Pilot Project on the Transboundary Movement of Municipal Solid Waste between Canada and the United States

Evaluation Report

November 7, 2006
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Attachment A: Environment Canada Notice Template and Instructions
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PILOT PROJECT ON THE TRANSBOUNDARY MOVEMENT OF MUNICIPAL SOLID WASTE BETWEEN CANADA AND THE UNITED STATES

EVALUATION REPORT

EXECUTIVE SUMMARY

During 2005, the U.S. Environmental Protection Agency and Environment Canada worked cooperatively on a Pilot Project (“Pilot”) to test the implementation of the notice-and-consent provisions for the import and export of municipal solid waste (MSW) as anticipated in the Agreement Between the Government of Canada and the Government of the United States of America Concerning the Transboundary Movement of Hazardous Waste. Since the U.S. does not have the authority and Canada is in the process of developing regulations to implement the MSW provisions of the Bilateral Agreement, the Pilot Project established a voluntary notice and feedback process to provide information on MSW shipments from Canada to the United States based on current procedures used for hazardous waste. This report analyzes the experiences of the governments and stakeholders during the Pilot Project and provides recommendations to be considered in the future development of a MSW export, import and transit notice-and-consent program that meets all the provisions of the Bilateral Agreement.

The participants in the Pilot Project viewed it as a success that resulted in a number of beneficial outcomes. The Pilot Project was considered by its participants to serve as a good testing ground for future notice-and-consent activities for MSW, particularly in establishing procedures and roles and responsibilities of the key players in these import/export transactions. The volunteer exporters seemed comfortable with the level of information they needed to provide to initiate the notice process. The notice review and feedback process occurred in a timely fashion, even though the particular requirements pertaining to MSW presented a learning process for the government reviewers. All interactions between U.S. EPA and Environment Canada were effective and went very smoothly.

Some issues were identified during the Pilot Project that should be taken into consideration in future development and implementation of a binding notice-and-consent process. For example, the variability of state and provincial/territorial requirements regarding MSW will require an appropriately-structured review notice process to address their specific requirements efficiently. In addition, some improvements can be made regarding the governments’ operational and business processes, including the expansion of tools used to manage data and to provide compliance assistance to stakeholders.
I. INTRODUCTION

A. Background

The Agreement between the Government of Canada and the Government of the United States of America Concerning the Transboundary Movement of Hazardous Waste (the “Bilateral Agreement”) was signed by the Canadian Environment Minister and the U.S. Environmental Protection Agency (U.S. EPA) Administrator on October 28, 1986, and came into effect on November 8, 1986. The Bilateral Agreement sets out the administrative conditions for the export, import and transit of hazardous waste between the United States and Canada, and provides for governmental oversight to ensure that such waste moving between the U.S. and Canada is handled safely and is imported only to facilities that are authorized by the importing jurisdiction. The Bilateral Agreement was amended in 1992 to add similar provisions for MSW sent for final disposal or incineration.

Both Canada and the United States have regulations in place to implement the obligations under the Bilateral Agreement as they pertain to hazardous wastes and hazardous recyclable materials, as each is defined under U.S. and Canadian environmental regulations. Under the Bilateral Agreement, the process for the transboundary movement of hazardous waste requires a Notice of Intent (NOI) from the exporting country and a consent or objection from the receiving country. With regard to imports into the United States, the NOI to export identifies the Canadian generator/exporter of the hazardous waste and the receiving facility in the United States, the waste stream(s), the estimated frequency of shipments, and other pertinent information. Typically, the NOI covers a period of 12 months.

The notice-and-consent provisions for MSW have not yet been implemented in either the United States or Canada. Environment Canada has the statutory authority and is in the process of developing regulations to address the import, export and transit of specified non-hazardous waste streams, including MSW and ash from the incineration of MSW. These regulations, when finalized, will oblige the Canadian regulated community to submit notifications containing specific information, which will then be forwarded to EPA for review and consent or objection. The United States has not yet enacted the legislation needed to provide EPA with statutory authority to carry out a notice and consent scheme for the transboundary movement of MSW.

B. Purpose and Objective of Pilot

The import and export of MSW have come under scrutiny in the last several years, primarily due to the large amount of MSW being shipped from Ontario to Michigan for disposal. Since both Canada and the U.S. are committed to the eventual development of a notice and consent regime for MSW, the countries agreed in 2005 that a limited pilot of such procedures could be informative to all stakeholders.

