



Discussion Paper on Hazardous Materials Regulations

*Combining and amending *The Hazardous Substances and Waste Dangerous Goods Regulations, The Environmental Spill Control Regulations and The PCB Waste Storage Regulations**

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Executive Summary

The amalgamation and amendment of three associated regulations; *The Hazardous Substances and Waste Dangerous Goods Regulations (HSWDG)*, *The Environmental Spill Control Regulations* and *The PCB Waste Storage Regulations*, is being considered and will result in the promulgation of the new Hazardous Materials Regulations (HMR).

Consultation is an important part of the development of these regulations. Through this discussion paper, Saskatchewan Environment is soliciting comments, suggestions and solutions from interested parties on areas that need clarification in the regulations and to examine issues with the regulations that years of use have identified. The suggestions provided by stakeholders will be considered in the development of the HMR. When providing suggestions, please ensure they include rationale and are balanced to ensure protection of the environment while encouraging a healthy economic outlook for Saskatchewan.

The department is consulting in an effort to create a performance and outcome based regulation that will support the government's Green Strategy.

The Green Strategy will identify principles and goals that government will use to create a sustainable future for the province. These regulations are being developed to support the sustainable vision proposed in the Green Strategy. The development of the HMR will also incorporate principles arising from the vision established by the Green Strategy.

The development of the regulations will include:

1. A high-level, government-wide, vision and goals with implementation shared across different departments.
2. A broader emphasis on strategies to promote continuous improvement in environmental outcomes and accountability across all sources of pollution.
3. A place-based approach with boundaries that make environmental planning sense and facilitate a total cross-media, cumulative approach (such as watershed management).
4. A more comprehensive, flexible set of regulatory and non-regulatory compliance tools and incentives.
5. An approach based on shared responsibility with the regulated community, NGOs, the public and scientific/technical community.

This consultation is an important part of the development of the regulations. Saskatchewan Environment is also interested in maintaining the highest quality of environmental protection while being flexible to industry and communities to ensure compliance and continuous improvement in the area of hazardous waste management. There are overlapping and differing aspects of the current regulations compared with the federal regulations, and these issues should be considered when developing the new regulations. In addition, there have been recent changes in many federal regulations and the impacts of these changes need to be evaluated and addressed.

A number of influences and interactions provide concepts and discussion points for consideration or inclusion in the regulations. Areas of influence include Federal-Provincial working groups, international commitments, environmental groups, stakeholder concerns and the public. These influences have been summarized into a number of areas of focus for the amendment including:

- Federal Harmonization Issues – There are a number of issues being discussed at the national/inter-jurisdictional level that could impact the way hazardous waste is handled in Saskatchewan. The issues to be discussed include:
 - definitions of hazardous waste and hazardous recyclable material;
 - “derived from” rule;
 - listing and delisting of hazardous waste;
 - National Environmentally Sound Management Criteria for managing waste;
 - pre-treatment standards prior to landfilling the material;
 - guidelines for managing and establishing hazardous landfills;
 - exemptions for low risk recyclables;
 - establishing a product stewardship program to include hazardous waste management;
 - hazardous waste tracking and information sharing among jurisdictions; and,
 - hazardous waste classification codes.

- HSWDG Regulatory Issues – Over the years there have been a number of issues the department has identified to be considered in the next amendment of these regulations. The issues include: overlap and duplication with the upstream oil and gas industry, ensuring the regulations reflect the department’s involvement in transportation of dangerous goods, providing for the permitting and operation requirements for a hazardous waste disposal facility, interaction on federal land, temporary fuel storage or remote facility access, allowing for the development of standards, guidelines and objectives, minimum distance requirements and pesticide use management.

- Environmental Spill Control Regulatory Issues – These regulations were in place prior to federal or provincial Transportation of Dangerous Goods regulations. There is an opportunity to coordinate the regulations to ensure consistency and to take advantage of the chemical and waste substance identification system. There are also issues with the reporting limits and their ability to address current needs, duplication between *The Clean Air Regulations* and *The Environmental Spill Control Regulations*, handling and reporting of cumulative spills, spills to a contained or engineered area, reporting provisions, definition of “environment” and “person in control of a pollutant”, secondary reporting of spills, use of risk analysis when outlining spill reporting and minor housekeeping issues.

- PCB Regulatory Issues – These are regulations for a specific material. There are opportunities to reduce the redundancy between jurisdictions’ regulation and ensure consistency on reporting numbers.

The regulations will play a critical role in protecting the environment while allowing the regulated community flexibility to achieve their goals. As a result, the regulations will become more performance and outcome based, allowing industry to achieve compliance through innovation and continued improvement.

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1.0 Background

Saskatchewan has recently completed consultations on the development of a Green Strategy for the province. In the process three goals and seven principles have been identified to guide the province toward a sustainable future. After careful review of these guiding principles SE proposes to amend and amalgamate three existing regulations in an effort to put into action tools to aid creating a vibrant Saskatchewan economy and moving toward a sustainable future with respect to the management of hazardous materials.

The proposal is to amalgamate three associated regulations to take advantage of similar components while reviewing and amending the components of the existing legislation. The three regulations being examined are; *The Hazardous Substances and Waste Dangerous Goods Regulations* (HSWDG), *The Environmental Spill Control Regulations* and *The PCB Waste Storage Regulations* and will result in the new Hazardous Materials Regulations. Amalgamation will ensure the related hazardous material themed regulations are handled under the umbrella of one regulation. This will benefit the development and the structure of the regulations by taking advantage of the same definitions, classifications, enforcement and other operational components of the three regulations.

All of these regulations have been successful in protecting the environment in Saskatchewan and have accomplished what they have been designed to do. The goal is to build on the successes of the three current regulations by developing regulations dealing with hazardous materials and protecting the environment while being versatile to incorporate possible trends in the future.

The input from stakeholders will help with the integration of issues from direct users to ensure cooperation with industry and the community. The input will also aid in ensuring a balance between regulation requirements while providing flexibility to industries to ensure compliance by all organizations affected.

1.1 The Hazardous Substances and Waste Dangerous Goods Regulations

The prescriptive and most extensive of the regulations, *The Hazardous Substances and Waste Dangerous Goods Regulations*, are utilized by a large number of stakeholders in their operations.

