

Interim Directive

ID 2000-3

May 31, 2000

TO: All Oil and Gas Operators
All Oil Sands Operators
All Drilling and Servicing Operators
All Pipeline Operators
All Oilfield Waste Management Operators

HARMONIZATION OF WASTE MANAGEMENT

The Alberta Energy and Utilities Board (EUB) and Alberta Environment (AENV) have developed a Memorandum of Understanding (MOU) on the harmonization of waste management in Alberta. The MOU is intended to clarify the jurisdictional roles of the EUB and AENV, reduce regulatory duplication, promote an equivalent level of environmental protection and public safety, and reduce liability through appropriate waste management.

The MOU outlines guiding principles that the EUB and AENV have agreed to implement to harmonize requirements surrounding the management of oilfield and nonoilfield wastes. The harmonization agreements include the division of regulatory responsibilities based on the type of waste management facility or activity.

Questions regarding the MOU should be directed to either the EUB at (403) 297-6952 or AENV at (780) 427-5883.

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Memorandum of Understanding Between the Alberta Energy and Utilities Board and Alberta Environment on Harmonization of Waste Management

May 31, 2000

1 Introduction

Responsibility for the regulation of wastes in Alberta is divided between the Alberta Energy and Utilities Board (EUB) and Alberta Environment (AENV). The EUB is responsible for the regulation of upstream oilfield wastes, while AENV is responsible for the regulation of all other wastes generated in Alberta. This regulatory framework was established in 1993. The jurisdictional split was based on the premise that each agency's requirements would provide an equivalent level of environmental protection and public safety, while acknowledging that operationally the EUB's and AENV's processes might not be exactly the same.

To harmonize and clarify waste management requirements in Alberta, the EUB and AENV have agreed that each agency's responsibilities should be based on its specific expertise and experience related to certain types of wastes and waste management options. As a result, the EUB and AENV have agreed to divide regulatory responsibilities based on the type of waste management facility or activity. This new division will ensure the effective use of resources and technical expertise within each agency, reduce duplication, and eliminate uncertainty regarding who approves what.

The purpose of this memorandum of understanding (MOU) is to communicate fundamental waste harmonization principles that will promote equivalency and then to communicate the division of roles and responsibilities between the EUB and AENV regarding the regulation of wastes in Alberta.

2 Principles

To support the goal of a credible, responsible, effective, and practical system for the management of wastes in Alberta, the EUB and AENV agree that the following guiding principles shall be applied to the management of oilfield and non-oilfield wastes:

- An equivalent level of environmental protection and public safety will be achieved through either the EUB's or AENV's requirements and enforcement practices.
- The waste classification and characterization system will be consistent, such that the criteria or properties that render a waste hazardous or an oilfield waste dangerous shall be the same.
- A waste management facility will be approved pursuant to one set of regulatory requirements, either the EUB's or AENV's. AENV will regulate activities/facilities managing non-oilfield wastes or mixtures of non-oilfield and oilfield wastes, while the EUB will regulate activities/facilities managing oilfield wastes. In situations where an EUB-regulated facility wishes to manage small quantities of non-oilfield wastes, the EUB will review the request with input from AENV on a case-by-case basis.
- The approval process for waste management facilities shall be coordinated so that in situations where both the EUB and AENV have an interest in a facility (e.g., a facility that intends to manage oilfield and non-oilfield wastes), the appropriate approving authority will act as the "one window" and coordinate the application review with input from the other agency.

- Waste volume minimization involving reuse, recycle, reduce, and recover philosophies will be promoted through either the EUB's or AENV's requirements.
- The shared responsibility between the waste generator and the waste receiver for the appropriate management of wastes shall be supported and enforced by the appropriate regulatory agency, either the EUB or AENV.

3 Harmonization

Through this MOU the EUB and AENV agree to conduct their regulatory operations in accordance with the above-noted principles and to harmonize the requirements surrounding the management of wastes in Alberta. Refer to Appendix 1 for a list of EUB and AENV legislative documents and background information pertaining to waste management. See Appendix 2 for a list of definitions pertaining to waste management.