Consistent with Article 5.3 of the Bilateral Agreement, the overarching goal of the Pilot was to facilitate development of effective procedures and programmatic infrastructure as the basis for a future binding notice-and-consent process for transboundary movements of MSW between Canada and the United States once the necessary authorities are in place. The Pilot was also designed to provide both governments with information pertinent to the effectiveness of
the notification process for the movement of MSW from Canada into the United States.

C. Pilot Evaluation Process

In order to evaluate the effectiveness of the Pilot in providing adequate notice and sufficient information to provide positive or negative feedback, a comprehensive evaluation of the Pilot was conducted. The Pilot evaluation was designed to assess:

- Effectiveness in meeting the notification process requirements of the Bilateral Agreement;
- Sufficiency of information regarding destination landfills to allow for a thorough review of the notices;
- Experiences of the Canadian exporters, Environment Canada, and U.S. EPA participants;
- Effectiveness of the outreach provided by the Web-based border compliance assistance center; and
- Capability of U.S. EPA’s data systems for tracking and reporting notices and feedback responses.

The details of the Pilot Evaluation methodology and execution are described in Section III of this report.

II. FRAMEWORK FOR PILOT PROJECT

A. Pilot Development

Between August 2004 and January 2005, U.S. EPA and Environment Canada worked to develop the Pilot, with the intention to help both countries prepare for the eventual full implementation of the Agreement with respect to MSW shipments. The countries agreed that the Pilot would focus on the notice-and-feedback phase for shipments of MSW from Ontario to Michigan.

B. Pilot Implementation

The Pilot involved the development of procedures and an infrastructure for a non-binding notice and feedback process for transboundary movements of MSW. It simulated the conditions under which the U.S. and Canada believed that the notice-and-consent process would ultimately operate pursuant to the Bilateral Agreement. The process for submission and review of MSW export notices under the Pilot mirrored the existing hazardous waste export notice process. Environment Canada and U.S. EPA agreed on the information requirements for a notice following the specifications of Article 3 of the Bilateral Agreement, and volunteers were provided with a model notice for use during the Pilot (see Appendix A). The Pilot commenced on April 1, 2005 and concluded on December 31, 2005.

The following outlines the process used during the Pilot for the submission and review of notices regarding MSW exports from Ontario to Michigan:

1. Environment Canada invited exporters in Ontario to participate in the pilot project, utilizing the established network of contacts with the Ontario Ministry of Environment, exporting Ontario municipalities and the Ontario Waste Management Association.

2. Each Canadian exporter who volunteered to participate in the pilot completed the notice by providing all of the required information to Environment Canada. One notice was required from each
exporter for multiple shipments of MSW from one site in Canada to one site in the U.S. for a duration of six months. The proposed date of the first shipment was approximately one month from the date the notice was submitted.

3. Upon receipt of the notice, Environment Canada sent an acknowledgment to the Canadian exporter of receipt of its notice.

4. Environment Canada reviewed the notice to ensure that all information requirements were met.

5. If the notice was not complete, Environment Canada contacted the Canadian exporter to inform it of any discrepancies or missing information.

6. Once the information requirements on the notice were fully met, Environment Canada forwarded the notice to the U.S. EPA in Washington, DC.

7. U.S. EPA sent Environment Canada an acknowledgment of receipt of the notice.

8. U.S. EPA reviewed the notice for completeness and sent a copy to the appropriate U.S. EPA Regional Office to perform a detailed review of the notice information and the permit and compliance history of the receiving facility utilizing written review criteria developed for the Pilot (see Appendix B).

9. After consulting internally on the EPA Regional Office’s detailed review of the notice, U.S. EPA provided written feedback to Environment Canada within 30 days of acknowledging receipt of the notice. The feedback discussed whether or not the shipments of MSW as described in the notice appeared to be in accordance with applicable federal and state requirements.

