

# Directive 047

**Release date: June 27, 2023**

**Effective date: June 27, 2023**

**Replaces previous edition issued June 1, 2022**

## Waste Reporting Requirements for Oilfield Waste Management Facilities

---

### Contents

1	Introduction .....	3
1.1	Purpose of This Directive .....	3
1.2	AER Requirements .....	4
1.3	What's New in This Edition .....	4
1.4	Effective Dates .....	4
1.5	Intent of the Waste Plant Submission .....	5
2	Canada's Petroleum Information Network .....	5
2.1	Security and Validation .....	5
2.2	Methods of Submission .....	6
2.3	Submitting Amendments or Corrections .....	6
2.4	Notifications .....	7
2.5	Petrinex Inbox .....	8
3	Waste Plant Submission .....	8
3.1	Inventory .....	8
3.2	Receipts, Dispositions, and Autopopulation .....	9
3.3	OWMF Balancing .....	10
3.4	Query Waste Plant Submission Screens .....	11
4	Oilfield Waste Receipts and Dispositions .....	12
5	Reporting Fuel Consumption at OWMFs .....	15
6	Creation of a Waste Location ID .....	15
7	Opening and Closing Inventories and Adjustments for OWMFs .....	17
8	Oilfield Waste Cavern Reporting Requirements .....	18
9	Facility Status .....	19
10	Fees .....	20
Appendix 1	Definitions .....	21
Appendix 2	Example of a Blank Waste Plant Submission .....	23
Appendix 3	Reporting Codes .....	24

Appendix 4	Waste Plant Balancing and Missing Data Errors .....	25
Appendix 5	Sections of the Waste Plant Submission .....	28
Appendix 6	Example of a Completed Waste Plant Submission.....	31
Appendix 7	Waste Plant Submission Autopopulation (Waste Plant 1) .....	32
Appendix 8	Request Waste Plant Non-Compliance Error Report .....	33
Appendix 9	Waste Plant Submission Summary and Facility Activity View .....	34
Appendix 10	Miscellaneous/Province/State Codes .....	36
Appendix 11	Activity Type List .....	37
Appendix 12	Waste Location ID Screen for Non-oilfield Waste and Non-AER-Regulated Facilities.....	39
Appendix 13	Partial List of Waste Location Descriptions.....	41
Appendix 14	Waste Location ID Screen Confirmation .....	42
Appendix 15	Cavern Reporting Facility Subtype Conversion Instructions.....	43
Figure 1.	Possible autopopulation scenarios for a Waste Plant Submission by ABWP0001234 .....	9

---

## 1 Introduction

### 1.1 Purpose of This Directive

Oilfield waste management facilities (OWMFs) must have the approval to operate in accordance with section 39(1)(g) of the [Oil and Gas Conservation Act](#) and [Directive 058: Oilfield Waste Management Requirements for the Upstream Petroleum Industry](#).

This directive applies to the following OWMFs:

- oilfield waste processing facilities
- surface facilities associated with a standalone class 1a or class 1b disposal well
- oilfield waste caverns
- other OWMFs required to report waste by an AER approval

OWMFs treat, process, store, recycle, and dispose of oilfield waste generated by the upstream petroleum industry. Some OWMFs are approved to receive specific non-oilfield waste. Since April 1, 2009, OWMF approval holders have been required to electronically submit a monthly waste plant submission through Petrinex ([www.Petrinex.ca](http://www.Petrinex.ca)) using online screens or batch upload files (i.e., CSV or XML). Supporting documents are available by contacting the Petrinex service desk. See appendix 2 for an example of the waste plant submission format.

The reporting requirements for other types of OWMFs (e.g., transfer stations, storage facilities, landfills, biodegradation facilities) are detailed in *Directive 058*. For OWMFs that have multiple waste management activities (i.e., the types of OWMFs listed above) on their sites, the reporting requirements specified for each waste management activity (i.e., type of OWMF) must be followed. For example, an OWMF approval holder that transfers and processes waste must follow the reporting requirements in *Directive 058* for the waste transfer, and it must follow the reporting requirements in this directive for the waste processing.

The information submitted through the waste plant submission will autopopulate to other Petrinex facilities. Therefore, valid locations, facility identifiers (IDs) (e.g., ABBT), unique well identifiers (e.g., unlinked well ID), business associate (BA) codes, waste codes, and reporting codes must be submitted for a waste plant submission to be accepted by Petrinex.

Reporting of wastes by waste codes specified by the AER and by oil, water, and solids composition of the wastes in cubic metres (m<sup>3</sup>) remains unchanged; however, the option to report receipts and disposal amounts (dispositions) in tonnes (t) is no longer available.

## 1.2 AER Requirements

Following AER requirements is mandatory for the responsible duty holder as specified in legislation (e.g., licensee, operator, company, applicant, approval holder, or permit holder). The term “must” indicates a requirement, while terms such as “should,” “recommends,” and “expects” indicate a recommended practice.

Each AER requirement unique to this directive is numbered.

Information on compliance and enforcement can be found on the AER website.

## 1.3 What’s New in This Edition

This edition includes the following revisions:

- The facility activity code “GT” has been added to appendix 7 to accommodate reporting in Petrinex of waste from geothermal development activities (see [Directive 089: Geothermal Resource Development](#)).
- A reference has been added in section 10 to the volumetric deficiency invoice procedure in [Manual 011: How to Submit Volumetric Data to the AER](#).

## 1.4 Effective Dates

- 1) OWMF approval holders with OWMFs covered by this directive that have had activities during the preceding calendar month or were shut in for that entire month must do the following:
  - a) Complete the monthly waste plant submission and submit it to Petrinex by the waste management reporting deadline dates published in the reporting calendar on the Petrinex website ([www.petrinex.ca](http://www.petrinex.ca) > Calendars > Alberta Reporting Calendars) as per [Directive 007: Volumetric and Infrastructure Requirements](#).
  - b) Retain copies of the final waste plant submission for each month for at least five years. Supporting data and records (e.g., truck tickets, logbooks, analytical data) must also be retained for at least five years. These records must be made available to the AER upon request.

To improve the accuracy of waste plant submission reporting in Petrinex, the AER implemented waste plant error messages and corresponding noncompliance fees (see section 10 and appendix 4 for more details) effective with the January 2012 production month.

Payable invoices will be loaded into the ministry invoices and statements area in Petrinex, and any error that is not cleared by the next AER volumetric deadline may result in escalation and the issuance of a low-risk enforcement action letter.

## 1.5 Intent of the Waste Plant Submission

The waste plant submission is a way for OWMF approval holders to report receipts and dispositions of oilfield waste and non-oilfield waste to the AER in a format that allows the AER to track and monitor the receipt, processing, and disposal of oilfield and non-oilfield waste. It also allows the AER to track and monitor the disposal of by-products, including recovered oil and residuals generated by an OWMF's process, and their disposition to AER- and non-AER-regulated facilities.