3.1 Approval and Regulation of Waste Management Facilities and Activities

To simplify the regulatory framework established in 1993, the EUB and AENV have agreed to the following division of waste management regulatory responsibilities.

a) EUB responsibilities include

- schemes for deep well injection, slurry fracture injection, and cavern disposal of wastes, as well as associated surface facilities for these activities on upstream petroleum sites,
- oilfield waste transfer stations feeding solely to an oilfield waste management facility,
- all waste management activities occurring on oil or gas sites within a production system, including one-time treatment and permanent waste management components (e.g., biopiles/biocells, small incinerators, landfills, waste processing technology), and
- with the exception of stand-alone landfills and incinerators, all waste management facilities established for recovery of crude oil or other processing of oilfield wastes (e.g., oilfield waste processing facilities, biodegradation facilities, and facilities established to clean oilfield rags, pipes, or filters).

Waste management activities regulated by the EUB will be subject to the requirements set out in the pertinent documents listed in Appendix 1.1.

b) AENV responsibilities include

- all off-site and mobile incinerators and thermal treatment units,
- all off-site landfills and dedicated land treatment facilities,
- surface facilities for deep well injection, slurry fracture injection, and cavern disposal of wastes within an AENV-approved non-oilfield plant,
- compost facilities,
- waste management or recycling facilities handling non-oilfield wastes/recyclables or mixtures of non-oilfield and oilfield wastes/recyclables, and

- transfer stations, other than those feeding solely to an oilfield waste management facility.

Waste management activities regulated by AENV are subject to the pertinent documents listed in Appendix 1.2.

Based on the above division of waste management regulatory responsibilities, the EUB will not be the agency responsible for stand-alone sites established as a landfill or as a thermal treatment facility (fixed incinerator or thermal treatment unit), regardless of whether oilfield wastes are the intended waste streams. For facilities not listed in (a) or (b), the responsible regulatory authority will be determined by agreement between the EUB and AENV using the principles in this MOU as a guide.

3.2 Waste Characterization and Classification

The properties and criteria identified in EUB and AENV legislation defining dangerous oilfield wastes and hazardous wastes will be the same. Guidance documents developed by each agency and recommendations given to industry on the characterization and classification of specific wastes, the properties to be measured, the analytical methods to be used, and the chemical parameters to be tested will be consistent with the *Alberta User Guide for Waste Managers*, published by Alberta Environment.

3.3 Importation and Exportation

The regulatory distinction of oilfield wastes from other industrial wastes and their classification into non-dangerous and dangerous oilfield wastes are designations specific to wastes generated in Alberta. The legislation regarding the importation and exportation of all wastes, including oilfield wastes, in and out of Alberta resides within the Environmental Protection and Enhancement Act (EPEA). As such, wastes or recyclables entering or leaving Alberta must be classified as non-hazardous or hazardous. Anyone who consigns, transports, or receives hazardous wastes or imported/exported hazardous recyclables must have a personal identification number (PIN) from AENV and/or be authorized under EPEA.

The EUB and AENV agree that EUB-regulated oilfield waste management facilities may receive imported recyclables (non-hazardous or hazardous) provided that

- the recyclables are generated from the exploration and production of oil and gas,
- the waste management process produces a recoverable material (e.g., crude oil, clean rags, or pipes), and
- the facility approval authorizes the receipt of the type of wastes in question.

AENV will provide written authorization and a PIN to EUB-regulated oilfield waste management facilities that import hazardous recyclables and meet the above criteria.

3.4 Manifesting and Tracking

Currently EUB *Guide 58: Oilfield Waste Management Requirements for the Upstream Petroleum Industry* requires dangerous oilfield wastes being transported on public roads to destinations within Alberta to be manifested using the Alberta Oilfield Waste Manifest. Effective July 1, 2000:

- The EUB will not require submission of the white (fifth) copy of the Alberta Oilfield Waste Manifest and will eventually reduce the manifest to an EUB four-part form (Alberta Oilfield Waste Form).
- Dangerous oilfield wastes destined for AENV-regulated hazardous waste facilities for destruction, disposal, or consolidation must be accompanied by the Alberta Oilfield Waste Manifest or its reduced four-part form. Further transportation of these wastes from AENV-regulated facilities requires classification, manifesting, and a PIN, as per the requirements in the Waste Control Regulation under EPEA.
- Imported and exported hazardous recyclables and hazardous wastes generated from exploration and production of oil and gas, regardless of their destination, are subject to the Transportation of Dangerous Goods Regulation (TDGR) and manifest requirements under EPEA.
- A recycle docket pursuant to AENV requirements or the Alberta Oilfield Waste Manifest or its reduced four-part form must accompany any shipment of dangerous oilfield wastes going to an AENV-approved recycling facility.