10. Environment Canada informed the Canadian exporter of feedback received from U.S. EPA.

C. Pilot Participation

Six Canadian exporters submitted a total of 14 notices under the pilot project. Two Canadian municipalities accounted for eight of the notices, with the other six notices coming from four commercial entities. Some exporters used multiple transfer stations and submitted notices for each transfer station. All of the notices were for exports from Ontario to either one of two landfills in Michigan, Republic Services’ Carleton Farms Landfill, or Waste Management’s Pine Tree Acres Landfill. All wastes described in the export notices were shipped via tractor trailer, and accounted for approximately 40 percent of the total volume of Canadian MSW disposed in Michigan landfills (based on the annual waste flows between October 1, 2004 and September 30, 2005). More information on the notice volumes and receiving landfills is shown in the following table.
Table 1. Pilot Project Export Volumes (by Volunteer Type and Receiving U.S. Landfill)

<table>
<thead>
<tr>
<th>Exporter Type</th>
<th>Receiving Landfill</th>
<th>Total Export Quantity of Non-hazardous Waste Listed in 6-month Notices (U.S. Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipalities</td>
<td>Carleton Farms Landfill</td>
<td>514,000</td>
</tr>
<tr>
<td>Commercial Waste Companies</td>
<td>Carleton Farms Landfill</td>
<td>11,000</td>
</tr>
<tr>
<td>Commercial Waste Companies</td>
<td>Pine Tree Acres Landfill</td>
<td>196,000</td>
</tr>
</tbody>
</table>

III. DESCRIPTION OF METHODOLOGY FOR PILOT EVALUATION

A. Overall Pilot Evaluation Methodology

The purpose of this Pilot evaluation was to produce sound empirical data, usable information and analysis that could provide the basis for management decisions regarding a future, binding notice-and-consent process. The basic Pilot evaluation methodology encompassed:

- Defining evaluation objectives
- Identifying key stakeholders and data sources
- Developing strategies for designing the survey instruments
- Conducting the evaluation, analyzing the results, and measuring progress.

Given the nature of the transboundary pilot project as an information exchange process between parties, the primary sources of information concerning the performance of the pilot project were the NOIs, the U.S. EPA feedback letters to the NOIs, the Pilot volunteers (e.g., private and municipal waste exporters, private landfill operators), and the government officials responsible for processing the notices and providing feedback (e.g., Environment Canada, U.S. EPA).

B. Performance Measures

The Pilot was evaluated against performance measures related to the following items:

- Completeness of submitted notices
- Information (if any) needed by U.S. EPA beyond that provided by the NOI
- U.S. EPA feedback regarding submitted notices
- Performance in meeting Bilateral Agreement time frames.

C. Development of Interview Survey Form and Interview Survey Methodology

In order to review and analyze the effectiveness of the pilot project, customized survey forms were developed to facilitate the effective collection of information from the project participants during telephone interviews. The survey forms contained a variety of formats (e.g.,
multiple choice questions, frequency questions, open-ended questions). The forms specifically addressed questions about the Pilot in general, the Pilot process, perceived administrative burden, procedural issues, format of the export notice used for the Pilot, the future notice process, proposed informational Web site, and a notice tracking database. Personal interviews were conducted with representatives of the four groups participating in the Pilot, including U.S. landfill operators, Canadian exporters, Environment Canada officials, and U.S. EPA officials. A total of 13 surveys were completed covering all four target groups.

IV. ANALYSIS OF PILOT RESULTS

The data obtained during the pilot and through interviews were analyzed to determine whether the notice procedures proposed under the pilot project were:

- Feasible to implement under a permanent program
- Repeatable on a consistent basis
- Sufficiently robust to support the project data quality objectives
- User friendly and achievable by the stakeholders (government, industry).

Qualitative and semi-quantitative analyses were selected as the appropriate means of analysis of the pilot project due to the limited size of the available sample population and the particular type of data collected (e.g., opinions and impressions).

A. General Comments

The majority of participants found the pilot project helpful and valuable. Canadian exporters found the pilot project “simple and straightforward.” U.S. EPA officials expressed satisfaction with the Pilot. Specifically, U.S. EPA officials were pleased to have the opportunity to learn how to deal with the unique nature of MSW imports from Canada. They found that it was a good testing ground for future activities, and provided insights into the appropriate documents and procedures that will be needed.