The Hazardous Substances and Waste Dangerous Goods Regulations were devised to deal with increasing environmental problems stemming from poor storage of hazardous chemicals and wastes. They were developed to be preventative in nature and meant to ensure safe and environmentally sound storage of hazardous chemicals and hazardous wastes through mandated operational and physical construction related requirements. The regulations deal with a number of issues all revolving around storage and operation of facilities for hazardous wastes including underground and aboveground petroleum

storage tanks, chemical warehouses, and waste dangerous goods storage. The regulations outline the following:

- 1) Designating the hazardous substances (industrial, acute hazardous, environmental persistent, chronic hazardous, as well as waste dangerous goods);
- 2) Describing the characteristics of certain hazardous substances;
- 3) Providing exemptions for:
 - a) General substances regulated by other Acts, storage of household and agricultural consumptive use, substances permitted in foods and drugs, etc.;
 - b) Certain underground storage facilities;
 - c) Some above-ground storage facilities; and,
 - d) Storage in small containers;
- 4) Establishing approval requirements of facilities for the construction and storage;
- 5) Outlining the duties of an owner or operator;
- 6) Establishing criteria for storage in underground and above-ground tanks and storage in certain containers or stockpiles;
- 7) Establishing decommissioning requirements for facilities; and,
- 8) Supporting the federal *Transportation of Dangerous Goods Regulations*.

With such extensive regulations, it is typical to have areas of concern that stakeholders and department staff have with the implementation and adherence to the regulations. The regulations have been very effective since they were first proclaimed in 1989. Since proclamation, there have been five minor amendments in order to clarify areas that needed to be more descriptive. Since the inception of the regulations, there have been many innovations and changes in thinking globally, nationally, in other jurisdictions and within the province that the amendment should consider to ensure the regulations are current and effective.

1.2 The Environmental Spill Control Regulations

The Environmental Spill Control Regulations have been in place for a relatively long time in regulatory timeframes, proclaimed in 1981 and have only had minor amendments in 1983 and 2005.

The purpose of *The Environmental Spill Control Regulations* is public safety, protection of human health and protection of the environment in the event of a release of hazardous substances. The regulations set limits for releases to the environment before the owner of the pollutant must report, remediate the spill and dispose of the spilled substance for both onsite and offsite releases. The listing of substances with reporting limits are within the appendix of the regulation and include 118 substances that range from petroleum products, pesticides, organic and inorganic substances, metals, radioactive materials and waste products.

The regulations are easily understood by clients and have been very effective in controlling spills in the province. This is an opportunity to review the spills component of the regulations and revise based on current practices and philosophies.

1.3 The PCB Waste Storage Regulations

The last and very specific regulations that are being amalgamated into the new regulations are *The PCB Waste Storage Regulations*. These regulations, designed for the specific purpose of controlling PCB storage, were proclaimed in 1989 and have not had any amendments.

The purpose of the regulations is to designate PCB as a hazardous waste and ensure the proper storage and reporting/tracking of the waste. The requirements for storage, duties of the owners/operators of the storage sites, as well as the requirements for maintaining books and records are laid out by the regulations. The regulations also require specific information be submitted to the department to ensure the protection of the environment and public safety.

2.0 Consultation

A great deal of work has been done to establish the vision for a sustainable future in the province, yet there is a need to gain more information to address issues regarding the management of hazardous substances.

The purpose of this discussion paper is to identify and discuss issues regarding the regulations and provide an opportunity for the stakeholders to suggest areas for amendments. This is the opportunity to outline any operational issues and provide suggestions for improving efficiencies that will impact the design of the regulations. You will find that there are areas of discussion throughout the document where specific issues are highlighted for discussion.

The discussion paper will be distributed among industries and individuals that are impacted by the regulations, organizations that represent industries, non-government organizations that have an interest in the environment, other government departments and department staff. This will ensure there is a wide variety of comments and perspectives considered, ensuring comprehensive and practical regulations.

The results of this consultation will be the foundation of the regulatory amendment by providing the general outline of the concepts to be included.

We encourage responses that will help improve the regulations while ensuring the protection of the environment.

3.0 The Hazardous Substances and Waste Dangerous Goods Regulations

The Hazardous Substances and Waste Dangerous Goods Regulations have been effective in regulating hazardous substances handling in the province, ensuring public safety and protection of public health and the environment. Throughout the years there have been new innovations and techniques introduced for the handling of HSWDG. The review of the regulations will reflect how the industry and the philosophies have changed since the regulations were passed. They will also incorporate a revision of activities the department conducts.

In addition to the issues identified in the following pages, there will also be some housekeeping and other amendments such as sections where the timeframes have passed, where there has been confusion over the intent of specific sections, or where there are references to other material that must be updated.

Are there any definitions in HSWDG that need clarification? Are there any new definitions needed?

3.1 Federal Harmonization Issues

There are parallels and overlap with the Federal Government such as the requirements for storage of PCB material, but there are also other differences where discussions are needed. Discussions will have to be held on how the *Canadian Environmental Protection Act* (CEPA) is impacted and how the similarity affects not only the creation of the new regulations but also how it impacts *The Environmental Management and Protection Act* (EMPA). All this must be considered while maintaining a focus on the best management of hazardous waste.

Much of the work that is done on hazardous wastes is accomplished in coordination with and in consideration of, other jurisdictions of Canada to ensure harmonization. This cooperative approach introduces components that may or may not be appropriate for Saskatchewan.

The following points will be considered and incorporated where appropriate:

- **Definition of Hazardous Waste / Hazardous Recyclable Material:** When the federal hazardous waste regulatory requirements were originally promulgated in 1985, there were no federal environmental legislation containing the regulatory authority for hazardous waste regulations. The regulatory requirements were originally incorporated into *The Transportation of Dangerous Goods Act* and regulations (TDG). The main focus of these regulations was, and continues to be, transportation safety and emergency response, rather than cradle to grave waste

management. The federal government has since enacted the *Canadian Environmental Protection Act* (CEPA) giving the federal Minister of the Environment the authority to make regulations covering many aspects of environmental protection and controlling international movements of hazardous waste. In 1992, the federal *Export and Import of Hazardous Waste Regulations* (EIHWR) came into force under this authority.

