodology for the *consideration of alternatives* in the implementation of Stockholm BAT to considerations that will arise when Parties seek support from the Stockholm Convention Financial Mechanism in carrying out obligations expressed in Article 5.

#### Introduction

The Stockholm Convention is historic, not only as the first, global, legally binding instrument to address toxic chemicals control and management, but also because it garnered such enthusiastic support from countries in all regions, and from a very broad array of stakeholders and interest groups.

Negotiations leading to agreement on the Convention's Article 5 and Annex C – the provisions addressing unintentionally produced POPs – were especially difficult and contentious. In the end, however, and as a testament to the hard work and good judgment of everyone involved, a strong consensus was hammered out; one that accommodated an array of interests, concerns and felt needs.

This paper explores some aspects of the agreed Convention text as expressed in Article 5 and Annex C. It is written in the hope that with better understanding, Parties and interest groups will be less tempted to seek revision or reconsideration on matters already negotiated and agreed. This paper attempts further to promote discussion on guidelines for the implementation of Article 5 and Annex C that can be embraced by all parties to the original consensus as expressed in the adopted Stockholm Convention.

## **Background**

The mandate of the BAT/BEP Expert Group is to develop guidelines on best available techniques and to develop provisional guidance on best environmental practices relevant to the provisions of Article 5 of the Convention, for consideration by the COP upon entry into force of the Convention. The challenge of the Expert Group is to do this in ways that build upon and strengthen the consensus hammered out during the negotiation of the Convention.

The Expert Group has no mandate to propose any reconsideration or revision of the Convention's provisions; nor would it be wise to attempt to dismiss the importance of elements of Article 5 and Annex C that were originally agreed and drafted through negotiations and compromise by delegates to the POPs International Negotiating Committee.

Nonetheless, at the First Expert Group Meeting, it appeared to NGO experts associated with IPEN that an attempt was made to effectively nullify elements of Article 5 and Annex C, elements that had been drafted by the negotiators as a means of reaching consensus agreement on the final Convention text. These agreed elements of Article 5 and Annex C were, in fact, important in enabling many NGOs in the IPEN network (and also others) to enthusiastically support the finally agreed Stockholm Convention text. Therefore, we were most distressed when it appeared that an after-the-fact revision of the Convention might be occurring.

This difference of interpretation and opinion that emerged at the First Session of the Expert Group is reflected in the meeting Report, in paragraph 26:

"Representatives of environmental non-governmental organizations pointed out that in article 5 and annex C under BAT it is clearly stated that, when considering proposals for new facilities, priority consideration should be given to alternative processes, techniques and practices that do not form or release unintentional POPs but have similar usefulness. They suggested that guidance should also elaborate a methodology for Parties to use in considering broader alternatives and examples of such alternatives. Some experts expressed concern about the magnitude of such a task and whether it was within the scope of the mandate of the Expert Group."

It is important to recall here that one part of the mission of the BAT/BEP Expert Group is to prepare recommendations on BAT guidelines to be considered for adoption at the first meeting of the Conference of the Parties. Those who would argue that the topic *consideration of alternatives* is outside the Expert Group's scope and mandate are effectively suggesting that the guidelines on BAT that the Expert Group will prepare should, themselves, be silent on this topic,

Therefore, the effect of a decision that the topic of *consideration of alternatives* is outside the scope of the Expert Group mandate would be to recommend to COP1, guidelines for BAT implementation that, in effect, suggest *consideration of alternatives* has no role in implementation of BAT as this term is defined by the Stockholm Convention. In our view, such an outcome would be most unfortunate and contrary to both the text and the intent of the Convention as negotiated and adopted.

Happily, discussions held following the First Expert Group Meeting suggest this disagreement may have been based on a misunderstanding. The Co-Chairs of the Expert Group invited NGO experts associated with IPEN to prepare a "Thought Starter Paper" to present our views on this important topic to be presented at the Second Expert Group meeting, December 2003. We very much welcome this invitation.

# Why "Consideration of Alternatives" is a Critical Element of Stockholm Convention BAT

In this section of the Thought Starter Paper we will review Stockholm Convention text to explain why *consideration of alternatives* must be considered as an aspect of BAT under the Stockholm Convention. This section further argues that because the *consideration of alternatives* is an aspect of BAT under the Stockholm Convention, it is an important topic that the BAT/BEP Expert Group must address in the preparation of its recommendations for adoption by COP1.