The tracking and reporting requirements under *Guide 58* remain applicable to oilfield wastes sent out of province or to AENV-regulated waste management or recycling facilities. The tracking systems required for the movement of dangerous oilfield wastes are shown in Figure 1.

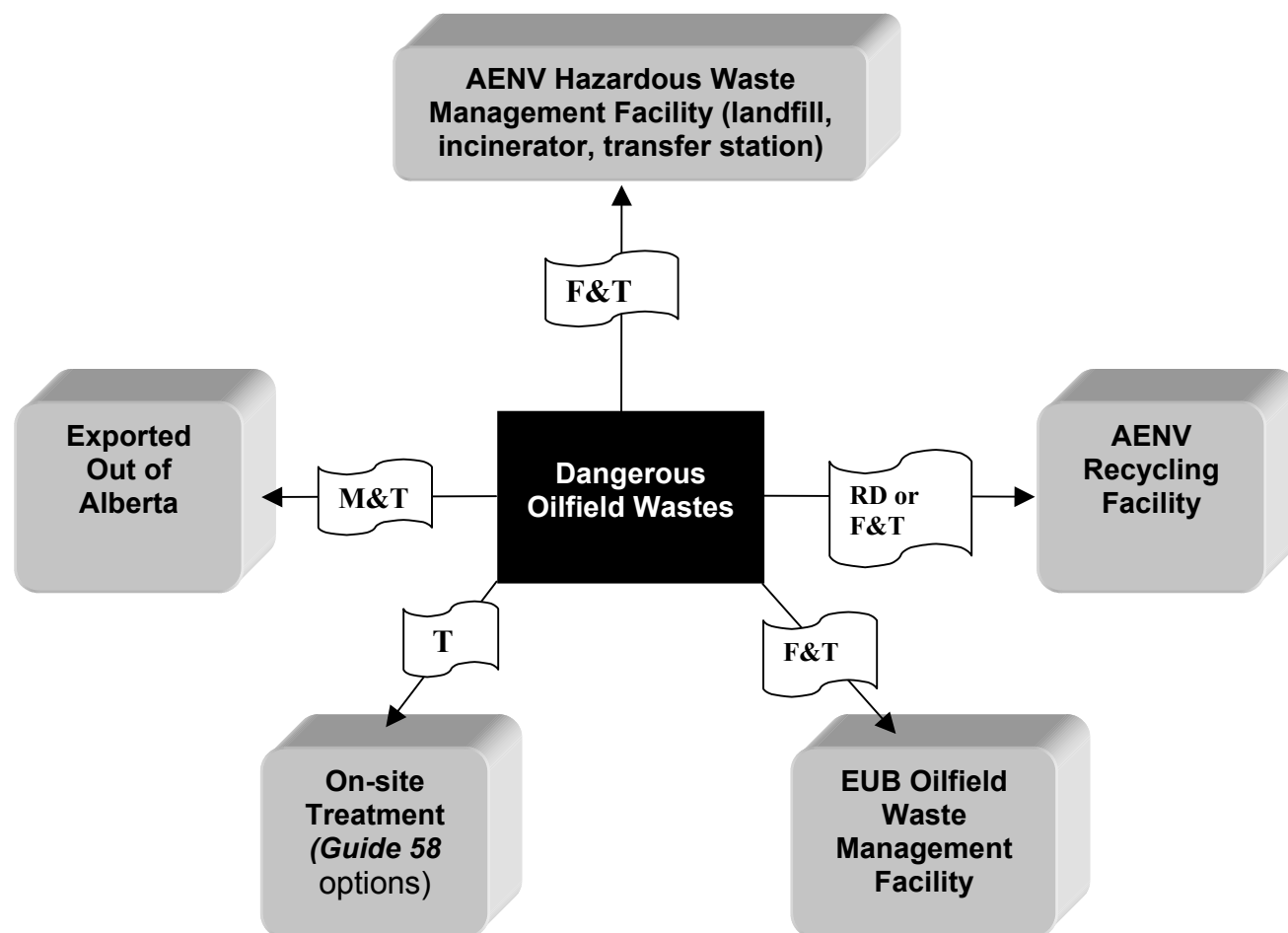
Facilities regulated by the EUB and AENV must retain records and report waste management information. Information requirements are outlined in the respective approval for a waste management facility or by policy directives specific to the EUB or AENV.