After consultation with stakeholders, Environment Canada moved toward a definition for hazardous waste and hazardous recyclable material that is more harmonized with the United States Environmental Protection Agency's (U.S. EPA) waste-based approach. Environment Canada has revised the definition to refer specifically to the hazard characteristics section of the TDG regulations. In the proposed *Export Import of Hazardous Waste and Hazardous Recyclable Material Regulations* (EIHWRMR) published in Canada Gazette, Part I on March 20, 2004, the definition of hazardous waste now includes a separate definition for hazardous recyclable material. These definitions have been harmonized, to the extent possible, with the U.S. EPA waste based approach. Saskatchewan has indicated its support of a decoupled hazardous waste and hazardous recyclable definition. Saskatchewan must determine how to incorporate appropriate federal definitions into its regulations.

Are the Federal definitions for hazardous waste and hazardous recyclable material acceptable? Should Saskatchewan adopt these regulations?

- **“Derived from” Rule:** One of the issues is to determine if the “derived from” rule should be included in the Saskatchewan hazardous waste framework. A “derived from” rule defines waste, or residue generated from the treatment, storage, or disposal of a listed hazardous waste, as being a hazardous waste unless it is formally de-listed. The U.S. EPA incorporates the use of a “derived from” rule with a formal listing and de-listing process.

There is currently no consensus across the Canadian jurisdictions on adoption of a “derived from” rule and the associated requirement for a delisting procedure. It is anticipated that it will be difficult to reach consensus on this issue in the near future. To date, Ontario is the only province to incorporate a “derived from” rule in its hazardous waste regulations, although British Columbia has a similar rule that is not referred to as such. Ontario also has a de-listing mechanism within the context of the rules. Without a similar “derived from” rule across all of Canada, there is a perception that some United States generators could send their hazardous waste and hazardous recyclable material to Canadian disposal facilities in order to avoid the more stringent “derived from” rule in the United States.

Adoption of a “derived from” rule could mean that waste exhibiting no hazardous characteristics would be regulated as “hazardous waste.” The strongest objections are due to the inflexibility of “testing out” of the various waste types. The rule

may run contrary in principle to the performance-based aspect of waste criteria, which applies in most cases vis-à-vis the characterization of hazardous waste, in that there is a reverse onus for the waste “derived from” rule. Saskatchewan must determine if it will incorporate the “derived from” rule in its regulations.

Would incorporating the “derived from” rule in the new HMR create any concerns?

- **Listing and De-listing:** Waste materials are listed because they typically exhibit one or more of the hazardous characteristics or because they contain contaminants that are known to be toxic or otherwise hazardous to human health and the environment. The purpose of listing a waste as hazardous is to ensure that the generator will identify and manage the waste properly.

In order for a waste to be exempted from being considered a listed hazardous waste, the U.S. EPA requires that a formal de-listing procedure be followed. Environment Canada is considering a similar mechanism for the proposed EIHWHRMR.

To date, Ontario is the only province to have adopted a de-listing procedure, although B.C. has a type of “de-listing” protocol that is not quite the same as the processes used by Ontario and the U.S. EPA. The merits of listing and delisting should be considered by Saskatchewan.

Are there merits for listing and delisting of hazardous waste for your industry?

- **National Environmentally Sound Management Criteria:** Managing waste and recyclable material in a manner that will protect the environment and human health against adverse affects is known as “Environmentally Sound Management,” or ESM. Environment Canada has incorporated ESM criteria into the proposed EIHWHRMR. New authority to do so was given under the *Canadian Environmental Protection Act, 1999 (CEPA 1999)*. Canada is a party to various international agreements (The Basil, Rotterdam and Stockholm Conventions as well as through the “Organisation for Economic Co-operation and Development”) that call for the ESM of hazardous wastes and hazardous recyclable material.

The main question with respect to ESM is whether there is a need to have some kind of national guidance or strategy or whether the individual approaches currently in use for the inclusion of waste are sufficient ESM. The group that will

continue the national work on ESM must address the question as to whether different levels of implementation or timelines could create an uneven playing field. To reduce this concern, some type of national standard would help ensure cooperation. It may be premature to include ESM into the regulations but it should be considered to include the option of adopting national standards. Saskatchewan will consider incorporating a section that will allow ESM to be recognized by the regulations.

Would incorporating ESM criteria into the regulations be appropriate?

- **Pre-treatment Standards for Landfills:** Pre-treatment of hazardous waste prior to landfilling is required in many jurisdictions, including the European Union, the United States, Ontario and Québec. These jurisdictions have developed the following programs:
 - The U.S. EPA amended its program in 1984, which required phasing out of land disposal of hazardous waste and implementing the pre-treatment of hazardous waste before landfilling. Land Disposal Restrictions (LDR) were subsequently implemented and phased in from 1994's amendment.
 - Ontario evaluated promulgation of new pre-treatment standards based on the U.S. EPA's Universal Treatment Standards (UTS), which prohibit hazardous wastes from being landfilled in Ontario unless they are pre-treated or meet specific requirements. Public comments were reviewed and the province announced that it is going forward with this proposal.
 - Although it is not written into its regulations, Québec may require pre-treatment for any hazardous material destined for landfilling. This is dealt with on a case-by-case basis, with the exception of contaminated soils, which are required by regulation to be pre-treated. The contaminated soil regulations have standards similar to the U.S. LDR. Landfilling of hazardous waste must go through a public hearing process which includes "impact studies" on all aspects of the project. Municipal wastes are not required to meet pre-treatment standards.
 - The European Council passed Directive 99/31/EC (referred to as the Landfill Directive) on April 26, 1999, requiring hazardous waste to be treated before being landfilled. It also prohibits the disposal of tires, hospital and other medical waste that are infectious, liquid or flammable waste and explosive or oxidizing waste in landfills. The Directive divides landfills into three separate classes: hazardous, non-hazardous and inert. Each class may only accept waste that corresponds to its designation (i.e., you cannot place hazardous waste in a landfill designated as non-hazardous). Member states must also ensure that existing landfills cannot operate unless they comply with the Directive.