U.S. landfill operators and Canadian exporters agreed that the Pilot as implemented did not involve a significant administrative burden. Given the success of this project and the fact that the information requested was well understood and straightforward, the survey participants provided minimal recommendations for improving any future notification process. U.S. landfill operators requested that any declaration or paperwork requirements should remain simple, as they already must comply with state requirements (e.g., Michigan Department of Environmental Quality regulations). The survey participants were open to having a semiannual or annual reporting requirement on past transboundary waste movement activity (e.g., number of loads, amount of waste, destination). Environment Canada officials expressed an interest in establishing a check-and-balance reporting process to compare the annual total amount of MSW actually shipped against the estimated total amount of MSW listed in the notice. Canadian exporters also questioned the benefit of carrying the feedback notice with each shipment, since they already provide a general declaration of vehicle contents for U.S. Customs.

U.S. EPA officials noted that, based on the notice reviews conducted during the pilot, future notice reviews would necessarily involve determining whether the waste described in the notice would be allowed to
be disposed of in the receiving U.S. landfill due to state-specific requirements. Depending on the U.S. state regulations applicable to the listed receiving landfills, this may require information not included in the pilot notice contents. The governments will need to develop an efficient process for dealing with state-specific and any province/territory-specific requirements.

B. Evaluation against Specific Performance Measures

Data obtained from the interview responses, the NOIs, and the feedback letters were measured, where feasible, against the performance measures documented in Section III of this report. Given the small sample size of the Pilot, the evaluation incorporated flexibility, while ensuring that the maximum possible utility was obtained from the data.

Suitability of the Notice of Intent (NOI) to Import Municipal Solid Waste (MSW)

A total of 14 NOIs were filed by six Canadian exporters using the notice form provided by Environment Canada during the Pilot. Each exporter filed one NOI per unique combination of Canadian transfer station and U.S. landfill site to cover export shipments over a six-month period. Environment Canada officials reviewed the export notices to ensure that all information requirements were met, then forwarded the notices to U.S. EPA.

All pilot participants found the export notices and accompanying instructions straightforward. Both Canadian and U.S. EPA officials did some follow up to clarify specific elements of the export notices. Officials requested clarification on such topics as contact information, facility ownership, facility type, original waste source, and collection and segregation procedures. The quantities of waste listed in the submitted export notices included both short (U.S.) tons and metric tons since no required units were specified (1 U.S. ton = 0.907 metric tons). One Environment Canada official stated that the NOI clarification process went smoothly. Exporters were responsive to the requests for additional information and did not indicate any problem with the requests.

The U.S. EPA official who reviewed the notices stated that information was needed beyond the requirements of Article 3 of the Bilateral Agreement. Specifically, the official needed more information to clarify the source of the MSW in relation to the three allowable categories of out-of-state MSW under Michigan regulations (i.e., MSW from a certified uniform waste stream, MSW from State-approved jurisdictions with waste collection procedures certified to exclude Michigan prohibited wastes, and MSW from a transfer station that screens and removes Michigan prohibited wastes). In every case, the U.S. EPA official was able to obtain the needed information.

Availability and Quality of Pertinent Information to Review the NOI

None of the feedback letters stated that export notices contained insufficient or inadequate information. Ongoing consultation between Environment Canada, U.S. EPA, and the exporters, rather than the feedback letters, ensured that the export notices were supplemented with additional, pertinent information enabling U.S. EPA to complete reviews of the NOIs. As discussed above, it was important to obtain information on the source of the MSW and collection procedures because of Michigan-specific regulations.
Efficiency and Timeliness of the Responses to NOIs to Import MSW

U.S. EPA provided a total of three feedback letters to Environment Canada to address the fourteen MSW export notices. The first letter addressed one export notice, the second addressed seven notices, and the third addressed six notices. Two of the letters were sent by U.S. EPA to Environment Canada within 30 days of receipt, and one was minimally delayed.

Effectiveness and Adequacy of EPA’s Feedback Mechanism

According to interview results, all three feedback letters provided clear guidance that the cited shipments of MSW were not in conflict with applicable requirements. The feedback letters provided information about Michigan regulations in addition to federal provisions.

All three feedback letters acknowledged that the export notices provided useful information, including the following: Environment Canada non-hazardous waste export notice tracking number, exporter name and city, destination name and city, maximum MSW export quantity, and dates of the six-month export period.