## 2 Canada's Petroleum Information Network

Petrinex is a shared, interactive, secure database accessed through the internet. It facilitates the exchange of data among upstream oil and gas industry partners and among industry and the Alberta Ministry of Energy. As a central source of all volumetric data, Petrinex's web-based interface gives users online access to information. The data submitted to Petrinex are subject to system controls and front-end editing procedures before they are finally posted to Petrinex. Front-end editing immediately identifies discrepancies for the submitting operator so that corrections can be made before final posting.

Each operator has its own method for submitting data to Petrinex, which is controlled through the operator's user security administrator (USA). For details, see the Petrinex Training System Module available under the resource centre on the Petrinex website ([www.petrinex.ca](http://www.petrinex.ca)).

### 2.1 Security and Validation

Only the approval holder of the OWMF may submit waste plant data to Petrinex for the given production month (i.e., the reporting month). It is the approval holder's responsibility to ensure that access for submitting data for a specific facility is assigned to the appropriate company representative (e.g., production accountant).

When ownership of an OWMF changes, the current approval holder may choose to give the new approval holder authority to submit prior-period amendments on its behalf. The approval holder of the waste plant submission records remains the original approval holder and is responsible for all submissions for the periods when the facility was in operation, regardless of who submitted the amendments.

Only the approval holder or person authorized to access Petrinex can query or run reports for the waste plant submission.

Once all information is entered using either online screens or batch upload files (i.e., CSV, XML), the approval holder or person who has been given access may validate the waste plant submission data and make any necessary corrections prior to final submission to Petrinex. Contact the Petrinex service desk for supporting documents and further information on the validation process.

## 2.2 Methods of Submission

There are two methods for electronically submitting data to Petrinex:

- Directly updating data online using defined screens and processes.
- Batch uploading using defined electronic formats.

Online updating is used primarily by an approval holder who has only a few transactions per month.

Batch uploading of waste plant data allows an approval holder to send data to Petrinex electronically through the web. This option is used by an approval holder who has production accounting systems or who manages its waste plant accounting by spreadsheet.

Operators are not restricted to using only one method; they may submit data using a batch process and then correct or amend the data using the online process, or vice versa.

Before submitting waste plant data to Petrinex, the approval holder or person who has been given access may validate the data and make any necessary corrections. The reporting deadline is specified in the Petrinex Alberta reporting calendar and is usually between the 18th and 22nd of the month. Late reporting will change other Petrinex users' submissions due to the autopopulation functionality of the Petrinex system.

Upon receipt of each submission, Petrinex runs computerized edit checks to ensure data quality and completeness. This edit checks that the data submitted are valid for acceptance by Petrinex by checking

- that the person submitting the data is authorized to submit the waste plant data,
- that the facility IDs are correct according to AER Petrinex records, and
- that activities and waste codes and reporting codes are valid.

If the submitted data do not pass one of the checks, the data are not accepted, and the approval holder should correct and resubmit the data.

## 2.3 Submitting Amendments or Corrections

Submissions of amendments or corrections are “full form replacement” submissions. This means that each submission made for an OWMF completely overrides the previous submission. However, during the current month the approval holder may still submit partial data for an OWMF, but each time the approval holder submits any data for an OWMF and production month (or reporting month), they must submit the previous partial data along with the new data.

Petrinex assigns a sequential amendment number each time waste plant data for an OWMF are submitted; the number increases by one for each amendment. When an approval holder amends waste plant data online, Petrinex displays the last version, to which the approval holder may add, change, or delete data. Then when the approval holder submits its changes, Petrinex creates an amendment that includes any unchanged data from the previous version along with the new changes made. The submission with the highest amendment number is always deemed to be the most current version for the facility.

All data for a facility for the current production month must be submitted by the AER filing deadline.

To avoid discrepancies between Petrinex and an approval holder's system, it is recommended that any amendment or correction be changed within the approval holder's production accounting system and then updated to Petrinex. This will ensure that Petrinex's waste plant information matches the approval holder's records.

If information is reported that should not have been included when an amendment was submitted, the approval holder may, through an amended submission, exclude the data that was reported in error. For example, if an incorrect facility ID was entered in "From/to," the amendment should report only the correct facility ID and not include the incorrect facility ID. Removing the incorrect facility ID will automatically delete any autopopulated data at the incorrect delivering facility.

For further details about the types of errors, see the Petrinex website under User Learning Centre > Learning Job Aids > Job Aids – Edit/Validation Rules – Multi Jurisdictions – Waste Plant Data Submission in Petrinex.

## 2.4 Notifications

If any problems are encountered with either online or batch submissions, Petrinex will notify the operator. For online submissions, an error message is displayed immediately, and the online errors can be corrected immediately before leaving the edit screens.

For batch submissions, Petrinex sends an email notification to the facility operator of record advising it of the results of each batch submission and any errors detected. Each approval holder may decide within its company who the appropriate person is to receive these notices. How an approval holder chooses to manage these email notifications depends on how it sets the notifications options. A copy of each notification is kept in the operator's Petrinex inbox for 90 days.

The OWMF approval holder or person who has been given access may validate data before submission and can either make any necessary changes or run the request waste plant AER noncompliance error report. This report may be run as often as necessary to determine any errors

for correction. Petrinex automatically sends out the request waste plant AER noncompliance error report two days before the deadline date (autogenerated warning report) and on the deadline date (autogenerated final report) for each OWMF.

## 2.5 Petrinex Inbox

The Petrinex inbox ensures that all notifications are available to approval holders for 90 days. Each approval holder must confirm that all notices of errors or missing data are acted on before the AER filing deadline to avoid waste plant noncompliance fees.

## 3 Waste Plant Submission

- 2) Waste plant data are transaction based, which means that each transaction for an OWMF must identify the From/To, the Activity, the Waste Code or Reporting Code, the classification (dangerous/hazardous or non-dangerous/non-hazardous), and the composition (oil, water, solid, and gas or a combination thereof). Each OWMF has its own method for submitting waste plant data to Petrinex; access for the submission is controlled through the OWMF's USA (see the Petrinex Learning Centre). See appendix 5 and appendix 6 for examples of the waste plant submission screens, appendix 3 for a list of reporting codes, and appendix 2 of *Directive 058* for a list of waste codes.
- 3) The facility ID and production month must be recorded in the initial screen prompt. The production month will default to the current production month, and Petrinex will autopopulate the corresponding OWMF name and location. Petrinex will also display appropriate screens and any inventory data from the previous month (see section 3.1).

### 3.1 Inventory

If an OWMF had closing inventory [INVCL] from the previous month, the OWMF's opening inventory [INVOP] for the current month will be autopopulated for the OWMF approval holder. At the AER filing deadline, Petrinex will roll over all closing inventory [INVCL] volumes to the next month's opening inventory [INVOP] for the next month's waste plant submission. In fact, the approval holder will never be able to enter the opening inventory activity, nor will it be able to change a volume that was autopopulated by Petrinex.