The Canadian Council of Ministers of the Environment (CCME) Hazardous Waste Task Group (HWTG) had been considering incorporating pre-treatment standards into the National Guidelines for the Landfilling of Hazardous Waste. These would be based on the U.S. LDR regulations, but were only proposed to incorporate some of U.S. EPA's exemptions. The HWTG could not come to consensus on the inclusion of the proposed pre-treatment standards in these guidelines because of concerns expressed about pre-treatment standards. Specifically, some of the provincial jurisdictions have raised concerns as to why hazardous waste that has been pre-treated to the extent of no longer exhibiting a hazard characteristic still requires disposal in a hazardous waste landfill. Further discussion of the pre-treatment standards by the HWTG was therefore deferred to the revision of the phys/chem/bio guidelines, which are currently scheduled as the next guidelines to be updated by the HWTG.

Presently Saskatchewan relies heavily upon regional hazardous waste management facilities for the ultimate disposal of hazardous waste. Saskatchewan may want to consider a provision to incorporate pre-treatment of hazardous waste if it is appropriate.

Should Saskatchewan consider requiring pre-treatment of hazardous waste prior to disposal? What foreseeable issues may arise with treatment?

- **Hazardous Waste Landfill Guidelines:** As part of national ESM activities, Environment Canada has been working with the provinces/territories through the HWTG to update existing technical guidelines. These technical guidelines for the management of hazardous waste and hazardous recyclable material are being revised with a view to strengthening ESM nationally for domestic and transboundary movements. The first of these guidelines to be updated are the 1991 National Guidelines for the Landfilling of Hazardous Waste. To date, the HWTG has not come to consensus on the proposed update to these hazardous waste landfill guidelines. Issues requiring resolution range from policy and technical concerns to report quality. The work on these guidelines has been put on hold by Environmental Planning and Protection Committee (EPPC) pending further EPPC direction arising out of their discussion.

Saskatchewan has supported the revisions to the guidelines on a limited basis. Decisions regarding issues such as the “derived from” rule, the listing and delisting protocol and UTS will need to be rectified before the guidelines can be finalized. Saskatchewan could incorporate a provision to accept national guidelines as part of the regulatory review.

- **Exemptions for Low Risk Recyclables:** In Canada, low risk hazardous recyclables (such as secondary metals, e-waste, or auto shredder residue) account

for more than 50% of imports and 25% of exports of hazardous materials. These exemptions, by reducing the administrative burden on the recycling industry, will promote the protection of the environment by encouraging recycling and discouraging landfilling of materials that could otherwise be recycled.

This issue is more national than provincial but, should Saskatchewan consider any provisions that would help to support exemptions for low risk recyclables?

- **Hazardous Waste Management Components of Product Stewardship:** Product stewardship is the management of a product through all stages of its life cycle, such as extended producer responsibility programs. The European Union has been working on several initiatives for end-of-life toxics management. The U.S. EPA and Canada have approached these issues from a product stewardship perspective. The U.S. EPA has implemented new Universal Waste rules to facilitate product stewardship. The question is whether Canada should follow suit by creating a similar national product stewardship program for its hazardous waste. Jurisdictions agree on the need for a comprehensive national strategy for product stewardship but there is no consensus on how this should be done. It has been highlighted that there is a need for jurisdictions' regulatory approaches to managing hazardous waste and hazardous recyclable material to be flexible and include mechanisms to facilitate the development and implementation of product stewardship programs. EPPC could promote, nationally, more flexible controls on recyclables being managed as part of Extended Producer Responsibility (EPR) programs. This type of program could generate good publicity as it is one of the aspects of hazardous waste management that directly affects the general public. Any national stewardship program will have to take into account the various product stewardship programs that already exist in the various provincial and territorial jurisdictions.
- Saskatchewan has utilized stewardship for several programs including waste paints and used oil. The regulations could incorporate a section to be used if the province encourages a national hazardous waste stewardship program.

Would a hazardous waste stewardship program be of assistance to management of hazardous wastes?

- **Hazardous Waste Tracking & Information Sharing:** Most provinces and territories agree that there is a need to track domestic and international movements of hazardous waste and hazardous recyclable material, but manifests are no longer used in all Canadian jurisdictions. There is agreement amongst the jurisdictions to share information but not on a mechanism to do so. Waste

tracking systems differ among the jurisdictions and some jurisdictions have invested substantial resources in their respective systems.

Several initiatives to share information and centralize waste tracking are undergoing consideration. Centralization of waste tracking has found support among the provinces/ territories as this would increase efficiency and reduce the administrative burden for industry. Environment Canada has been working on electronic exchange of data between the Canadian Border Service Agency and involved parties. Environment Canada has also been examining e-notices and e-manifesting, as well as waste codes in the context of international shipments. There is general agreement among the provinces and territories on the need to share information. Creation of a centralized waste tracking system would increase efficiency and reduce confusion within industry. Having one system instead of two would decrease the administrative burden for industry, since company representatives would be responsible for reporting to, and therefore only learning, one system rather than two. However, provinces/territories disagree on the mechanism to share information, because waste tracking systems differ among provinces/territories. Cost sharing of a centralized system is also an issue. Some jurisdictions have invested a large amount of resources in development of new systems.

Saskatchewan has moved away from the use of the waste manifest. As such, each facility recycling or disposing of hazardous materials will need a monitoring and reporting requirement in order to operate. If implemented, the province will need to ensure that hazardous waste tracking and information sharing is in place for all these facilities so that information may be exchanged between jurisdictions.

Does your industry currently track your hazardous waste shipments? What issues arise from the tracking system?

- **Hazardous Waste Classification Codes:** The HWTG has investigated the development of a national hazardous waste and hazardous recyclable material classification code system. There is currently a lack of consensus on such a classification code system. Two distinctive approaches are used as the basis for the classification code systems currently in use across Canada: TDG-based approaches and University of California at Davis (UCD)-based approaches, or a combination of the two approaches. The UCD classification approach was used as the basis for Alberta, Ontario and Quebec's provincial classification code systems. These three provinces account for approximately 70 - 80% of the hazardous waste and hazardous recyclable material in Canada. However, the three systems are not identical. In 2002, the HWTG decided to go with the 3 digit numerical codes based on the UCD approach, such as the codes that are currently used by Ontario.