3.5 Environmental Impact Assessments

The environmental impact assessment (EIA) process is supported by two regulations pursuant to EPEA: the Environmental Assessment (Mandatory and Exempted Activities) Regulation and the Environmental Assessment Regulation. The regulations outline those activities for which EIAs are either mandatory or exempted and establish the public information and notice requirements for the process. For projects not on the exempted or mandatory lists, the need for an EIA is assessed on a site-specific basis (i.e., discretionary projects). The EUB will refer any oilfield waste management facility application that it considers might require an EIA to AENV for further assessment. If AENV assesses that an EIA is required, AENV will manage the EIA process.

3.6 Financial Security

Both the EUB and AENV, as part of their respective application processes, require financial security for certain types of waste management facilities. The amount of security is based on the nature and the amount of wastes/recyclables managed, the type of facility, the estimated cost of reclamation, and any associated post-closure monitoring for the facility.



F - Four-part form or Oilfield Waste Manifest (EUB)
T - Tracking (as per *Guide 58*)
M - Manifest and PIN (as per EPEA)
RD - Recycle docket (AENV)

Figure 1. Tracking systems for movement of dangerous oilfield wastes

3.7 Enforcement

Waste generators and receivers are expected to manage wastes created or received in accordance with the current legislative requirements of EPEA or the Oil and Gas Conservation Act, as applicable. The EUB and AENV will engage the appropriate resources within the regulatory agencies to fully enforce waste management. In general, by the nature of the legislation approaches may be different in each agency, but the goal of both is to ensure compliance with requirements. Both agencies will work together to coordinate their enforcement activities.

a) EUB Surveillance and Enforcement

The EUB uses a combination of audits and inspections to ensure that oilfield waste generators and receivers under its jurisdiction comply with

- the EUB regulatory documents listed in Appendix 1.1, as well as any subsequent oilfield waste management requirements established by the EUB, and
- the terms and conditions specified in a facility's approval.

Each oilfield waste management facility is inspected at least once a year and audited every four to five years unless circumstances warrant more frequent evaluations. A generator audit is based on the Annual Waste Disposition Report and is intended to verify appropriate waste disposition locations, ensure that waste types and volumes are tracked, and confirm that on-site waste management activities comply with protocols in *Guide 58*. A generator audit may also be triggered as a result of questionable waste management activities found during an EUB inspection of oil or gas production sites.

Noncompliance issues are managed in accordance with the EUB's enforcement ladders, which are based on a concept of escalating consequences for repeat noncompliance. For further information, see EUB *Informational Letter (IL) 99-4: EUB Enforcement Process, Generic Enforcement Ladder, and Field Surveillance Enforcement Ladder* and *IL 99-4 Clarification*. In situations where audit findings indicate that oilfield wastes were inappropriately disposed at AENV-regulated facilities, the EUB will inform AENV and coordinate enforcement actions.

b) AENV Surveillance and Enforcement

AENV has an active Compliance Inspection Program (part of the department's overall Compliance Assurance and Enforcement Program) to ensure that facilities comply with EPEA requirements. Inspections are generally unannounced and cover all aspects of a facility's approval or registration. How frequently AENV inspects a facility depends on its priority, which the department assigns based on a number of factors. They include

- potential to cause an adverse effect,
- compliance history,
- environmental performance, and
- time elapsed since last inspection.

Companies with greater potential to cause an adverse effect or with a history of noncompliance can expect to be inspected more frequently than others.