Adequacy of the EPA Waste International Tracking System to Store and Organize MSW Information

The MSW module of the U.S. Waste International Tracking System (“WITSnet”) was under development during the Pilot. The system was fully launched on September 30, 2005, after the Pilot was well underway; as a consequence of the later completion of the module, the notification data were not available in the system when the notification review and feedback process was actually conducted, but instead only later during the Pilot.

Nevertheless, the U.S. EPA official responsible for system operations and development and the U.S. EPA official who reviewed the notices were able to comment on the tracking system. They stated that the system’s standard reporting and query features were “good” and recommended an add-on to track feedback comments within the WITSnet system.

During the Pilot, government reviewers could only e-mail comments concerning specific matters relating to a notice, instead of submitting them within the system. But the U.S. EPA official responsible for system operations and development indicated that during a second phase of system development, the system would be further enhanced, including the ability to provide and track feedback within the system, as well as the creation of additional reporting capabilities. This U.S. EPA official also acknowledged that the system cannot currently provide a running total of quantities of MSW shipped because the system does not have the capability to convert the units of MSW as provided in the notices. In order to be able to provide aggregate quantities of MSW, the notice process would need to require the use of standardized units, or alternatively, WITSnet would need to be modified to provide automatic conversion of the units provided by the exporter to a given reporting standard.

Usefulness of U.S.-based Compliance Assistance Web site

At the time of the Pilot, the U.S.-based Border Compliance Assistance Web site was not yet operational for MSW. Survey participants recommended the following content: a list of contacts; information on regulations and other requirements, including provisions and regulations from individual U.S. states; sample forms and responses to inform new participants once
the notification provisions for MSW shipments were implemented fully in the U.S. and Canada; and information on the Bilateral Agreement.

In response to these suggestions, as well as other input, the Border Compliance Assistance Center developed a “WasteWatcher” Web site (http://www.bordercenter.org/wastewatcherc/index.cfm). The site provides compliance assistance information for those involved in transporting MSW across the U.S.-Canadian Border, with an initial focus on shipments from Ontario into Michigan. The Border Center WasteWatcher serves the following user groups:

- Municipalities and other generators of solid waste
- Importers and exporters
- Transporters
- Members of the general public seeking information about the issues and the regulations.

As of May 2006, the Border Center WasteWatcher provides the following contents:

- Procedures at Michigan ports of entry
- Entry-related information for transporters
- U.S. Federal regulations, agreements and programs, including information on the bilateral agreement
- State (i.e., Michigan) environmental and transportation laws
- Michigan’s solid waste landfill database
- Summaries of and links to relevant articles published by the news media
- Links to additional information on border crossing, transportation, and Michigan environmental provisions.

The web site provides helpful information for stakeholders, and can easily be updated to accommodate future needs.

V. LESSONS LEARNED AND RECOMMENDATIONS

Based on the data gathered during the pilot evaluation, including feedback received from stakeholders, U.S. EPA and Environment Canada have drawn several conclusions and recommendations aimed specifically at improving the MSW notice and consent process and its associated infrastructure, taking into account:

- Identification of significant successes of the Pilot process that can be replicated in a future binding process
- Potential areas for clarification/improvement regarding implementing the Bilateral Agreement
- Operational and business process recommendations to improve the implementation of the notice process.

A. Significant Successes

Given that the Pilot uses the existing notice-and-consent process for hazardous waste imports as the model, the modifications to process, practices, documentation, and systems made by the governments in the pilot for MSW notifications successfully created an effective process for transboundary movement of MSW. Environment Canada and U.S. EPA officials expressed satisfaction with the administrative procedures for notice receipt,
review, and feedback. The Pilot provided an excellent testing ground for these procedures and the government-to-government interaction was a helpful simulation for future activities under the Bilateral Agreement.

All participants found format and instructions for the NOIs to be clear. This observation is supported by the evidence that all NOIs were complete to the extent of the requirements of Article 3 of the Bilateral Agreement. In addition, the exporters commented that the NOIs did not impose a significant burden on them. Canadian and U.S. officials reported that they had to obtain supplementary pertinent information not required in the notice form to evaluate compliance with Michigan’s MSW landfill requirements.

Canadian and U.S. officials successfully collaborated on the NOI review process. As discussed below, additional state and provincial/territorial requirements may increase the scope of needed information and, as a result, the government time needed for review of each notice. But in the end, the Pilot demonstrated that the 30-day period for notice review and feedback under Article 3 of the Bilateral Agreement is a deadline that is attainable.