- 4) When an approval holder amends a previous month and changes the closing inventory volume [INVCL], Petrinex autopopulates a pending waste plant submission, changing the opening inventory [INVOP] volume for the subsequent month. The approval holder must also submit an amendment for that month. (See section 7 for additional opening inventory, closing inventory, and adjustment information.)



- 5) If an OWMF has an opening inventory and the facility does not have any activity (i.e., receipts or dispositions) for the month, the opening inventory volumes must be entered as the closing inventory.
- 6) If an OWMF is “active” and there are no receipts, dispositions, or inventory to be reported for the month, the approval holder must report a SHUTIN activity.

### 3.2 Receipts, Dispositions, and Autopopulation

- 7) Except for gas, materials received at an OWMF must be reported as receipts [REC] allocated into the product groups of oil, water, and solids on the waste plant submission for the OWMF.

If the facility that delivered the material to the OWMF is AER-regulated, Petrinex will autopopulate a corresponding disposition to that facility’s volumetric report. When an OWMF delivers material to another OWMF, Petrinex will autopopulate the disposition on the waste plant submission of the delivering OWMF from the receipts reported by the receiving OWMF. Petrinex will autopopulate the receipt of gas at an OWMF from the disposition reported by the facility that delivered the gas.

- 8) Materials delivered from an OWMF must be reported as dispositions [DISP] on the waste plant submission for the OWMF, except for delivery to a custom treating facility (CT), pipeline (PL), or terminal (TM).

When an OWMF delivers to a CT, PL, or TM, Petrinex will autopopulate the disposition for the OWMF from the reported receipts for the CT, PL, or TM. When an OWMF delivers material to an injection facility for a disposal well, Petrinex will autopopulate the receipt of materials at the injection facility for the disposal well from the reported disposition for the OWMF. See figure 1 for additional autopopulation scenarios.

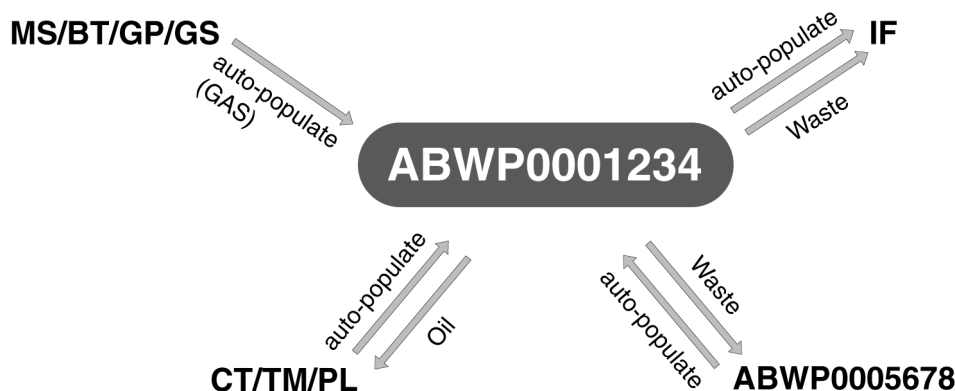


Figure 1. Possible autopopulation scenarios for a Waste Plant Submission by ABWP0001234

Petrinex will flag the facility as pending when it autopopulates the receipt or disposition volumes. This pending transaction is not part of a submission until the approval holder “accepts” the pending disposition or receipt, even if the approval holder has completed its submission and is only waiting for the autopopulated volumes.

An OWMF approval holder must ensure that the autopopulated volumes are accepted and become part of its facility submission. An OWMF cannot modify volumes that have been autopopulated based on another facility operator’s submission.

- 9) If an OWMF approval holder disagrees with a volume, it must contact the receiving or disposing facility operator that created the autopopulated volume and request a correction of the volume.

See appendix 7 for further details on autopopulation rules.

### 3.3 OWMF Balancing

Petrinex runs a system process that balances the facility, calculates activities (e.g., [REC], [DISP]), and totals individual activities. When an approval holder submits an OWMF query or a batch upload or online waste plant submission, the Petrinex system automatically runs the process to ensure that the current balances are maintained. If any balancing issues arise, the approval holder will receive an online notification (see section 2.4). An approval holder may request that this report be run on specific facilities or on all facilities under its authority.

Petrinex will automatically run an AER noncompliance error report on all facilities two days before, and on, the filing deadline date. The approval holder may run the Request Waste Plant Non-Compliance Error Report (see appendix 8) for any facility for which it submits data before the submission deadline; this report may be requested as often as necessary by the approval holder or person who has been given authorized access.

For oil, water, or solid:

$$\text{IMBAL} = \text{total } \{([\text{INVOP}] + [\text{REC}]) - ([\text{DISP}] + [\text{INVCL}]) + [\text{INVADJ}]\}$$

For gas:

$$\text{IMBAL} = \text{total } ([\text{REC}] - [\text{FUEL}])$$

The AER recommends that the approval holder use the Request Waste Plant Non-Compliance Error Report and make necessary corrections/amendments to avoid associated waste plant noncompliance fees (see appendix 4).

### 3.4 Query Waste Plant Submission Screens

The Query Waste Plant Submission summary view screen displays the summarized activities (e.g., [REC], [DISP]) and the balancing activities for each product group (i.e., oil, water, and solid). Only one product group displays at a time. See appendix 9 for an example of a summary and facility activity view screen. To view a different product, select it from the product group drop-down menu. As the summary screen is the result of summarized and calculated activities for each product, data cannot be entered here.

To change any values on this screen, the approval holder must change the facility details used in the calculations.

$$\text{IMBAL} = \text{total} \{ ([\text{INVOP}] + [\text{REC}]) - ([\text{DISP}] + [\text{INVCL}]) + [\text{INVADJ}] \}$$

Note: The approval holder will never be able to enter the opening inventory activity or change a volume that was autopopulated by Petrinex.

The approval holder will see the balancing activity [IMBAL] within the summary view screen. These activities are calculated based on the products (i.e., oil, water, and solid) and activities (e.g., receipts and dispositions) reported at the OWMF. Petrinex will also compare the total volume of each product group (i.e., oil, water, or solid) received [REC] to the total adjustment [INVADJ] reported for each product group. If the total [INVADJ] is greater than 10 per cent of the total [REC] for a product, an error message is displayed in the AER waste noncompliance report. See appendix 4 for additional error message details. See section 7 for additional details on inventory adjustment.

The Query Waste Plant Submission Facility Activity view screen displays the detailed activity for a particular production month, including

- from/to (e.g., unique well identifier, facility ID, etc.),
- activity (e.g., [REC], [DISP], [INVOP], [INVADJ], [INVCL], [FUEL]),
- waste code or reporting code,
- classification (e.g., dangerous oilfield waste [DOW], non-dangerous oilfield waste [non-DOW]), and
- product group (e.g., oil, water, solid, gas).

#### 4 Oilfield Waste Receipts and Dispositions

- 10) For the waste plant submission to be considered complete, OWMF approval holders must ensure that it contains the waste receipts [REC] (oilfield and non-oilfield) and dispositions [DISP] (to AER-regulated and non-AER-regulated facilities) as detailed below.