#### What Article 5 States Relative to the Work of the BAT/BEP Expert Group

Stockholm Convention Article 5 sets forth measures that Parties must take to reduce the total releases, derived from anthropogenic sources, of dioxins and other unintended POPs (as defined in Annex C) with the goal of their continuing minimization and, where feasible, ultimate elimination.

The term "best available techniques" (BAT) is specifically mentioned in paragraphs (d) and (e) of Article 5. According to these paragraphs, Parties are mandated to require the use of BAT for certain new sources. In addition, Parties are mandated to promote both BAT and best environmental practices (BEP) for other sources.

Paragraphs (d) and (e) both state:

"When applying best available techniques and best environmental practices, Parties should take into consideration the general guidance on

<sup>&</sup>lt;sup>1</sup> BAT is also referenced by name in paragraph (f) of Article 5.

prevention and release reduction measures in Annex C and guidelines on best available techniques and best environmental practices to be adopted by decision of the Conference of the Parties."

The mandate of the BAT/BEP Expert Group is to prepare recommendations for guidelines, to be considered for adoption by decision of the COP, as called for in the Convention text cited above (and elsewhere). The above-cited paragraph directs Parties – and therefore, presumably, directs the Conference of Parties – to take into consideration when applying BAT, the "general guidance on prevention and release reduction measures in Annex C." The portion of Annex C that provides such guidance is Part V and it would most inappropriate for the Expert Group, in preparing its recommendations to the COP, to ignore or to rule out the consideration of important and relevant aspects of Part V of Annex C.

In addition, while explicit mention of Party obligations to promote and/or require the application of BAT are contained in paragraphs (d) & (e), paragraph (c) also has relevance to the application of BAT. Paragraph (c) mandates Parties to promote the development – and where the Party deems appropriate – to require the use of substitute or modified materials, products and processes to prevent the formation and release of dioxins and other unintended POPs (as defined in Annex C).

While paragraph (c) makes no explicit reference to BAT or to BEP, it states that the paragraph's substitution provisions should be implemented "taking into consideration the general guidance on prevention and release reduction measures in Annex C and guidelines to be adopted by decision of the Conference of the Parties."

Presumably this paragraph (c) reference to: "guidelines to be adopted by decision of the COP," is a reference to the very same guidelines the BAT/BEP Expert Group is mandated to prepare: that is, to the same guidelines that are referenced in paragraphs (d) and (e).

This interpretation makes good sense when one understands paragraph (c) text as directing Parties, in their application of BAT and BEP, to promote and – when they deem it appropriate – to require the use of substitute or modified materials, products and processes to prevent the formation and release of unintentionally produced POPs.

It would make little sense to interpret the text of paragraph (c) to suggest that the COP is to adopt a separate set of "substitution" guidelines different and distinct from the BAT/BEP guidelines called for in paragraphs (d) and (e).

One must just think through the implications of an interpretation suggesting two such distinct sets of guidelines. Who might be responsible for preparing recommendations to the COP on the (hypothetical) paragraph (c) "substitution"

guidelines? If distinct "substitution" guidelines were to be prepared, how would one avoid the confusion caused by the high degree of overlap and redundancy between two distinct sets of guidelines on such intimately intertwined topics? And if distinct sets of guidelines were prepared, would Parties be told to ignore the (hypothetical) "substitution" guidelines when applying BAT; or would a third set of guidelines be required to assure proper integration of the first two? And so on....

The argument above suggests that an effort to treat the topic of "substitution" as a matter separate and distinct from BAT leads either to an absurd conclusion, or alternatively, leads one to pretend that paragraph (c) of Article 5 can be ignored or just wished out of existence.

One can easily give full credence and weight to paragraph (c), and its provisions by recognizing and acknowledging that *consideration of alternatives* is the means by which provisions of paragraph (c) are to be appropriately integrated into the application of BAT. Put simply, BAT guidelines will, in effect, define a methodology for the consideration of substitute or modified materials, products and processes that can prevent the formation and release of unwanted POPs when these guidelines incorporate the *consideration of alternatives* as one important element of Stockholm BAT as it is applied to new sources.