Alberta, Ontario and Québec each use their own UCD-based classification code system, with Alberta's system being combined with a TDG approach. All other federal, provincial and territorial jurisdictions currently use a TDG-based approach. Each of these provinces uses its own classification code system extensively in a number of areas including generator registration and the approvals for haulers and receiving facilities. With the impact that a change in classification code system would have on generator registration and approvals, there has been a lack of ability to convert to any one of these three UCD-based systems and therefore no consensus on how to harmonize among them. With further discussion among the jurisdictions, consensus is likely. The Saskatchewan regulation should consider the direction nationally in coding of hazardous waste.

Does your company deal outside of Saskatchewan and have you encountered issues with coding of materials? Would standardized coding be of assistance?

3.2 Regulatory Issues

- **Hazardous Waste Disposal or Treatment** - The process for establishment of a hazardous waste disposal facility or treatment facility is cumbersome. There is no regulatory requirements that deal specifically with the establishment, operation and permitting of a hazardous waste disposal or treatment facility. Without a regulating instrument in place, any project must go through the Environmental Assessment (EA) process. Once the project is put through the EA process, EMPA, 2002 is used as authority for development of a permit. However, EMPA is too broad to deal effectively with this type of facility. There may be an opportunity to include a provision in these regulations for permitting of hazardous waste disposal or treatment facilities as well as adopting Codes of Practice for treatment or disposal of hazardous.

Would your industry be affected by a permitting and approval system for hazardous waste treatment or disposal facilities? Would your industry be affected if a Code of Practice were adopted for treatment or disposal?

- **Rework the Approval Process:** Consider streamlining the approval process to remove the registration component which should not be needed any longer because all the timeframes have passed that made the registration useful.
- **Portable / Temporary Fuel Storage and Remote / Restricted Facility Access:** When an activity such as mineral exploration, drilling, forestry, remote construction, etc. takes place, the storage of fuel for the activities becomes problematic. *The Hazardous Substance and Waste Dangerous Goods Regulations* were designed more for facilities within populated areas and do not take into

account or fit well with temporary or portable types of activities. In many cases the proponent must knowingly be in regulatory noncompliance in order to function in the activity. This is not a good situation for either the proponent or the regulator. Some consideration should be given to this issue for incorporation into the amendment. There are alternatives to consider such as self-contained skid tanks and requirements for impermeable pads on locations where mobile equipment is serviced or typically parked.

Do you find the current regulations clear regarding temporary fuel storage facilities?

- **Remediation Guidelines, Objectives and Standards - Vesting and Enforceability:** The ability to make and enforce guidelines, objectives and standards for the protection and remediation of land is an inherent and essential element of environmental protection legislation. There are powers vested to make and adopt guidelines, objectives and standards within EMPA, 2002 or regulations under it. Expansion of the ability to make guidelines, objectives and standards is anticipated in areas governing hazardous waste management and yet, the ability to explore other elements of hazardous substances management also remains essential. The power and scope to create and formally adopt guidelines, objectives and standards must cover a broad range of potential topics across the life-cycle of chemical and waste management and it is critical that these instruments are enforceable. A provision for making and enforcing guidelines, objectives and standards should be considered for the amalgamation and formation of the new HMR because of the change in the way the department utilizes regulations and standards.

Would remediation guidelines, objectives, or standards, developed and enforceable under the regulations, be of assistance to your industry?

- **Addition of a storage tank to an existing Storage Facility.** The current Section 9(5) of HSWDG prohibits the transfer of HSWDG to a storage facility unless the storage facility is approved or registered (an amendment to the regulations was made in 2000). There is an issue with enforcement when an additional tank is added to a storage facility that already has approval but the proper approval has not been received for the additional tank. If there is an opportunity to clarify the issue of additional storage tanks added to existing facilities in the regulations, it should be incorporated.

Would a change to the regulations regarding addition of storage tanks to existing facilities impact your industry?

- **Above Ground Storage Tanks:** There are no formal requirements in the current regulations to require a qualified person to perform the decommissioning of an above ground storage tank. There may also be requirements that are too stringent for double walled above ground storage tanks. Issues around the installation and decommissioning of above ground storage tanks should be considered in the amendment.

Would your industry be impacted by changes to the requirements for above ground storage tanks?

- **Vagueness/overlap with upstream oil and gas industry - conflict with Saskatchewan Industry & Resources (SIR).** The departments have met to resolve the issues with the upstream oil and gas industry. If there is an opportunity to provide clarification in the regulations with the overlap with SIR the opportunity should be taken.
- **Dangerous Goods Transportation Act and Regulations (DTG - provincial) and Transportation of Dangerous Goods Act and Regulations (TDG - federal).** The department has removed itself from the majority of TDG issues such as manifesting and transferring of waste. This should be reflected in the regulatory amendment.

There are a number of other issues related to the federal regulation and the province's involvement that should be considered in the amendment including:

- **Transport on Winter Roads and on Ice/Water:** A possible issue is the clarification of jurisdictional concerns in the transporting of dangerous goods over winter roads (including frozen water-bodies) and on open water. Jurisdiction varies between federal and provincial, with the provincial varying between Saskatchewan Environment (SE) and the Saskatchewan Department of Highways and Transportation.
- **Overlap Issue:** Due to changes to the administrative structure of TDG, its inherent complexity and resource limitations, SE is forced to deal with issues on an *ad hoc* basis. It has become increasingly difficult to maintain the department's commitments to the TDG Acts, Regulations and Program. In fact, the department has made policy decisions to accommodate these factors that could cause complications depending on the direction of changes to federal and provincial policy and legislation. Because different jurisdictions use and interpret TDG differently, problems are encountered when different jurisdictions come into play. The regulatory changes should reflect Saskatchewan Environment's involvement in the activity.