The information may be submitted using online screens, batch upload files, autopopulation from Petrinex, or a combination thereof.

- 11) **From/To:** For a receipt [REC], the facility ID of the site that generated the oilfield waste being received (From) must be included. It must be a valid facility ID issued by Petrinex (e.g., BT, CT, GS, GP, IF, and WS; BCWI, SKWI, etc.) or unlinked well ID (i.e., WI). For a disposition [DISP], the facility ID to which the material is being delivered (To) must be included and be a valid facility ID issued by Petrinex (e.g., CT, TM, PL, WP, IF).

The Petrinex infrastructure reports (e.g., well infrastructure, facility infrastructure) may be used to help determine valid facility and well IDs. Facility IDs are associated with surface locations, and unlinked well IDs are associated with bottomhole locations.

- 12) A Waste Location ID must be created through Petrinex to report the receipt of non-oilfield waste or to report a disposition to a non-AER-regulated facility (see section 6).
- 13) Receipt of waste generated by out-of-province (BCWI, SKWI, NTWI, YTWI) oil and gas exploration and production is permitted and is considered non-oilfield waste. The OWMF approval holder must record the appropriate UWI and use the non-oilfield waste [NONOFD] reporting code for the receipt. (See appendix 3 for a complete list of reporting codes.)
- 14) **Activity:** The receipt of oilfield and non-oilfield waste must be recorded as [REC], and disposition of oilfield waste must be recorded as [DISP]. Refer to the autopopulation table in appendix 7 for details, or see figure 1.
- 15) **Waste Code:** The appropriate waste code or reporting code for the oilfield waste being received must be reported and consistent with that applied for and approved for the OWMF. (See appendix 2 of *Directive 058* for a list of waste codes.)
- 16) The [NONOFD] reporting code must be used to report the receipt of non-oilfield waste:
- c) The receipt of non-oilfield waste must be authorized by the OWMF approval, and only the specific types of non-oilfield waste listed in the approval can be received at an OWMF.
  - d) Waste generated by a refinery is considered non-oilfield waste and must be reported using the appropriate reporting code [NONOFD].

- 17) [WASTE] must be used to report dispositions of either water or solid (with small amounts of oil) from the OWMF. **For dispositions of oil (with small amounts of water), the waste code column must be left blank.** [WASTE] must also be used for the disposition of waste [WASTE] from one OWMF to another OWMF or from an OWMF to any other non-AER-approved waste management facility.

To be eligible to market a by-product (or manufactured material) generated by processing waste at an OWMF, the OWMF approval holder must have an AER-approved safety data sheet (SDS) for the by-product.

- 18) Dispositions [DISP] of the by-product must be documented on the waste plant submission following reporting requirements in this directive but using [MNFCTR] as the waste code or reporting code.
- 19) A waste location (WL) ID must be created when reporting [DISP] of [MNFCTR]. If the manufactured material is not being dispositioned to a facility ID, the OWMF may create one WL ID to represent the manufactured product rather than creating a separate WL ID for each location to which the manufactured product is dispositioned.
- 20) The OWMF must keep a list of the names and locations of where the manufactured product was dispositioned, and the list must be made available upon AER request.

[WSTMIS] is a recognized AER waste code; however, OWMF approval holders must use the most appropriate waste code for the material being accepted. Use of [WSTMIS] may be subject to audit.

- 21) The approval holder must also use appropriate waste codes or reporting codes for fluids being accepted for management (e.g., [WATER], [FSHWTR], [BRKWTR]) or accepted and used for processing received wastes/materials. The appropriate waste codes or reporting codes for the disposition [DISP] of materials must also be used.
- 22) There are different types of water source facility IDs, and they differ according to the sources of water, which include the following:
- a) AER-licensed fresh water source wells (fresh/nonsaline or brackish/saline) are wells that are >150 m deep. These wells are linked to a facility (generally an injection facility). The facility ID must be used for reporting at the OWMF.
  - b) AER-unlicensed water sources are sources of fresh (nonsaline) water that can come from a shallow drilled source well (<150 m), river, lake, or other surface location. As required, the operator of these types of water source must request an Alberta water source (ABWS) facility ID and use the ABWS facility ID for reporting at the OWMF.
  - c) Surface runoff water (e.g., rain or snowmelt) is on the site of the OWMF and is used for processing received wastes/materials. This water must be accounted for in the waste plant

submission using the miscellaneous code ABRO (see appendix 10 for details). Surface runoff water that meets surface water discharge criteria (see *Directive 055: Storage Requirements for the Upstream Petroleum Industry* for surface water discharge requirements) must be recorded as [FSHWTR], and the OWMF approval holder must ensure that it holds the appropriate permits before the water is used. Surface runoff water that does not meet surface discharge criteria must be recoded as [CWATER].

- 23) **N/D**: The receipt of oilfield and non-oilfield waste must be identified as either (D) for DOW or hazardous non-oilfield waste or (N) for non-DOW or hazardous non-oilfield waste based on the classification of the material received. (See *Directive 058* for characterization/classification requirements.)
- 24) The inclusion of (D) or (N) is not required for the disposition of material from the OWMF, but the OWMF approval holder must document the classification of the material being shipped and provide the documentation to the AER upon request.
- 25) Oil, Water, Solids: the combined waste composition must be identified for receipts [REC] and dispositions [DISP] as total volumes of oil, water, and solids in cubic metres (m<sup>3</sup>) rounded to one decimal place. See figure 1 or the autopopulation table in appendix 7 for details.

For the receipt or disposition of multiple shipments of the same waste/material (i.e., the same waste code and classification) from the same generating/receiving location in one production month, enter the sum of the volumes of oil, water, and solids in cubic metres rounded to one decimal place in the Oil, Water, and Solids columns.

- 26) The receipt of produced water [WATER] must be reported as a receipt on the waste plant submission for the OWMF.
  - a) The OWMF must have a dedicated tank for the collection of produced water [WATER] for the water to be acceptable for disposition to a class II disposal well (i.e., produced water must not be commingled with other fluids/waste).
  - b) If produced water [WATER] is received into a dedicated tank, the disposition must be recorded as [WATER]; if the produced water [WATER] is not received into a dedicated tank (i.e., produced water is commingled with other fluids/waste), the disposition must be recorded as [WASTE]. If the produced water is commingled with other fluids, the commingled fluids must be sent to a class Ia or Ib disposal well.
- 27) The receipt of waste at an OWMF is first accounted for as a receipt [REC] at the ABWP reporting facility ID. For OWMF with other approved activities such as custom treating (ABCT facility ID), terminalling (ABTM facility ID), and injection (ABIF facility ID), the OWMF must show a disposition [DISP] to the appropriate facility ID. Reporting must reflect what physically occurs at the facility.

The closing fluid inventories (combined volumes of waste fluid and produced water) are recorded in the Water column section of the waste plant submission as a single entry.