#### What Annex C, Part V States Relative to Consideration of Alternatives

As seen above, Article 5, paragraphs (c), (d) and (e), all tell Parties to take into consideration the guidance provided in Annex C. Part V of Annex C is the section of Annex C where BAT and BEP are discussed. The first substantive sentence of Annex C, Part V reads:

"Priority should be given to the consideration of approaches to prevent the formation and release of chemicals listed in Part I."

This sentence sets the tone for all of Annex C, Part V and, in fact, it reflects the ultimate goal of Article 5, which, as stated in the Chapeau, is elimination of byproduct POPs releases "where feasible." The above-cited reference to *priority consideration* also harkens back to the substitution provisions of Article 5 paragraph (c). It is difficult to read the Convention other than as giving instructions to Parties to give priority to elimination measures in preference to release reduction measures under circumstances where it is feasible for them to do so.

Under Annex C, part V, section A details "general prevention measures," and includes the following in its sub paragraph (f):

"When considering proposals to construct new waste disposal facilities, consideration should be given to alternatives such as activities to minimize

the generation of municipal and medical waste, including resource recovery, reuse, recycling, waste separation and promoting products that generate less waste. Under this approach, public health concerns should be carefully considered."

While section A of part V relates to general measures relating to both BAT and BEP, Section B is about BAT alone. Within this section can be found the clearest and most precise statement in Stockholm Convention text on the topic of consideration of alternatives. This text is found in Section B, subparagraph (b), and it provides a schema (a topic we will return to later) for determining the circumstances under which *priority consideration* should be given to alternatives in the application of Stockholm Convention BAT. It states:

"When considering proposals to construct new facilities or significantly modify existing facilities using processes that release chemicals listed in this Annex [dioxins, furans, etc.], priority consideration should be given to alternative processes, techniques or practices that have similar usefulness but which avoid the formation and release of such chemicals."

The above text was the final language drafted and agreed by the Contact Group working on Annex C and Article 5, prior to its presentation to the INC 5 plenary for adoption. This text was inserted to reassure some delegates that the Stockholm Convention, in its implementation, would stress prevention and alternatives in preference to end-of-pipe dioxin control measures.

This text reiterates an approach already spelled out elsewhere. However, some delegates wanted a clear and unambiguous clarifying statement, to be placed directly before a listing of release reduction measures: a statement that reiterates the Convention commitment to give priority to prevention, substitution and alternatives in preference to measures that can only achieve dioxin release reductions and better controls.

These delegates were concerned that without such a reiteration, there might be a temptation during implementation, to throw overboard the Convention's provisions promoting prevention and substitution, and to deny support from the Convention Financial Mechanism to Parties who might chose instead to utilize pollution prevention measures in their implementation of Article 5 obligations. It had not escaped their notice that in some highly industrial countries, export industries seeking foreign markets for high-tech, end-of-pipe solutions carry serious political weight. (One important example is companies who export improved flue-gas cleaning technologies.) Industries of this kind would have an interest in attempting to monopolize access to the resources that will become available from the Convention Financial Mechanism (new and additional funds dedicated to providing incremental costs to compensate developing countries for the costs of the obligations they incur in the implementation of Article 5 obligations).

The inclusion of the *consideration of alternatives* as an important aspect of the application of BAT helps to level the playing field and expand the options open to developing country Parties in their decisions on means to be used in the implementation of Article 5 obligations. Costly imports of end-of-the-pipe control technologies need not be the only available option for which it is possible to apply for and receive international financial support for incurred incremental costs. When guidelines for the application of BAT incorporate a methodology for the *consideration of alternatives*, Parties are given the means to also consider lower-tech solutions that allow them to be more reliant on domestic resources, and/or innovative state-of-the-art technologies that perform the same useful function as polluting technologies, but that avoid formation and release of dioxins and other POPs.

These considerations were taken into account during the negotiation of the Convention. It would be wrong to now attempt to reverse or to reconsider them.