- **Generator Registration, Carrier and Receiver Registration, Documentation:** The department has revised the program in recent years departing from the way these activities are handled in the regulations. These changes were implemented to streamline the handling of hazardous wastes in Saskatchewan while maintaining the required degree of management control over the importation, transportation and disposal of hazardous wastes. These changes should be reflected in the regulatory amendment.
- **Enforcement:** This was more of an issue prior to amendments to include environmental legislation into The Summary Offences Procedure Regulations (SOPR). Amendments will be made to SOPR as the section numbers and wording changes in the new Hazardous Materials Regulations are established. If there is an opportunity available to include other enforcement options during the amendment, the option will be examined. Consideration should also be given to the ability to “unapprove” a facility or tank if it no longer meets the requirements of the regulations.
- **Enforcement on Federal Lands:** There has been an internal debate regarding the application of the HSWDG Regulations to federal lands. Some perceive that federal legislation takes precedence, leaving room for no application of the provincial regulations to federal lands. In contrast, previously, the HSWDG Regulations were applied to federal facilities based on advice from Environment Canada regarding the application of the Federal Treasury Board Manual, Appendix A - The Code of Environmental Stewardship for the Government of Canada. This document notes that federally administered facilities will meet or exceed the letter and spirit of federal environmental laws and, where appropriate, will be compatible with provincial and international standards. It must be noted that during the early program development and implementation stages, federal representatives work closely with provincial staff in registering and supporting the implementation of operational and upgrading requirements to facilities on federal lands.

While there are now federal tank registration regulations, there is no mandated upgrading schedule. Additionally, there is presently no federal equivalent to the HSWDG Regulations as applicable to storage of hazardous substances or waste dangerous goods in warehouses, stockyards, or stockpiles. The federal tank registration legislation also only applies to fuels and allied products in storage tanks. When storage on federal sites is located close to property boundaries or could impact nearby environmentally sensitive areas, the absence of an effective federal instrument represents some risk to the integrity of nearby non-federal lands.

There are a number of types of facilities (typically federal jurisdiction) that the province does not regulate because they are located on land that is not within the jurisdiction of the province. However, the department has been approached

a number of times to “register” these facilities. The interest in having a registration system is to make the province aware of these facilities and to ensure that they are included in our systems.

There are a number of options for federal land including:

- Stating an exemption directly in the regulation under the “Exemption From Requirements” section;
- Development of a policy; or
- Cooperative written agreement with the Federal Government.

These options should be considered and if a regulatory change is needed, it should be incorporated into the amendment.

Would your industry be affected by Saskatchewan recognizing facilities on federal land?

- **Minimum Setback Distances:** The regulations have specific setback distances that must be adhered to in the development of a storage facility. With the interest of warehouse conversions for residential use, the regulations have been questioned due to the fact that the storage facilities were in compliance with all minimum setback distances when they were developed but the conversion of adjacent property has made some facilities non-compliant out of the control of the storage facility owner. The options for setback distances of existing facilities should be considered in the amendment of the regulations.
- **Buffer Zones:** There are other programs that the department administers which utilize buffer zones for materials to protect the ecosystem such as buffer zones from streams, lakes and rivers. Considerations should be given to provide linkages to these buffer zones for consistency of different programs in the department.

Should Saskatchewan revise the regulations to require existing facilities upgrade their facility if there is a change of adjacent development within the setback distances?

4.0 The Environmental Spill Control Regulations

The Saskatchewan spill regulations were developed before the advent of federal or provincial legislation governing the transportation of dangerous goods. Therefore, the author of the regulations was not able to take advantage of many of the systems that are now in place including substance identification and chemical classification.

Incorporation of the regulations with HSWDG Regulations will ensure opportunities are utilized to include the same systems and definitions for both components.

- **Chemical and Waste Substance Identification** – There have been some discussions regarding classification of hazardous waste, as discussed in the HSWDG portion of this discussion paper.

The classification system should be reviewed in the regulatory amendment to determine which is appropriate for Saskatchewan.

- **Reporting Limits** – There are a number of issues to be considered regarding reporting limits, including:
 - Limits above which releases are to be reported in the present Saskatchewan regulations address both "on-site" and "off-site" occurrences. "Off-site" reporting criteria has been primarily applied to transportation related incidents whereas "onsite" has generally been applied to releases on the property of industry, commerce, government, or individuals occurring as a result of storage system failure, stationary sources or in loading transport vehicles. The existing system of reporting limits does function for both types of releases of pollutants in the general environmental protection legislation. Saskatchewan's system appears to be unique in that a limited description of form, character, or concentration of pollutants and the time periods over which the release quantities are given as co-qualifiers for spill reporting limits.
 - The spill regulations were developed prior to the department regulating a number of different industries and companies that SE presently regulates. This issue should be considered in the development of the amended regulations to reduce any overlap between the different regulations SE administers.
 - The reporting limits values should also be reviewed to ensure they are up-to-date. Consideration would also be given to ensure that all the desired chemicals are included in listing.

Would a single reporting limit be useful? Would it be a benefit to streamline the requirement from the department into "one window"? Are the reporting limits reasonable?

- **Emission Reporting Under Section 8 of *The Clean Air Regulations* and Section 7 of *The Potash Refining Air Emission Regulations*** -Section 8 of *The Clean Air Regulations* makes the requirement to report accidental, emergency, or unauthorized releases or discharge of an air contaminant that results in air pollution. "Air contaminants" in this context includes emission of by-products of industrial sources, incinerators or fuel burning equipment generally during upset conditions at levels that would exceed ambient air quality standards specified in the regulation. However, definition of an "air contaminant" within *The Clean Air Act* is considerably broader since it is defined to mean a solid, liquid or gas or combination of any of them in the ambient air that contributes to air pollution. Since categories for other organic substances, inorganic substances and metals (in solution or powder forms) exist within the spill regulations, some potential for overlap may also exist. Historically, confusion over reporting has occurred for releases of ammonia from industrial facilities under *The Clean Air Regulations* because of the duplicate reporting requirements under the spill regulations. There are also possibilities for duplicate reporting requirements in relation to hydrogen sulphide under these two regulations.

Section 7 of *The Potash Refining Air Emission Regulations* requires the reporting of uncontrolled or accidental discharge of particulate matter when it exceeds specified emission levels. Although the potential for duplicate reporting exists for air releases of potash under both regulations, airflow from potash drying is not likely sufficient to result in a duplicate reporting requirement.

Is your industry impacted from the different components of the department's regulations overlapping? If so, how could this overlap be reduced?