## 5 Reporting Fuel Consumption at OWMFs

- 28) To report the fuel consumed at OWMFs, the following information must be recorded in the waste plant submission:
- From/To:** This field must be left blank.
  - Activity:** [FUEL] must be reported to document the consumption of gas as fuel. (See appendix 11 for a list of activity types.)
  - Gas:** The volume consumed as fuel, in thousands of cubic metres ( $10^3 \text{ m}^3$ ) rounded to one decimal place, must be reported in the Gas column.
- 29) OWMFs must account for gas consumed for the entire site. In most cases, the fuel gas receipt is autopopulated by the fuel gas supplier.
- 30) If the gas receipt is not autopopulated via another oil and gas reporting facility (e.g., meter station [ABMS] or gas plant [ABGP]), then the OWMF must report the receipt of gas. OWMFs are required to select one of the three following for reporting the [REC] of [GAS] at the OWMF (see appendix 10):
- Alberta miscellaneous (ABMC)
  - Alberta commercial (ABCO)
  - Alberta industrial (ABIN)

## 6 Creation of a Waste Location ID

- 31) Before entering the receipt of a non-oilfield waste or the disposition of material to an approved non-AER-regulated waste management facility, the OWMF approval holder must look up or create a waste location ID. (See appendix 12 for an example of the information required.) A look-up list of waste location IDs is available on Petrinex, and new waste location IDs that are created will be added to the list.
- 32) A waste location ID must **not** be created
- for an out-of-province well; use of the specific well ID is required (e.g., BCWI, SKWI, NTWI, YTWI);
  - for a valid unlinked well ID or facility ID available from Petrinex;
  - for an abandoned well linked to a facility; use of the linked facility ID is required;

- d) for an abandoned well linked to a suspended facility; use of the suspended facility ID is required;
- e) for a suspended facility; use of the suspended facility ID is required;
- f) for an abandoned well or facility; use of the unlinked well ID or facility ID is required; or
- g) to account for balancing at an OWMF.

A waste location ID may be created

- to account for spill material at an OWMF;
- to account for the acceptance of non-oilfield waste, which include wastes generated from nonupstream petroleum industries in Alberta and imported wastes that have a recoverable component generated from the exploration and production of oil and gas outside of Alberta. AER-approved OWMFs may receive quantities of non-oilfield waste if an application has been submitted to the AER and the AER has approved the request; and
- if prior approval has been granted, in which case a waste location ID should be used to represent a manufactured product generated from processing wastes at an OWMF.

33) The OWMF approval holder must enter the information outlined below into the waste location ID form to create a unique waste location ID.

- a) **Name:** Enter the name of the non-oilfield waste generator or the non-AER-regulated facility that is to receive the OWMF's disposition.
- b) **Description:** Select the best descriptor of the generating location (e.g., gas/service station generator) or approved non-AER-regulated receiving facility from a drop-down list. (See appendix 13 for a list of descriptions.)
- c) **Approval Number:** Enter either the approval number of the generating location, if such a number exists (e.g., Alberta Environment and Protected Areas [AEPA]) approval or registration number), or the approval number of the approved non-AER-regulated facility.
- d) Dispositions from an OWMF for further management must go to an approved waste management facility (e.g., AEPA or AER approved). The receiving facility must hold an approval, registration, or permit number and be approved to manage the type of material.
- e) **Location (AB or Non AB):** Enter the generating location or the location of the approved non-AER-regulated waste management facility. If the generating site is in Alberta, the Alberta Township System, variant of the Dominion Land Survey system, may be used. For non-Alberta generating locations, complete the space provided. The location entered must be the generating location, not the company's main office location or the disposition location for the non-AER-regulated facility.



- f) **Address:** Enter the street address of the generating location or the non-AER-regulated facility.
  - g) **City:** Enter the city or town in which the generating location or non-AER-regulated facility is situated.
  - h) **Province:** Enter the province in which the generating location or non-AER-regulated facility is situated.
  - i) **Postal Code:** Enter the postal code of the generating location or non-AER-regulated facility.
- 34) When the waste location ID form is completed, a waste location ID confirmation (see appendix 14) is generated with a unique number (e.g., ABWL0000123) for the non-oilfield generating location or the non-AER-regulated facility. This waste location ID must be used for the non-oilfield waste generating location or for the non-AER-regulated facility that is to receive the OWMF's disposition; it should also be used for subsequent receipts from and dispositions to the same location.

## 7 Opening and Closing Inventories and Adjustments for OWMFs

- 35) The information submitted on the waste plant submission to Petrinex provides the ability to query the amount of oil, water, and solid recorded for the production month. To allow calculation of this information for the reporting facility, the OWMF approval holder must report information as described below.

The monthly closing inventory [INVCL] for oil, water, and solids must be manually recorded in one activity row on the waste plant submission.

The [INVCL] for each product (i.e., oil, water, or solid) autopopulates to the subsequent reporting month as the [INVOP].

The monthly summary of total receipts [REC] and total dispositions [DISP] is calculated and displayed for each of oil, water, and solid in the summary view of the waste plant submission screen in Petrinex (see appendix 9 for an example).

To correct an [INVOP] due to adjustments, the OWMF approval holder must change the previous month's [INVCL]. This can be done by amending the specific row of the previous month's waste plant submission.

Adjustments [INVADJ] are used to account for errors due to shrinkage or errors in volume determinations. A positive adjustment is required if the receipts are greater than the disposition for a product group (i.e., oil, water, or solid); a negative adjustment is required if the receipts are less than the disposition for a product group (i.e., oil, water, or solid).

Adjustments are calculated as follows for one month:

$$\text{Adjustment} = (\text{Total Receipts} + \text{Opening Inventory}) - (\text{Total Dispositions} + \text{Closing Inventory})$$

If an adjustment is not made for a product group (i.e., oil, water, or solid), it will show an imbalance [IMBAL] in the summary view. See appendix 9 for an example.

An explanation is not required for an adjustment. However, there could be a noncompliance associated with it.

Petrinex will compare the total volume of each received [REC] product group (i.e., oil, water, or solid) with the total adjustment [INVADJ] reported for each product group. If the total [INVADJ] is greater than 10 per cent of the total [REC] for a product, an error message is displayed in the AER waste noncompliance report. See appendix 4 for further details.