B. Potential Areas for Clarification/Improvement

The greatest potential area for clarification/improvement regarding implementing the export notice provisions of the Bilateral Agreement is the impact of requesting and certifying compliance with state-specific and province/territory-specific requirements. The Pilot demonstrated that U.S. officials needed more information from Canadian exporters in order to evaluate the suitability of export into Michigan due to Michigan-specific requirements. This need for further information and evaluation could be the case for any other U.S. state that imposes its own restrictions on MSW disposal, and could also be the case for any shipments from the U.S. into a specific province. The proposed notice-and-consent process, as tested in the Pilot, does not account for state or provincial/territory variability. Without modification, it may not be able to do so, at least not in the existing notice format, because it would have to account for every possible combination of state or provincial/territory requirements. The process as designed currently requires the U.S. EPA official reviewing the notices to obtain additional information after submission of NOI.

C. Process Recommendations

The Pilot evaluation indicated that implementation of a binding notice and consent process for MSW under the Bilateral Agreement is workable. Environment Canada and U.S. EPA officials have an enhanced understanding of the requirements, roles and procedures. In addition, other participants, such as Canadian exporters and receiving landfills, are amenable to the expected requirements of such a process.

NOI Improvements

As discussed in Section IV, Canadian and U.S. EPA officials requested clarification on such topics as contact information, facility ownership, facility type, original waste source, and collection and segregation procedures. Changes to the Canadian NOI form or additional instructions might partially reduce future requests for clarification. As some of the requests for additional information were related to state-specific requirements, at a minimum, the two governments need to develop an efficient process for dealing with state-specific and province/territory-specific requirements.
Tool Improvements

Because the Pilot tested the infrastructure necessary for processing MSW notices, the suitability of the following data systems and tools was evaluated:

- U.S.-based Compliance Assistance Center
- U.S. WITSnet

The existing U.S.-based Border Compliance Assistance Center, which has previously focused primarily on U.S./Mexico border issues, has expanded its operations to include additional information to assist those involved in MSW shipments. The Border Center WasteWatcher Web site provides much of the information recommended by the pilot participants. However, when the bilateral agreement and export notice procedures are implemented, the Border Compliance Assistance Web site should include the following:

- List of contacts for the various U.S. and Canadian environmental agencies that deal with MSW disposal and transboundary waste shipments.
- Information on regulations and other requirements, including provisions from individual U.S. states (currently only Michigan regulations are included).
- Sample export notice forms and responses to inform new participants.

WITSnet also will need continued enhancement to assist in the implementation of the bilateral agreement’s MSW export notice procedures when they are implemented. The analysis of the Pilot results suggested a number of ways to improve the capability of U.S. EPA’s data system for tracking and reporting MSW notices and feedback responses. This would require another phase of system development.
Attachment A: Environment Canada Notice Template and Instructions
Pilot Project Regarding the Transboundary Movement of Municipal Solid Waste
Content of Notice

For the purpose of the pilot project, Environment Canada and the U.S. Environmental Protection Agency (U.S. EPA) have agreed on the following information requirements for a notice. The attached notice template serves to provide volunteers with a model with which they may submit a notice. Please note that volunteers should attach additional sheets to the template if additional space is needed.

For the purpose of the pilot project, Environment Canada would consider that the exporter would be the owner or operator of the facility from which the non-hazardous waste for final disposal is shipped. In addition, the U.S. importer would be the receiving Michigan landfill. Each notice from each exporter would cover multiple shipments from one site in Canada to one site in the U.S. for the duration of the pilot project.