- **Cumulative Spills - Tracking, Reporting and Management of Contamination** - A blurring of regulatory lines has always existed between pollution created by spills in excess of specified quantities and contamination created by repeated spills below specified quantities. While the intent of the spill regulations is to manage incidents with quantities likely to represent some degree of environmental risk in an immediate context, the realm below the specified quantities, even in situations where cumulative quantities may exceed reportable limits (generally in excess of 24 hours) has largely been untouched in practical field applications until effects become manifested. While the spill regulations successfully deal with this for most situations associated with underground storage of fuel products where such impacts are commonly encountered, cumulative spills could occur for other substances.

Should cumulative spills be included into the tracking, reporting and management portion of the regulations?

- **"Person in Control of a Pollutant" - Definition Required** – The word "control" within the phrase "person in control of a pollutant" is not a defined term within the spill regulations.

To resolve any future potential difficulties, in the amendment a definition change should be considered to either define "control" or the entire phrase in a manner similar to the definition of "person responsible for a discharge", as defined within EMPA, 2002.

- **Spill Reporting Telephone Number** - The telephone number cited within Section 6 of the regulations is incorrect. Revision to the current number (1-800-667-7525) is required.
- **Reporting Provisions - Owner and Person Having Control Provisions** - Section 7 of the spill regulations makes a requirement for the submission of a written spill report by both the person having control of the pollutant and the owner of a pollutant. Alternatively, a joint report may be submitted by both parties. While some view this as a potential for duplicate reporting, this provision does aid in ensuring that the person in control of a pollutant has advised and discussed the situation with the owner of the pollutant in situations where the owner was not in charge of the pollutant at the time of discharge (e.g.: transportation related spills, etc). Reporting provisions for the owner and "person having control" should be considered in the regulatory amendment.

Has your industry been impacted by the current reporting requirements of spills?

- **Reporting of Spills to Contained Areas or Engineered Structures** - For several years, some industries within Saskatchewan have questioned the application of the spill regulations to situations where pollutants have been released to contained areas, because such events do not result in a release to the soil or water environment. Therefore, in many respects, it is understandable how this concern is really directed at the definition of a spill with the evolution and inclusion of risk management principles into environmental protection decision-making in recent times.

Consideration should be given to the issue of releases to contained areas as there may still represent some hazard to people and the environment depending on the nature of the substance and the degree and integrity of the containment. Pits and ditches around property boundaries provide little value in protecting soil, subsoil

and groundwater unless measures are taken to improve and maintain containment and reduce the potential for penetration of pollutants to lower soil levels and groundwater. In contrast, specially constructed containment dikes and impermeable base liners are examples of good engineering practice that aid in reducing risk and degree of contamination in the event of a spill. Any method of dealing with this issue should satisfy the government's need for transparency and public accountability and not jeopardize the protection of the environment. Reporting spills to contained areas or engineered structures should be considered in the amendment.

Would it be beneficial to have different requirements for spills to contained areas or engineered structures?

- **Secondary Reporting of Spills** - Discussion with industry has revealed that there may be some benefit for the inclusion of provisions for secondary reporting requirements to organizations or bodies, beyond the provincial government or company itself, which may have a need to know. Such needs or requirements sometimes stem from Environmental Assessment, review panels, etc., especially in northern areas of the province.

Should there be a requirement to allow for reporting of spills to other interested parties?

- **Overlap and Diverging Issues with TDG.** There are a number of issues that overlap or diverge between *The Environmental Spill Control Regulations* and the Federal TDG Act and regulations. The following issues should be considered in the amendment:
 - Written report requirements for *The Environmental Spill Control Regulations* are currently 7 day, however, the federal reporting requirements are 30 days. This should be considered in the amendment.
 - Consideration should also be given to the issue of temporary storage site releases such as a release from a wheeled transport unit. Clarification should be given to identify if it is considered transport or storage and the release limits to be used.
 - TDG is emergency focused and involved in the short-term aspects. The provincial component should be considerate of the long-term remediation and restoration of impacted areas.
 - Human health and protection of property is the focus of TDG and the limits it establishes, which would be more of an off-site perspective. Should Saskatchewan continue with limits for on-site as well as off-site

spills? The provincial legislation must consider issues that also impact the environment but are not a danger to human health or property.

- Remediation is typically required with spills. There should be consideration given to clarifying the remediation level that should be achieved and the process for determining appropriate action such as risk based, future land use or background levels.
- There may be areas where overlap is inevitable, but there should also be consideration given to reduce the overall overlap of the requirements between Saskatchewan legislation and Federal legislation.

Is your industry impacted by any overlap and divergence with TDG in the current spill regulations?

- **Providing the information to the public.** Currently there are a number of processes; the Environmental File Search process and the Freedom of Information process, in place for the public and industry to request information from the department based on the activities Saskatchewan Environment administer. With the increased use of technology, there are opportunities for the department to provide this information in a more accessible form such as with web-based systems. In order to ensure the department has the legislative authority to provide this information in a public forum, a section is being considered for the regulations that would outline the department's intentions. This would be similar to Section 72 of *The Water Regulations*, which states:

“72 (1) All information, data, test results and records submitted to the minister pursuant to a permit, the Act or these regulations is deemed to be public information.

(2) The minister may disclose to the public any of the information, data, test results and records mentioned in subsection (1) at any times and in any manner that the minister considers appropriate.”

5.0 The PCB Waste Storage Regulations

Polychlorinated biphenyls (PCBs) are the only chemical which has a specific regulation for storage. While these regulations have aided in reducing the stock of PCB waste in the province they may be overly prescriptive when dealing with the remaining inventory. As a result these regulations should be updated to reflect the risks associated with the remaining inventory and in addition accommodate improvements in storage system designs. Further, there are presently inconsistencies between PCB's and other hazardous material storage site requirements. These requirements should be harmonized.

Definition of PCB. There is an issue with the definition for PCB liquids and solids, where in Saskatchewan it is 5 parts per million (ppm) by weight that differs from the present federal definition which is set at 50 ppm. Some resolution in the differing values as applied to PCB storage in Saskatchewan must be considered in forming revised Saskatchewan regulations.

Does your industry currently utilize the PCB regulations?

Disposal of material contaminated with PCB above the 5 ppm value. Issues in other jurisdictions have shown that there may be a need to allow material that is contaminated above the regulated limit to be disposed of into an engineered landfill. Materials such as auto shredder residue and construction and demolition debris have been tested and shown to have high levels of contamination. Analytical results indicate that while the total concentration of the contaminant may be high it is not mobile. Leachate of these materials is typically "non detect".