$$\% \text{ INVADJ} = (\text{INVADJ} / \text{REC} + \text{INVOP}) \times 100\%$$

## 8 Oilfield Waste Cavern Reporting Requirements

- 36) Oilfield waste caverns have surface infrastructure that receives and prepares or slurries the waste for injection into the cavern, and that receives materials coming out of the cavern (e.g., displaced brine or recovered oil). Reporting for surface facilities associated with a cavern must follow the process flow as approved for the OWMF, and transfer of all materials between the surface infrastructure and associated caverns (e.g., displaced brine from a cavern) must be reported as receipts or dispositions, as appropriate. (See section 4 for more details.)
- 37) The surface infrastructure, which is typically approved as a waste processing facility, and each cavern receiving waste from the surface infrastructure must all have appropriate reporting facility ID codes (e.g., ABWP0000123).
- 38) Approval holders of OWMFs that consist of oilfield waste caverns and associated surface infrastructure must complete and submit monthly waste plant submissions following the requirements set out in section 4.
- 39) All transfers of materials between the surface infrastructure (surface waste facility with associated facility subtype 701) and associated caverns (cavern waste facility with associated facility subtype 702) must be documented as receipts or dispositions (as appropriate) based on the actual operations at the OWMF. This includes documenting the transfer of cavern brine between the surface infrastructure and cavern.
- 40) Reported dispositions must correspond to the actual part of the facility from which the material was delivered. For example, oil recovered from a cavern is typically stored in tanks that are part of the surface infrastructure, and the oil is then transferred from the tanks to another facility or pipeline. The reporting must reflect that the oil recovered from the cavern was received at the

surface infrastructure and was delivered from there to the receiving facility (e.g., custom treating facility, terminal, pipeline). The reporting must also reflect that brine displaced from the cavern goes to the surface infrastructure, and from the surface infrastructure it goes back down the cavern or to another facility, such as an injection facility for a disposal well.

- 41) The closing inventory for a cavern must account for all of the solids it receives. The lifetime of a cavern, unless prematurely ended because of operational problems, is often ended when the volume of accumulated solids approaches the capacity of the cavern.
- 42) If the received waste contains free liquids, approval holders must verify the oil, water, and solids composition of the waste receipts by sampling or by an alternative method accepted in writing by the AER. If the received waste consists of solids and no free liquids, the percentage of oil, water, and solids does not have to be determined, and the receipt volume may be recorded as 100 per cent solids.

If the associated surface infrastructure does not report the receipt of wastes containing oil, the recovery of oil from caverns will be questioned by the AER.

The opening cavern inventories [INVOP] of water (brine), solids (if any), and oil (if any) will be populated from the closing inventories reported. Each subsequent month's opening inventory [INVOP] for oil, water, and solids will be the closing inventory [INVCL] from the previous month's waste plant submission. This will be an autopopulation function of Petrinex.

- 43) After a cavern measurement (e.g., sonar survey), the remaining cavern volume must be assessed. Within three months of the measurement, appropriate adjustments must be made to the waste plant submission to reflect cavern volumes (e.g., oil, water, and solid).
- 44) Oilfield waste caverns associated with surface infrastructure must hold an appropriate reporting facility subtype.
- 45) If an approval holder determines that the existing oilfield cavern holds the incorrect reporting facility subtype, the approval holder must contact the AER to make the appropriate changes (see appendix 15 for details).

## **9 Facility Status**

- 46) When a new waste plant reporting code (ABWP) is obtained, the operational status of NEW will be assigned by Petrinex. After the first submission to Petrinex, Petrinex will assign an operational status of ACTIVE. Any subsequent operational status changes are the responsibility of the OWMF approval holder, which must ensure that the facility's operational status is accurate. Those waste plants that are not required to report to Petrinex will have an operational status of RETIRED.

- 47) An OWMF must have a status of ACTIVE to report and use the waste plant submission. A facility that has been identified as suspended or abandoned may still report using the waste plant submission. However, the following restrictions apply:
- a) An AER-suspended OWMF is one that has ceased all normal operations in accordance with its approval. The facility may not be rendered incapable of its approved use, but it is left in a safe and stable state during its suspended state. A suspended OWMF may only accept fresh water [FSHWTR] to allow for processing of previously received wastes/materials and can continue to deliver oil, water, and solids in order to eliminate inventory before the facility is abandoned or mothballed (long-term suspension) or until the facility begins operating again. An OWMF in a suspended state must actively eliminate or reduce on-site inventory and must not accept oilfield or non-oilfield waste.
  - b) An AER-abandoned OWMF is one that has been permanently dismantled to render it permanently incapable of its approved use. This includes leaving downhole or subsurface structures in a permanently safe and stable condition in accordance with AER requirements; removing associated equipment and structures; removing all inventory (waste/materials); and removing and appropriately disposing of structural concrete. Abandoned OWMFs must not receive or dispose of materials (oilfield or non-oilfield). If any contaminated soil or water is a result of OWMF remediation and reclamation, the OWMF is required to report using the oilfield waste disposition report as outlined in *Directive 030: Digital Data Submission of the Annual Oilfield Waste Disposition Report*.

## 10 Fees

To address the costs and quality issues that result from late submissions and data discrepancies in the reporting of waste plant data, the AER has a schedule of fees consistent with that set out in the *OGCR*, Part 17. An OWMF approval holder's submission must be as complete and as accurate as possible so that it does not result in any of the errors listed in appendix 4 of this directive. An OWMF approval holder with missing data or with data discrepancies that are not corrected before the AER filing deadline will receive an invoice for fees.


Approval holders may request that the AER Production Data Services team review a volumetric deficiency invoice. Refer to [Manual 011: How to Submit Volumetric Data to the AER](#) on how to request a review of a volumetric deficiency invoice.

## Appendix 1 Definitions

<b>abandoned facility</b>	The permanent dismantlement of the licensed facility so that it is permanently incapable of its AER-licensed use. This includes leaving downhole or subsurface structures in a permanently safe and stable condition in accordance with AER requirements; the removal of associated equipment and structures; the removal of all produced liquids; and the removal and appropriate disposal of structural concrete.
<b>active facility</b>	Operational status is either active or suspended.
<b>activity code</b>	As it relates to waste plant submission, includes receipt, disposition, opening and closing inventory, imbalance, and inventory adjustment (see appendix 10).
<b>AER approval no.</b>	The first 8 digits of the approval code as assigned to AER-approved facilities (e.g., 12345678-00-00).
<b>BA code</b>	Business associate code—the unique four-digit code assigned to each corporate entity.
<b>brine</b>	Saline water displaced from a waste cavern.
<b>delivery</b>	The transfer of product or waste to an intended destination. The delivery of one facility is the receipt of the corresponding facility.
<b>disposition</b>	The sum of all deliveries.
<b>DOW</b>	Dangerous oilfield waste, as defined by <i>Directive 058: Oilfield Waste Management Requirements for the Upstream Petroleum Industry</i> .
<b>facility ID code</b>	Facility identifier code—a unique facility identification code, with 4 letters and 7 numbers (e.g., ABWP1234567), assigned by Petrinex to each facility.
<b>fluids</b>	The sum of both waste fluid [WASTE] and produced [WATER].
<b>hazardous</b>	See <a href="#">Waste Control Regulation</a> .
<b>new facility</b>	Operational status of a facility assigned by Petrinex that remains in effect until the first submission.
<b>non-DOW</b>	Non-dangerous oilfield waste as defined by <i>Directive 058</i> .
<b>non-hazardous</b>	See <i>Waste Control Regulation</i> .
<b>oilfield waste</b>	See <i>Oil and Gas Conservation Rules</i> , section 1.020(12.1).
<b>OWMF</b>	See <i>Oil and Gas Conservation Rules</i> , section 1.020(12.2).