The overall Compliance Assurance and Enforcement Program outlines AENV's approach to enforcement. All cases follow a well-defined path moving from incident through investigation to an enforcement outcome. Enforcement decisions can involve file closure, issuing a warning letter or an administrative penalty, forwarding the file to Alberta Justice for prosecution, and/or issuing an enforcement order.

4 Summary

The EUB and AENV both have responsibilities related to the management of wastes in Alberta. Each agency is committed to developing and implementing its waste-related regulatory programs in a manner that minimizes overlaps and ensures environmental protection and public safety. This MOU outlines the principles and actions that are being or will be followed to achieve harmonization pertaining to the regulation of wastes in Alberta.

Appendix 1 Legislative Background

The division of responsibilities between the EUB and AENV is based on the regulatory distinction between oilfield wastes and nonoilfield wastes. Oilfield waste is defined in both agencies' legislation as an unwanted substance or mixture of substances that results from the construction, operation, or reclamation of a well site, oil and gas battery, gas plant, compressor station, crude oil terminal, pipeline, gas gathering system, oil production site, or oilfield waste-related facility.

The EUB and AENV have agreed to amend the definition of oilfield wastes to not include a substance or mixture of substances from the above-cited sources when received at facilities regulated by AENV. Oilfield wastes must, first, not contravene any EUB requirement for the management of oilfield wastes and then, second, qualify for acceptance at the AENV-regulated facility. Upon entering the facility, the oilfield waste then becomes a waste regulated by AENV for the purpose of storage, treatment, disposal, or further transportation.

1.1 EUB Legislation

The EUB regulates the management of oilfield wastes under the authority of the Oil and Gas Conservation Act and the Oil and Gas Conservation Regulation. The details regarding the management of oilfield wastes at the generator's facility site, the transportation of oilfield wastes on Alberta's public roads, and the treatment and disposal of oilfield wastes at waste management facilities are outlined in the following EUB documents:

- *ID 96-3 and Guide 58: Oilfield Waste Management Requirements for the Upstream Petroleum Industry*
- *IL 96-13 and Guide 50: Drilling Waste Management*
- *IL 94-2 and Guide 51: Injection and Disposal Wells, Well Classifications, Logging, and Testing Requirements*
- *ID 95-3 and Guide 55: Storage Requirements for the Upstream Petroleum Industry*
- *ID 99-4: Deposition of Oilfield Waste into Landfills*
- *IL 99-2: Use of Produced Sand in Road Construction*
- *IL 98-2: Suspension, Abandonment, Decontamination, and Surface Land Reclamation of Upstream Oil and Gas Facilities*
- *IL 98-1: Coordination of Release Notification Requirements and Subsequent Regulatory Response*
- *IL 99-4: EUB Enforcement Process, Generic Enforcement Ladder, and Field Surveillance Enforcement Ladder (with Clarification dated February 24, 2000)*
- *Guide 36: Drilling Rig Inspection Manual*
- *Guide 37: Service Rig Inspection Manual*
- *Guide 63: Oilfield Waste Management Facility Inspection Manual (in draft)*
- *Guide 64: Facility Inspection Manual*

1.2 AENV Legislation

The AENV waste management framework is based on the following legislation and guidance documents:

- Environmental Protection and Enhancement Act (EPEA), which establishes the principles and legal requirements for waste management, including environmental assessment processes, approvals and registrations, waste manifesting, release of substances, and enforcement activities
- Activities Designation Regulation (ADR), which identifies those waste management activities that require approval, registration, or notification
- Waste Control Regulation (WCR), which establishes the administrative procedures and technical criteria for waste and recyclables management, waste importation, manifesting, and financial security
- Approvals and Registrations Procedure Regulation, which outlines the requirements for approval and registration applications
- Release Reporting Regulation
- Substance Release Regulation
- Environmental Assessment (Mandatory and Exempted Activities) Regulation
- Environmental Assessment Regulation
- *Alberta User Guide for Waste Managers*, which interprets and details the regulatory requirements applicable to AENV hazardous waste/recyclable management
- *Code of Practice for Landfills*
- *Code of Practice for Composting Facilities*
- *Code of Practice for Small Incinerators* (draft)
- *Code of Practice for Alternate Fuels* (draft)
- *Code of Practice for Land Treatment and Disposal of Soil Containing Hydrocarbons* (draft)

In addition to the legislation and guides to above, the federal Transportation of Dangerous Goods Act and Regulation, administered in Alberta by the Department of Alberta Infrastructure, contains dangerous goods classification, packaging, and transportation requirements.