Should the regulations provide an exemption for these materials so they may be disposed of into an engineered landfill?

6.0 Strategic Approach to Managing the Environment

Saskatchewan Environment strives to ensure effectiveness by evolving through continuous self-evaluation and pursuit and adoption of best practices. This strategic approach to the way the department operates allows the department to address upcoming challenges. Through this approach, the department has been observing other jurisdictions across Canada and has been examining the ways the environment is managed and regulated.

Considering the participation or development of partnerships with local interest groups for the approvals or spill reporting;

- Allowance for the flexibility of enforcement to work with industry in compliance and environmental concerns;
- Regulatory systems that are performance and outcome based.
- Being transparent with the information collected by the department to allow for the sharing of information. Providing access to some information received through regulatory processes to the public, NGOs, etc;
- Working with other jurisdictions to consider the other systems in an effort to coordinate or harmonize, where possible, to assist industry;
- Considering a process to allow industry to utilize Environment Management Systems such as ISO 14001;
- Encouraging continuous improvement in requirements or standards;
- Consider the cumulative effects of certain activities in a more broad based approach to the environment; and
- Consider the concept of risk analysis for the determination of the reporting and remediation requirements.
- Regulating *Canadian Environmental Protection Act (CEPA)* Toxic substances within Saskatchewan where Saskatchewan Environment has an existing relationship with industry
- Implementation of hazardous waste tracking, with room to improve the present system
- Provision of information sharing
- Issues regarding enforcement and compliance
- Issues regarding federal lands

With the conclusion of the consultation of the Green Strategy the department intends to promote the regulations as a tool to contribute to the government's goals of: Innovation Toward Sustainability, A Respected and Protected Environment and Shared Responsibility, Integration and Accountability.

Will this approach promote performance and drive outcomes for the effective management of hazardous materials in Saskatchewan?

7.0 Next Steps

The intention of the discussion paper is to provide the ability for stakeholders to raise the concerns and the considerations that will be contemplated in the amendment and amalgamation of *The Hazardous Substances and Waste Dangerous Goods Regulations*, *The Environmental Spill Control Regulations* and *The PCB Waste Storage Regulations* into the new HMR. Comments will form the basis and outline of the components that will be considered in the amendment of the regulations. The process is meant to solicit comments and identify other issues that industry, companies, organizations and individuals may have with the amendment.

This discussion paper will be distributed to Saskatchewan Environment's stakeholders including industries and individuals that are impacted by the regulations, organizations that represent industries, non-government organizations that have an interest in the environment, other government departments and department staff. It will also be posted on the Internet for easy and quick access to the document.

The results from the consultation will help the department form the legislative amendment package. Stakeholders will then see the results in the new HMR. In an effort to aid information exchange the department has placed the survey found in Appendix 1 of this document on the internet at the following web address.

<http://www.se.gov.sk.ca/environment/protection/land/hazardous/hazardous.asp>.

You may use the survey to provide your comments and issues to the department. We look forward to hearing from you. Please remember to provide potential solutions to problems/issues that are raised.

Appendix 1 - Survey for The Discussion Paper on Hazardous Materials Regulations

Name:
Company:
Address:
Email:
Telephone:

3.0 The Hazardous Substances and Waste Dangerous Goods Regulations

Are there any definitions in HSWDG that need clarification? Are there any new definitions needed?

3.1 Federal Harmonization Issues

Are the Federal definitions for hazardous waste and hazardous recycled material acceptable? Should Saskatchewan adopt these definitions?

Would incorporating the “derived from” rule in the new HMR create any concerns?

Are there merits for listing and delisting of hazardous waste for your industry?

Would incorporating Environmental Sound Management criteria into the regulations be appropriate?

Should Saskatchewan consider requiring pre-treatment of hazardous waste prior to disposal? What foreseeable issues may arise with pretreatment?

Should Saskatchewan consider any provisions that would help to support exemptions for low risk recyclables (although this issue is more national than provincial)?

Would a hazardous waste stewardship program be of assistance to management of hazardous wastes?

Does your industry currently track your hazardous waste shipments? What issues arise from the tracking system?

Does your company deal outside of Saskatchewan and have you encountered issues with coding of materials? Would standardized coding be of assistance?

3.2 Regulatory Issues

Would your industry be affected by a permitting and approval system for hazardous waste treatment or disposal facilities? Would your industry be affected if a Code of Practice were adopted for treatment or disposal?

Do you find the current regulations clear regarding temporary fuel storage facilities?

Would remediation guidelines, objectives or standards, developed and enforceable under the regulations, be of assistance to your industry?

Would a change to the regulations regarding addition of storage tanks to existing facilities impact your industry?

Would your industry be impacted by changes to the requirements for above ground storage tanks?

Would your industry be affected by Saskatchewan recognizing facilities on federal lands?

Should Saskatchewan revise the regulations to require existing facilities upgrade their facility if there is a change of adjacent development within the setback distances?

4.0 The Environmental Spill Control Regulations

The classification system should be reviewed in the regulatory amendment to determine which is appropriate for Saskatchewan.

Would a single reporting limit be useful? Would it be a benefit to streamline the requirement from the department into "one window"? Are the reporting limits reasonable?

Is your industry impacted from the different components of the department's regulations overlapping? If so, how could this overlap be reduced?

Should cumulative spills be included into the tracking, reporting and management portion of the regulations?

To resolve any future potential difficulties, in the amendment a definition change should be considered to either define "control" or the entire phrase in a manner similar to the definition of "person responsible for a discharge", as defined within EMPA, 2002.

Has your industry been impacted by the current reporting requirements of spills?

Would it be beneficial to have different requirements for spills to contained areas or engineered structures?

Should there be a requirement to allow for reporting of spills to other interested parties?

Is your industry impacted by any overlap and divergence with TDG in the current spill regulations?

5.0 The PCB Waste Storage Regulations

Does your industry currently utilize the PCB regulations?

Should the regulations provide an exemption for low risk PCB materials so they may be disposed of into an engineered landfill?

6.0 Strategic Approach to Managing the Environment

Will this approach promote performance and drive outcomes for the effective management of hazardous materials in Saskatchewan?