<b>Petrinex</b>	Canada’s Petroleum Information Network ( <a href="http://www.Petrinex.ca">www.Petrinex.ca</a> ). Formally the Petroleum Registry of Alberta.
<b>processed waste</b>	Waste that has been subjected to any method, technique, or process designed to change the physical, chemical, or biological character or composition of a substance.
<b>product code</b>	AER product name, represented by a code.
<b>product group</b>	Combined waste composition of oil, water, or solids measured in m <sup>3</sup> within Petrinex.
<b>production month</b>	Reporting month for the waste plant submission with a submission deadline of approximately the 18th day of the following month for the previous reporting month. Submission deadlines are available on Petrinex website ( <a href="http://www.Petrinex.ca">www.Petrinex.ca</a> ) and are published on the reporting calendar.
<b>receipt</b>	Receipt of product or waste from another facility. The receipt of one facility is the disposition [DISP] of the corresponding facility.
<b>reporting code</b>	Code used to report receipts or dispositions based on the requirements of this directive.
<b>retired facility</b>	Operational status of a facility that is not required to report in Petrinex.
<b>SHUTIN</b>	A facility that is considered active but is not receiving or delivering materials for a given month.
<b>standalone facility</b>	As defined in <i>Directive 058</i> .
<b>suspended facility</b>	The cessation of normal production, operation, or injection activities at a facility in accordance with its AER-licensed use. The facility need not be rendered permanently incapable of its licensed use but must be left in a safe and stable state during this period of suspension, as prescribed by AER regulations and guidelines.
<b>UWI</b>	Unique well identifier—standard well identification used to define the approximate geographic location of the bottom of a drill hole and a specific drilling or producing event at the drill hole. The unique well identifier, although based on the legal survey position of a well, is primarily for identification rather than location. The location component describes the bottomhole location of the well, not the surface position of the well.
<b>waste code</b>	AER waste name, represented by a code (see appendix 2 of <i>Directive 058</i> ).
<b>waste composition</b>	The portion of each product group (i.e., oil, water, and solid) in a given waste stream as established by analysis of the waste.
<b>waste fluid</b>	An oilfield waste [WASTE].

## Appendix 2 Example of a Blank Waste Plant Submission

✉ ? 👤 ☎ ↔  
AB AB05 TOMMEE OIL & GAS LTD. username

Quick List Monthly Allowable Costs Infrastructure Ministry Invoices IOGC Reporting Admin Functions Audit

### Edit Waste Plant Submission

Facility Id: AB WP 0000590 Location: 01-36-030-26W4 Production Month: 2022-01  
Name: TOMMEE VALLEY CAVERN  
Reference Code:

Filters: From/To  Activity  Waste Code  Go

Del From/To	Activity	Waste Code	N/D	Oil	Water	Solids	Gas
P	INVOP			2.2	2.8	0.7	
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Add Validate Submit Cancel

## Appendix 3 Reporting Codes

### Reporting Codes

Reporting code	Description
ADMATT	Additives such as chemicals, sorbent materials, flocculants, etc. used within a Waste Plant to assist with oilfield waste management.
WASTE	Special waste code for a waste plant disposing to/receiving from another waste plant or injection facility.
BRKWTR	Saline Water/Brackish Water – TDS > 4000 ppm
FSHWTR	Nonsaline Water/Fresh water – TDS < 4000 ppm
MNFCTR	Manufacture
NONOFD	Imported oilfield waste and Alberta-generated non-oilfield waste (see <i>Directive 058</i> ).



## Appendix 4 Waste Plant Balancing and Missing Data Errors

A waste plant operator may submit a request for a facility balancing and missing data check for one or more OWMFs. The waste plant operator may request this function on a specific OWMF or all OWMFs at any time during the month. The facility balance is only done on OWMFs for which there have been submissions since the last AER filing deadline. This includes the current month and any amendments for previous months.

Petrinex automatically submits a balancing and data missing check each month two days before the AER filing deadline. This is the final notice of any outstanding errors or missing submissions prior to noncompliance consequences.

Two reports are produced and sent to the waste plant operator by email. The summary report summarizes the balance errors and missing data for the operator and includes the relevant error message. The detail report includes all details for an OWMF. These reports only include facilities that are in error; they do not include facilities that balance.

For error messages WPE0002 and WPE0003, a facility may receive several pending REC, DISP, and INVOP at one facility due to amended volumes not being accepted by the OWMF approval holder. In these situations, regardless of the number of occurrences, only one fee will be issued. For more details on error messages, contact Petrinex.

<b>Error number</b>	<b>Petrinex error message</b>	<b>Petrinex error description</b>	<b>AER error message</b>	<b>AER error descriptor</b>	<b>Fee</b>
WPE0001	Facility is missing  Facility Operational Status = Active or Suspended.	Facility has an 'active' operational status for the production month, and the required waste plant submission has not been made. 'Active' in this instance means 'active' or 'suspended.'	Facility is missing for the current month.	Facility has an 'active' or 'suspended' operational status for the current production month, and the required waste plant submission has not been made.	\$500.00 for missing facility report per facility.
WPE0002	Amendment is missing for a prior month  Pending activity with no submission [from/to] [waste code] [activity].	The operator of the facility that you delivered to/received from has amended the disposition/receipt volume at your facility, and you have not accepted the change (pending DISP/REC).	Amendment is missing for a prior month due to a change in DISP/REC volume.	The operator of the facility that you delivered to/received from has amended the disposition/receipt volume at your facility, and you have not accepted the change (pending DISP/REC).	\$100.00 for a pending activity per facility.