Appendix 2 Definitions

Approved Landfill (AENV)	An AENV-regulated landfill that accepts more than 10 000 tonnes of wastes per year, that accepts hazardous wastes, or that is located in a ravine, gully or coulee, or over a buried valley and is approved under the Environmental Protection and Enhancement Act.
Biodegradation Facility (EUB)	A type of oilfield waste management facility where oilfield wastes are biologically degraded in a contained and controlled environment, whether it is in an impermeable cell structure (biocell) or piled on a impermeable liner (biopile). (Does not include land treatment.)
Compost (AENV)	The stable humus-like material that results from the biological decomposition and stabilization of organic materials under aerobic and thermophilic conditions. It is potentially beneficial to plant growth and is sanitized to a degree that protects human health.
Compost Facility (AENV)	A waste management facility where waste, not including hazardous waste, is decomposed through a controlled bio-oxidation process that results in a stable humus-like material but does not include a residential composter or a compost facility that receives only sludge as defined in the Wastewater and Storm Drainage Regulation.
Facility (EUB)	Any building, structure, installation, equipment, or appurtenance over which the Board has jurisdiction and that is connected to or associated with the recovery, development, production, handling, processing, treatment, or disposal of hydrocarbon-based resources or any associated substances or wastes, and includes, without limitation, a battery, a processing plant, a gas plant, an oilfield waste management facility, a central processing facility as defined in the Oil Sands Conservation Regulation (AR 76/88), a compressor, a dehydrator, a separator, a treater, a custom treating plant, a produced water-injection plant, a produced water disposal plant, a miscible flood injection plant, a satellite, or any combination of them, but does not include a well, a pipeline as defined in the Pipeline Act, a mine site or processing plant as defined in the Oil Sands Conservation Regulation (AR 76/88), or a mine site or coal processing plant as defined in the Coal Conservation Act.
Land Treatment (AENV)	The controlled application of a substance on the soil surface and incorporation of the substance into the upper soil zone in such a manner that physical, chemical, or biological degradation of the substance takes place. (Dedicated facilities allowed.)
Land Treatment (EUB)	A planned and controlled mixing of oilfield wastes and soil surface in which the inherent soil processes are used to biodegrade, transform, and assimilate the waste constituents. (Limited to one-time, on-site application of non-refined hydrocarbon contaminated soil or pit/pond sludge.)
Off-site (AENV)	An independent site established to manage third-party wastes.

Oilfield Waste	An unwanted substance or mixture of substances that results from the construction, operation, abandonment, or reclamation of a facility, well site, or pipeline but does not include an unwanted substance or mixture of substances from such a source that is received for storage, treatment, disposal, and/or recycling at a facility regulated by Alberta Environment.
On-site (AENV)	Management of a generator's hazardous wastes at a site owned by the generator of the wastes.
On-site (EUB)	The management of oilfield waste on the site on which it was generated or on another site within the same production system, provided that both sites have the same licensee or approval holder.
Personal Identification Numbers	A registration number from AENV required by anyone who consigns, transports, or receives hazardous wastes.
Registered Landfill (AENV)	An AENV-regulated class II or class III landfill not located in a ravine, gully or coulee, or over a buried valley, where not more than 10 000 tonnes per year of non-hazardous and inert waste is disposed and its construction, operation, reclamation, and registration are in compliance with the requirements specified in the <i>Code of Practice for Landfills</i> .
Same Production System (EUB)	An interconnected system of upstream production facilities (e.g., wells, pipelines, batteries). An oil/gas production site receiving oilfield wastes for on-site management or storage must be within the same interconnected system of upstream production facilities as the oil/gas production site from which the oilfield wastes originated. Both the receiving and the originating site must have the same licensee or approval holder.