1) The name, street and mailing address, electronic address, telephone number, facsimile number of, and the name of the contact person for the Canadian exporter;
2) The name, mailing address, site address, electronic address, telephone number, facsimile number of, and the name of the contact person for the Canadian site from which non-hazardous waste for final disposal will be shipped;
3) The name, street and mailing address, receiving site address, electronic address, telephone number, facsimile number of and the name of the contact person for the U.S. importer;
4) The name, street and mailing address, electronic address, telephone number, facsimile number of, and the name of the contact person for the authorized carrier(s). Indicate if more than one carrier is used and provide carrier information for each carrier;
5) The registration, permit or license number issued by the applicable jurisdiction (e.g. the Province of Ontario, the State or the U.S. EPA) to the Canadian exporter, the U.S. importer, the Canadian site from which the non-hazardous waste will be shipped, and the authorized carrier(s);
6) All modes of transport that will be used;
7) The port(s) of exit and entry;
8) The proposed date of the first and last shipment during the 6 month pilot project;
9) The estimated number of shipments during the 6 month pilot project;
10) The following information with respect to the non-hazardous waste for final disposal:
   a) the type/source of the waste; if residential waste identify the municipality(ies) from which the waste is generated;
   b) the estimated total maximum quantity of waste to be shipped during the 6 month pilot project;
   c) the intended disposal operation at the receiving site in the U.S.; in the case where the disposal operation at the receiving facility in the U.S. would not be considered final disposal also indicate the final disposal operation; and
11) Indicate whether a contract or series of contracts is/are in place between the Canadian exporter or generator and the receiving facility in the U.S.
For the purpose of the pilot project, Environment Canada and the USEPA consider that non-hazardous waste for disposal includes solid, non-hazardous waste from:

- Residential (single- and multiple-residential);
- Industrial, commercial, or institutional facilities that is similar in nature to residential waste (e.g., from cafeterias, offices);
- Municipal litter bins located in public spaces such as parks, zoos, bus shelters, and transit stops, that is similar in nature to residential waste;
- Residual waste from waste diversion operations from the above three sources (e.g., a material recovery facility (MRF), composting); and
- Residual waste from the incineration of solid, non-hazardous waste from the above sources.

And does not include:

- Waste from industrial processes (e.g., sawdust from a mill, textile trimmings from a factory);
- Waste entirely composed of construction and demolition waste;
- Sanitary sewer-treatment plant sludge; and
- Waste that exhibits hazardous characteristics (e.g., radioactive, explosive, flammable, poisonous, infectious, corrosive, toxic, or biomedical waste).

Disposal operations

<table>
<thead>
<tr>
<th>Disposal Code</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>Release into or onto land, other than by any of operations D3 to D5 and D12.</td>
</tr>
<tr>
<td>D2</td>
<td>Land treatment, such as biodegradation of liquids or sludges in soil.</td>
</tr>
<tr>
<td>D3</td>
<td>Deep injection, such as into wells, salt domes, mines, or naturally occurring repositories.</td>
</tr>
<tr>
<td>D4</td>
<td>Surface impoundment, such as placing liquids or sludges into pits, ponds, or lagoons.</td>
</tr>
<tr>
<td>D5</td>
<td>Specially engineered landfilling, such as placement into separate, lined cells that are isolated from each other and the environment.</td>
</tr>
<tr>
<td>D6</td>
<td>Release into water, other than a sea or ocean, other than by operation D4.</td>
</tr>
<tr>
<td>D7</td>
<td>Release into a sea or ocean, including sea-bed insertion, other than by operation D4.</td>
</tr>
<tr>
<td>D8</td>
<td>Biological treatment, not otherwise set out in this Schedule.</td>
</tr>
<tr>
<td>D9</td>
<td>Physical or chemical treatment, not otherwise referred to in this Schedule, such as calcination, neutralization or precipitation.</td>
</tr>
<tr>
<td>D10</td>
<td>Incineration or thermal treatment on land.</td>
</tr>
<tr>
<td>D11</td>
<td>Incineration or thermal treatment at sea.</td>
</tr>
<tr>
<td>D12</td>
<td>Permanent storage.</td>
</tr>
<tr>
<td>D13</td>
<td>Blending or mixing, prior to any of operations D1 to D12 and D16.</td>
</tr>
<tr>
<td>D14</td>
<td>Repackaging, prior to any of operations D1 to D12 and D16.</td>
</tr>
<tr>
<td>D15</td>
<td>Interim storage, prior to any of operations D1 to D12 and D16.</td>
</tr>
<tr>
<td>D16</td>
<td>Release, including the venting of compressed or liquefied gases, or treatment, other than by any of operations D1 to D12.</td>
</tr>
<tr>
<td>D17</td>
<td>Testing of a new technology to dispose of a waste.</td>
</tr>
</tbody>
</table>
# Template for Notice of Exports of Non-hazardous Waste for the purpose of the pilot project