# How to Incorporate *Consideration of Alternatives* as a Key Component of Stockholm Convention BAT Guidelines

The starting point in exploring how to incorporate *consideration of alternatives* as a key component of Stockholm BAT guidelines is the definition of BAT provided in the text of the Convention. This is important because different countries and different regulatory systems define "Best Available Techniques" and/or "Best Available Technologies" in various ways. In the Stockholm Convention, BAT is defined in Article 5, paragraph (f) as follows:

"Best available techniques' means the most effective and advanced stage in the development of activities and their methods of operation which indicate the practical suitability of particular techniques for providing in principle, the basis for release limitations designed to prevent and, where that is not practical, generally to reduce releases of chemicals listed in Part I of Annex C and their impact on the environment as a whole ..."

This definition is consistent with the other aspects of Convention text cited above. It states that under the Stockholm Convention, BAT is "designed to prevent" releases. The definition suggests that measures to "reduce releases" only enter the picture "where that [i.e. prevention] is not practical."

# Conditions Under Which the Stockholm Convention Directs Parties to Give *Priority Consideration* to Alternatives

With the Convention definition of BAT in mind, the text of Annex C, part V, section B, subsection (b) (described above as a schema for determining the circumstances under which *priority consideration* should be given to alternatives) suggests three conditions which, if satisfied, indicate that *priority consideration* be given to alternatives. These three conditions are:

- 1) A Party (or a jurisdiction within a Party) is applying Stockholm BAT in considering a proposal to construct a new facility or to significantly modify an existing facility that uses processes that are known to release dioxins or other by-product POPs listed in Annex C (furans, PCBs, HCB);
- 2) Possible alternatives can be identified that utilize processes, techniques and/or practices that do not create or release by-product POPs; and
- 3) One or more of the identified possible alternatives has *similar usefulness* to that of the proposed new facility.

We will review the above three conditions in some more detail

#### **Condition 1**

Each Party to the Stockholm Convention is mandated to require the use of BAT for new sources within source categories identified by the Party as warranting such action; and must do so under the implementation schedule of its action plan. This should begin with an initial focus on source categories identified in part II of Annex C,<sup>2</sup> but Parties are also mandated to promote the use of BAT more broadly.<sup>3</sup> For these purposes, the term "new source" means any source whose construction or substantial modification is commenced within at least one year of Convention entry into force for the Party (or under some circumstances, after entry into force of a Convention amendment).<sup>4</sup>

Additionally, the Convention mandates that:

"In any case, the requirement to use best available techniques for new sources in the categories listed in Part II of that Annex [Annex C] shall be phased in as soon as practicable but no later than four years after the entry into force of the Convention for the Party."

<sup>3</sup> Article 5 (e)

<sup>&</sup>lt;sup>2</sup> Article 5 (d)

<sup>&</sup>lt;sup>4</sup> Article 5 (f) (vi)

At a minimum, four years following Convention entry into force for a Party, Condition 1 as described above will apply each time there is a proposal for new construction or substantial modification of any: waste incinerator; cement kiln firing hazardous waste; facility producing pulp using elemental chlorine or chemicals generating elemental chlorine for bleaching; facility for secondary copper production; facility for sintering in the iron and steel industry; facility for secondary aluminum production; and facility for secondary zinc production. Condition 1 may also apply earlier and/or may apply to other kinds of facilities as well based on a Party's National Implementation Plan and/or other decisions it takes regarding its implementation of Article 5 including 5 (e).

#### **Condition 2**

In the application of BAT, in each case where Condition 1 above holds, it becomes necessary for a Party to assure that at least a preliminary determination is made as to whether Condition 2 applies. In every case where Stockholm BAT is being applied to a proposal to construct a new facility (or modify an old one), the proponent and/or the appropriate regulatory agency, and/or the public (via notification) should be asked to identify possible alternatives that utilize processes, techniques and/or practices that do not create or release by-product POPs.

As an aid in identifying such possible alternatives, the Stockholm Convention Secretariat should maintain and update lists of possible alternatives for categories of facilities that use processes known to release by-product POPs listed in Annex C, and to also collect and maintain additional relevant information.<sup>6</sup>

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<sup>&</sup>lt;sup>5</sup> Annex C, Part II