<table>
<thead>
<tr>
<th>1. <strong>Canadian Exporter:</strong></th>
<th>2. <strong>Site from which non-hazardous waste will be shipped:</strong></th>
<th>3. <strong>U.S. Importer:</strong></th>
<th>4. <strong>Carrier:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
<td>Name:</td>
<td>Name:</td>
<td>Name:</td>
</tr>
<tr>
<td>Street address:</td>
<td>Street address:</td>
<td>Street address:</td>
<td>Street address:</td>
</tr>
<tr>
<td>Mailing address:</td>
<td>Mailing address:</td>
<td>Mailing address:</td>
<td>Mailing address:</td>
</tr>
<tr>
<td>Electronic address:</td>
<td>Electronic address:</td>
<td>Electronic address:</td>
<td>Electronic address:</td>
</tr>
<tr>
<td>Telephone number:</td>
<td>Telephone number:</td>
<td>Telephone number:</td>
<td>Telephone number:</td>
</tr>
<tr>
<td>Facsimile number:</td>
<td>Facsimile number:</td>
<td>Facsimile number:</td>
<td>Facsimile number:</td>
</tr>
<tr>
<td>Name of the contact person:</td>
<td></td>
<td>Name of the contact person:</td>
<td></td>
</tr>
</tbody>
</table>

| 5. Registration number: | __Yes __No | 5. Registration number: | 5. Registration number: |

<table>
<thead>
<tr>
<th>6. Mode(s) of transport:</th>
<th>7. Port(s) of exit and entry:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>8. Shipment dates:</th>
<th>9. Estimated number of shipments:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed date of first shipment:</td>
<td></td>
</tr>
<tr>
<td>Proposed date of last shipment:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10. <strong>Description of waste</strong></th>
<th>11. <strong>Contract:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>10a. Type/source of the waste:</td>
<td>A contract or series of contracts is/are in place between the Canadian exporter or generator and the receiving facility in the U.S.</td>
</tr>
<tr>
<td>10b. the estimated total maximum quantity of waste to be shipped:</td>
<td>Yes No</td>
</tr>
<tr>
<td>10c. the intended disposal operation(s):</td>
<td></td>
</tr>
</tbody>
</table>

---

1 Volunteers should attach additional pages to this template if additional space is needed.
Attachment B: U.S. EPA Draft Criteria for Notice Reviews under the Pilot
Pilot Project Regarding the Transboundary Movement of Municipal Solid Waste (MSW)  
Draft Criteria for Notice Reviews

This document describes the criteria EPA will use when reviewing notices of proposed shipments of MSW during the pilot project. EPA will then provide feedback on the notices to be shared with Environment Canada and the exporters. This feedback will provide information regarding EPA’s likely response to future notices once the regulations for the notice and consent process are in place. Any feedback provided by EPA during the pilot is not binding on the voluntary participants, but is intended to be instructive.

The following list reflects the elements EPA will consider in its review of notices before providing feedback. Based on EPA’s experience during this pilot project, EPA may modify the list in the future:

1. **Does the notice provide all of the required information?**

2. **Is the import of the waste prohibited under other U.S. statute(s), such as the ban on the importing/exporting substances with ≥50 ppm PCBs under The Toxic Substances Control Act or restrictions on importing chlorofluorocarbons under the Clean Air Act?**

3. **Is the waste allowed to be disposed of in the importing Michigan landfill facility?**  
The proposed shipment should conform to the acceptance criteria for the importing facility, which is usually specified in the facility permit. Michigan state laws may also prohibit the disposal of certain materials in MSW landfills.

4. **Is the U.S. importing facility operating with a State of Michigan municipal solid waste landfill (MSWLF) permit?**

The following two questions are included to avoid a serious environmental or public health consequence at a landfill facility, and are independent of the origin of any waste stream. EPA is not currently aware of either of these concerns being evident at the Michigan landfills currently receiving MSW from Canada:

5. **Has EPA received information that demonstrates that the U.S. importing facility cannot properly and safely manage the intended waste import (e.g., a problem at the facility that poses an imminent and substantial endangerment to the environment or public health)?**

6. **Has the U.S. importing facility’s owner, operator, or parent corporation been convicted under the criminal provisions of any U.S. environmental statute within a year of the notice submittal, when such recent criminal activity calls into question the ability of the facility to properly and safely manage the waste?**