It would be useful for the Convention Financial Mechanism to provide funds to an agency with comparative advantage to develop and update these lists of possible alternatives and to collect and maintain additional relevant information. Furthermore, it would be most useful if demonstration projects are carried out in developing countries and countries in transition to explore the usefulness and efficacy of possible alternatives to major POPs sources, and to collect the data needed to compare costs and usefulness. The GEF has already approved one such demonstration project, titled: "Global Programme to Demonstrate the Viability and Removal of Barriers that Impede Adoption and Successful Implementation of Available, Non-Combustion Technologies for Destroying Persistent Organic Pollutants (POPs)" see: <a href="http://www.gefonline.org/projectDetails.cfm?projID=1692">http://www.gefonline.org/projectDetails.cfm?projID=1692</a>; and the GEF has accepted for entry into its pipeline, a second Project entitled: "Demonstrating and Promoting Best Practices in Reducing Medical Waste to Avoid Environmental Releases of Dioxins and Mercury from Health Care Practice,." See: <a href="http://www.gefonline.org/projectDetails.cfm?projID=1802">http://www.gefonline.org/projectDetails.cfm?projID=1802</a>

#### **Condition 3**

In cases where conditions 1 & 2 hold, a substantive judgment must be made to determine whether any of the identified possible alternatives has *similar* usefulness to that of the proposed new facility.

The determination of *similar usefulness* is best understood as the outcome of an honest, common sense comparison between a proposed facility and a possible alternative. In comparing a proposed facility with a possible alternative, a range of different considerations should be taken into account. These should include, inter alia:

- A comparison of the quality of the product and/or the service that can be expected to be produced by the proposed facility versus the quality of the product and/or service that can be expected to be produced by the alternative;
- The relative costs of producing similar products and/or services taking into account both initial capital costs as well as longer-term costs including costs of labor, materials, transport and so on;
- Relative environmental and health impacts, energy requirements, and raw materials consumption – these should include both impacts to which money costs can be allocated, and also health and environmental impacts whose money costs are more difficult to quantify;
- Relative availability and/or accessibility of the alternative taking into account initial acquisition, ongoing availability of parts and/or service, needed skills, potential availability of financing, etc.
- Relative ease or difficulty and relative costs of environmental monitoring and health code compliance including measures to assure that permitted release limit values for POPs and/or other pollutants achieve consistent compliance;
- In comparing the monetary costs, the environmental and health impacts, energy and materials consumption, capacity for accurate and consistent testing and monitoring or releases, and so on, all necessary and/or customary upstream and downstream costs and impacts should be taken into account so that the comparison is holistic and does not contain buried elements.<sup>7</sup>

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<sup>&</sup>lt;sup>7</sup> For example, costs and impacts associated with a proposed incinerator should take into account costs and impacts associated with the disposal of wastes produced by the incinerator.

This exercise to compare a proposed facility and a possible alternative is one whose particulars will vary depending on the country and its legal, regulatory and customary traditions. The nature of the exercise may also vary between different types of facilities with different purposes, and between facilities that may be subject to different modes of ownership (public, private, etc.) Finally, one might expect different outcomes to the exercise depending on the specific geographic location and site of the proposed new facility. In other words, the comparison needs to be concrete and specific, and it needs to fully accommodate national and regional needs and approaches.

In the end, however, this comparison is a necessary element in the application of BAT when the Conditions (1 & 2) above are met. The competent authority must make a determination as to whether an alternative has been shows to exist that exhibits *similar usefulness*. If the determined answer is "yes," then all three of the conditions of the schema are met, and *priority consideration* should be given to the alternative process(es), technique(s) and/or practice(s) deemed to have *similar usefulness*.

Before exploring what it might mean to give *priority consideration*, a digression is needed to address the "non-prescriptive" character of Stockholm Convention BAT.

#### **Stockholm BAT is Non-Prescriptive**

Annex C, Part V, paragraph B, titled "Best available techniques" starts as follows:

"The concept of best available techniques is not aimed at the prescription of any specific technique or technology, but at taking into account the technical characteristics of the installation concerned, its geographical location and the local environmental conditions."

This reflects the text of Article 5 (c) in which it is the decision of the Party alone to determine whether or not it is appropriate to "require" the use of substitute or modified materials, products, products and processes.

For this reason, the BAT guidelines to be adopted by the COP cannot be interpreted as forcing a Party to *require* the utilization of some specific alternative as a substitute for a proposed new facility (using processes that release dioxins and other POPs). The Convention<sup>8</sup> does not mandate any Party to require substitution. The Convention does, however, mandate Parties to promote substitution. It further gives to the Party, alone, the power to *require* substitution, "where it deems appropriate."

<sup>&</sup>lt;sup>8</sup> Article 5 (c)

It is important to note, however, that the term "non-prescriptive" is not the same as "optional" or "voluntary." No one would suggest that the non-prescriptive character of Stockholm BAT should be interpreted to mean that the Convention's BAT requirements are voluntary or optional. The non-prescriptive approach, rather, was agreed in order to give Parties flexibility with regard to the means they chose to use in their application of Stockholm BAT (not flexibility as to whether or not they should apply BAT for facilities specified in Article 5 (d)).

In like manner, the requirement to give *priority consideration* to alternatives with *similar usefulness* (that avoid dioxin releases) is also not voluntary or optional. Parties do, however, retain flexibility with regard to how they may choose to implement this obligation, taking into account national laws, conditions, traditions, etc. This includes flexibility both in the procedures they may use in making a possible determination of *similar usefulness* and in the ways they decide to assure that an alternative determined to have *similar usefulness* is given *priority consideration*. In the end, however, when Parties apply Stockholm BAT, they are mandated to undertake, as appropriate, a determination of *similar usefulness* and to assure that alternatives that avoid generation of byproduct POPs and are determined to have *similar usefulness* be given *priority consideration*.

#### **Priority Consideration**

As noted above, the Convention states that the concept of BAT is not aimed at the prescription of any specific technique or technology. Furthermore, the Convention states<sup>9</sup> that: "Release limit values or performance standards may be used by a Party to fulfill its commitments for best available techniques." With these elements of Convention text in mind, what exactly is the force of Convention text that mandates Parties to assure *priority consideration* is given to alternatives? Additionally, what is the usefulness of this requirement?

- 1) The exercise, itself, is useful. It is useful to require proponents of a new facility to review the possible alternatives that avoid formation and release of by-product POPs. It is useful to require the proponent to takes part in a holistic, common sense, but honest comparison of the similar usefulness of possible alternatives to their proposed facility, (taking into account the considerations such as those listed in the discussion of Condition 3 above). The proponent may learn from the exercise, and it may voluntarily change its plans. But that is not the end.
- 2) It is useful for the national or the relevant sub-national regulatory authority to enter into a process in which it is required to make an evaluation of whether or not an identified alternative can be determined to have similar usefulness – collecting, balancing and weighing the relevant information. The regulatory authority with responsibility for implementing Stockholm BAT should, at a

<sup>&</sup>lt;sup>9</sup> Article 5 (f) (g)

minimum, be required to prepare a written explanation of its determination; convey this to the proponent; make it a matter of public record; and include it as an Annex in any request to the Convention Financial Mechanism seeking incremental cost support for either the originally proposed facility, or for a possible alternative determined to have *similar usefulness*.

- 3) Under circumstances in which the national or the appropriate sub-national regulatory authority decides that an alternative with *similar usefulness* is available that avoids generation and release of dioxins and other POPs, the Convention grants to the Party, alone, the authority— where it deems appropriate to require substitution. Where the Party elects to require substitution, this proposed BAT process provides an orderly way to make and to justify the decision. Subject to overall national policies and approaches, a national or a sub-national regulatory agency that chooses to require a proponent substitute a non-POPs-polluting alternative with *similar usefulness* is given more weight and more authority in the discharge of its work by the fact that an orderly process for *consideration* of alternatives was followed, and by the fact that granting *priority consideration* to the alternative, in this case, was a convention obligation.
- 4) In some cases and/or in some countries, the national or the appropriate subnational regulatory authority may decide that despite identification of an alternative determined to have similar usefulness, it will not require substitution. In this circumstance, the regulatory authority will need to make other decisions and impose other requirements to assure the originally proposed facility satisfies Stockholm BAT requirements. It will do so by requiring that the proposed new (or modified) facility apply and/or meet some combination of the following: certain technologies; certain activities; certain methods of operation; certain ways in which the installation is designed, built, maintained, operated, and decommissioned; and/or specified release limit values or performance standards. 10 In such cases, consequences will almost certainly follow from the fact that the proponent of the facility had declined to voluntarily deploy a similarly useful alternative that avoids dioxin generation and release. Given that the proponent has declined to utilize a similarly useful alternative, the regulatory agency will need to take into account the nonpolluting alternative in its determination of BAT, including requiring the highest performance standards and the most restrictive POPs release limit values without fear that doing so will discourage beneficial economic development activity. Similarly, a funding agency considering incremental cost subsidies will take into account what cost savings the rejected alternative might have allowed. The proponent can then decide to meet the required high standards, or alternatively the proponent at that point might decide the regulatory burden is too costly or too onerous and might revert to an identified alternative option that would entail little if any ongoing regulatory oversight, and that might also yield a more beneficial incremental cost calculation.

<sup>&</sup>lt;sup>10</sup> Article 5 (f) parts i & ii; and (g)

Overall, the mandate that a Party require *priority consideration* be given to an alternative with *similar usefulness* that avoids generation and release of POPs has considerable force and utility. This is true whether or not a Party interprets – in any particular case – this requirement to mean it should deny a permit to proposed facility and/or to require a substitute.

### Incremental Cost Calculations/ An Afterward

If the Stockholm Convention COP were to decide – based on the recommendation of the BAT/BEP Expert Group – that *consideration of alternatives* is not an aspect of Stockholm BAT, this could influence the decisions of the Convention Financial Mechanism in an undesirable direction. While new facilities that generate substantial quantities of POPs would likely be eligible for financial support for the incremental costs of pollution control equipment, proposed facilities that avoid the formation and release of POPs – those that represent superior alternatives to dioxin generating technologies – would likely not be considered to qualify. The unintended consequence of such an outcome might be the creation of a perverse market distortion. Superior alternatives might be put at a distinct competitive disadvantage to technologies that generate and release POPs, since only POPs-polluting facilities might be deemed eligible for subsidy (to control and reduce releases). Such an outcome would subvert the actual Convention text, which repeatedly stresses prevention, substitution, alternatives, and elimination where feasible.

#### What the Convention Says About Incremental Costs

Recall Article 13 of the Convention on financial resources and mechanisms. The objective of Convention financial measures is to "enable developing country Parties and Parties with economies in transition to meet the agreed full incremental costs of implementing measures which fulfill their obligations under this Convention<sup>11</sup>…" This has two components:

- A measure can be considered to be the subject of a request for incremental cost subsidies under the Stockholm Convention when, and only when the measure can be shown to be one that enables a Party to fulfill its Stockholm Convention obligations; and
- 2) The requested financial support is to cover "incremental costs," that is, in general terms, to reimburse the Party for the difference between a) the cost of the measure in question and b) the amount of money the Party and/or its

<sup>&</sup>lt;sup>11</sup> Article 13 (2)

society would have spent to achieve the same (or a similar) utility in the absence of Stockholm Convention obligations.

# Will Non-POPs-Polluting Alternatives Qualify for Incremental Cost Support?

In the absence of procedures for the *consideration of alternatives*, such as those described in this Thought Starter Paper, there would be no approved methodology to demonstrate that an investment in non-polluting techniques can be considered as a substitute for dioxin-generating technology (as this is called for in Article 5 (c) and elsewhere). Without such a demonstration, it may be difficult for a Party to verify that the decision to construct or deploy a non-POPs-polluting facility or activity is a valid means that the Party is using to apply BAT to a proposed new source in order for the Party to satisfy its obligations under Article 5 (d). Since, due to limited financial resources, it is likely that the Convention Financial Mechanism will eventually concentrate its byproduct POPs-related investment grants to providing support for incremental costs associated with the BAT obligations of Article 5 (d), divorcing the *consideration of alternatives* from the application of BAT would likely inhibit the availability of financial support for alternatives.

On the other hand, if the COP approves BAT guidelines that incorporate the consideration of alternatives, then there can be no doubt that a decision for the deployment of such an alternative is a measure a Party has decided to take to fulfill is Convention obligations. The Party will have produced written documents during its BAT process that can serve as evidence that the non-POPs-polluting facility is being deployed as a means of fulfilling the Party's BAT obligations. As a result, the alternative facility or the alternative practice becomes a good candidate for receiving Convention incremental cost support.

#### **Unintended Consequences**

The above observation suggests that if the guidelines adopted by the COP for application of BAT do not incorporate a methodology for the *consideration of alternatives*, this could have strange and unintended consequences. The world could find itself in a situation where dioxin-generating technologies are fully eligible to receive subsidies from the Stockholm Convention Financial Mechanism, but non-POPs-polluting alternatives with *similar usefulness* are systematically denied such subsidies. Such an outcome would likely distort markets and put superior alternatives at a distinct competitive disadvantage. Despite everyone's good intentions, the Stockholm Convention could end up – through the use of Convention-related subsidies for incremental costs – promoting the spread of dioxin-releasing technologies, and inhibiting the adoption and spread of non-polluting alternatives (that do not qualify for subsidy). This

could, in the long term, create results exactly opposite to what the Stockholm Convention intended to achieve.

This unintended consequence is avoided when the *consideration of alternatives* is a requirement in the application of Stockholm BAT for new sources. In this case, when a proposed new dioxin generating facility triggers a Party obligation to apply BAT under Article 5 (d), an effort must be made to identify alternatives that avoid dioxin generation. If an alternative is identified and is determined to have *similar usefulness* to the originally proposed facility, there will be a written record of the evaluation process including a comparison of the economic and non-economic advantages and disadvantages of the alternate relative to the originally proposed facility. This written record can and should be attached as an Annex to the request for incremental cost support to the Convention Financial Mechanism, and this should be sufficient to demonstrate that the incremental costs of the alternative relative to the baseline qualifies for Stockholm Convention financial support.

#### The Consideration of "Usefulness"

The exercise for making a determination of whether or not an alternative has similar usefulness is also very helpful in generating the data and information needed in making a calculation of what might be an appropriate sum that could be considered to be the full incremental cost of the measure. The calculation of agreed full incremental costs is a complex undertaking: it is as much an art and the outcome of a negotiation as it is a science. However, the starting point in any calculation of the incremental costs associated with a facility (or with a process, a practice and/or an activity) is always a consideration of "usefulness."

Presumably, the activity for which a full incremental cost subsidy is being requested from the Convention Financial Mechanism is one that serves some useful purpose (e.g. it provides a wanted or needed product or service). In the absence of the Party's Stockholm Convention obligations, this useful purpose would have been met by some other, less-costly means. (The less-costly means and its associated costs are called the "baseline.") Due to a Party's Stockholm Convention obligations, however, the Party is no longer allowed to permit these less-costly means in pursuit of the intended purpose. Therefore, the Party requires a more-costly means be used to achieve the same (or a similar) purpose, and the Party requests a subsidy from the Convention Financial Mechanism to compensate for the full incremental costs associated with meeting this obligation.

A successful request for full incremental cost support must include a presentation of the baseline – that is, what would have been the practice in the absence of Stockholm Convention obligations, and what would have been the associated costs. In preparing and presenting their funding request, the Party must make a

persuasive case that the facility or the activity for which it is requesting financial support has the same or a *similar usefulness* to the identified baseline, and that the requested incremental costs represent the amount the Party and/or its society will need to spend above and beyond the baseline costs in order achieve the same or a similar outcome compatible with the Party's Convention obligations.

The BAT process proposed above for determining *similar usefulness* provides a framework in which a Party (through its competent regulatory authorities) compares the desired products and/or services that constitute the "usefulness" of the originally proposed facility with some possible alternative taking into account associated costs, environmental consequences, feasibility and so on.

Whatever the outcome of this BAT exercise, this process will help a Party generate the information it will need upon which to stake its claim for "full incremental costs" relative to the baseline. We have already shown why this is true for any alternative determined to have *similar usefulness*. However, it would also be true for the original proposed facility (that generates and releases byproduct POPs) under circumstances where, following a detailed comparison, no determination could be made that any identified possible alternative has *similar usefulness*. The BAT exercise would have already generated comparative information that would be useful in preparing a comparison between the proposed facility and the baseline. It would also help the Party answer questions that the Financial Mechanism might ask such as: Is it necessary to construct a new dioxin-generating facility? Have you considered alternatives?

In the end, it would be very good if the Stockholm BAT guidelines and Convention Financial Mechanism guidelines were well aligned with one another, and were fully complementary. The incorporation of *consideration of alternatives*, as a key element of the Stockholm Convention BAT Guidelines, would be most helpful as one step toward achieving this.

**END**