WPE0003	Amendment is missing for a prior month  Pending activity with no submission [activity].	The operator of the facility amends the closing inventory for a prior month. This resulted in a change to the next month's opening inventory, and you have not accepted the change (pending INVOP).	Amendment is missing for a prior month due to a change in inventory.	The operator of the facility amends the closing inventory for a prior month. This resulted in a change to the next months opening inventory, and you have not accepted the change (pending INVOP).	\$100.00 for a pending activity per facility.
WPE0004	Imbalance is other than 0.0 [OIL] IMBAL = [volume].	The facility is out of balance (i.e., the balance is not 0.0) for oil product group.	Imbalance cannot exist for the product oil.	The facility is out of balance (i.e., the balance is not 0.0) for the product group oil.	\$100.00 for a product group (oil) per facility.
WPE0005	Inventory adjustment exceeds tolerance [OIL] INVADJ = [percentage].	The facility has an inventory adjustment (INVADJ) for a particular product group that is greater than 10% of the total receipts (REC) for the same product group.	Inventory adjustment exceeds the 10% tolerance for oil.	The facility has an inventory adjustment (INVADJ) for the product group oil which is greater than 10% of the total receipts (REC) for the same product group.	\$100.00 for a product group (oil) per facility.
WPE0006	Imbalance is other than 0.0 [WATER] IMBAL = [volume].	The facility is out of balance (i.e., the balance is not 0.0) for water product group.	Imbalance cannot exist for the product water.	The facility is out of balance (i.e., the balance is not 0.0) for the product group water.	\$100.00 for a product group (water) per facility.
WPE0007	Imbalance is other than 0.0 [SOLID] IMBAL = [volume].	The facility is out of balance (i.e., the balance is not 0.0) for solid product group.	Imbalance cannot exist for the product solids.	The facility is out of balance (i.e., the balance is not 0.0) for the product group solids.	\$100.00 for a product group (solid) per facility.
WPE0008	Inventory adjustment exceeds tolerance [WATER] INVADJ = [percentage].	The facility has an inventory adjustment (INVADJ) for water product group which is greater than 10% of the total receipts (REC) for the same product group.	Inventory adjustment exceeds the 10% tolerance for water.	The facility has an inventory adjustment (INVADJ) for the product group water which is greater than 10% of the total receipts (REC) for the same product group.	\$100.00 for a product group (water) per facility.
WPE0009	Inventory adjustment exceeds tolerance [SOLID] INVADJ = [percentage].	The facility has an inventory adjustment (INVADJ) for solid product group which is greater than 10% of the total receipts (REC) for the same product group.	Inventory adjustment exceeds the 10% tolerance for solids.	The facility has an inventory adjustment (INVADJ) for product group solids which is greater than 10% of the total receipts (REC) for the same product group.	\$100.00 for a product group (solid) per facility.
WPE0010	Imbalance is other than 0.0 [GAS] IMBAL = [volume].	The facility is out of balance (i.e., the balance is not 0.0) for gas product group.	Imbalance cannot exist for the product gas.	The facility is out of balance (i.e., the balance is not 0.0) for product group gas.	\$100.00 for a product group

					(gas) per facility.
WPE0011	Facility is missing for prior month. Retroactive facility operational status change for prior month.	When facility status is changed from inactive to active for previous production months, submission is required.	Facility is missing for a prior month.	A retroactive change to the facility has changed the facility operational status to 'Active' and you have not submitted volumetric data for the production months that the facility is now active.	\$500.00 for the missing facility report per facility.
WPE0012	Pending DISP created at a suspended facility. Pending disposition to a Waste Plant [value] has been recorded at your suspended facility [value] for the production month [value]. A submission is required.	Receipt from a suspended facility.	Pending DISP created at a suspended facility.	A DISP has been reported at a suspended facility.	No charge for a pending activity per facility.

## Appendix 5 Sections of the Waste Plant Submission

**PETRINEX**  
CANADA'S PETROLEUM INFORMATION NETWORK

AB AB05 TOMMEE OIL & GAS LTD. username

Quick List Monthly Allowable Costs Infrastructure Ministry Invoices IOGC Reporting Admin Functions Audit

**Edit Waste Plant Submission**

Facility Id:  Production Month: 2022-01

Go

**Facility ID** or waste plant facility ID associated with the OWMF. When entered, it will be validated by user and facility type. Once the desired waste plant facility ID is selected, the system will populate the **Location** and **Name**.

**Production month** or reporting month is defaulted to the current AER production month and year. This field may be changed by overtyping the existing values.

**PETRINEX**  
CANADA'S PETROLEUM INFORMATION NETWORK

AB AB05 TOMMEE OIL & GAS LTD. username

Quick List Monthly Allowable Costs Infrastructure Ministry Invoices IOGC Reporting Admin Functions Audit

**Edit Waste Plant Submission**

Facility Id: AB WP 0000590 Location: 01-36-030-26W4 Production Month: 2022-01

Name: TOMMEE VALLEY CAVERN

Reference Code:

Filters: From/To Activity Waste Code

ALL ALL ALL

Go

**Reference code** is a user-entered code for a specific waste plant submission. The reference code may contain up to 16 characters.



- Quick List ▾
- Monthly ▾
- Allowable Costs ▾
- Infrastructure ▾
- Ministry Invoices
- IOGC Reporting ▾
- Admin Functions ▾
- Audit ▾

### Edit Waste Plant Submission

Facility Id: AB WP 0000590 Location: 01-36-030-26W4 Production Month: 2022-01  
 Name: TOMMEE VALLEY CAVERN  
 Reference Code:

Filters: From/To  Activity  Waste Code

Go

Del From/To	Activity	Waste Code	N/D Oil	Water	Solids	Gas
<input type="checkbox"/> P	INVOP		2.2	2.8	0.7	
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						
<input type="checkbox"/>						

Add Validate Submit Cancel

The following **Filters** can be applied:

**From/To:** Enables the OWMF approval holder to filter the displayed list of transactions by generating or disposition location. To filter an out-of-province well identifier, the identifier must be manually entered into the From/To filter field.

**Activity:** Enables the OWMF approval holder to filter the displayed list of transactions by activity type available to Waste Plant Reporting (see appendix 10).

**Waste Code:** Enables the OWMF approval holder to filter the displayed list of transactions by waste code or reporting code (see appendix 2 of *Directive 058*).

**Go:** Regenerates the list of transactions, displaying only those transactions that meet the filtration criteria selected.

**Del:** A checked box marks the transaction for deletion the next time **Submit** is selected.

**From/To** column is used to select an unlinked Petrinex well ID, a Petrinex facility, or a waste location. The ID can be obtained from the look-up list available on Petrinex or can be entered directly.

**Activity** column is used to select an activity (see appendix 10). The activity can be entered directly or obtained by using the look-up list.

**Waste Code** column is used to select the AER waste code or reporting code (see appendix 2 of *Directive 058*). The waste code can be entered directly or obtained by using the look-up list.

**N/D** column is used to identify the classification of the waste material received or delivered as either non-dangerous (or non-hazardous for non-oilfield wastes) or dangerous (or hazardous for non-oilfield wastes).

**Oil, Water, Solids** columns are used to enter the composition of the waste material received and the disposition of resulting wastes in cubic metres (m<sup>3</sup>) to one decimal place.

**Gas** column is used for reporting fuel gas, which is reported in thousands of cubic metres (10<sup>3</sup> m<sup>3</sup>) to one decimal place.


**Add:** Calls up a utility that allows the user to specify the number of new empty rows to add. These rows will be added to the end of the data on screen. The added rows exist only on the screen until a submit is done to physically create the rows in the reporting system.

**Validate:** Performs a full validation of the data. If there are no errors, first-page data will be displayed; if there are errors, the errors will be displayed at the top of the data section.

**Submit:** A full validation is performed on the data, and the complete list of errors (or success) is displayed. Any errors are displayed at the top or the data section. Rows selected for deletion will be deleted, any error-free rows are saved and any rows with errors are not saved to Petrinex, any empty Added rows are not saved to Petrinex, any previous Petrinex submission is saved off to an amendment history table and the current submission is saved with an incremented number, and the screen is refreshed showing a standardized message.

**Cancel:** The user is warned of any unsubmitted changes, if any, and can be stopped at this point.

## Appendix 6 Example of a Completed Waste Plant Submission



**AB** AB05 TOMMEE OIL & GAS LTD.

username

✉ ? 👤 📞 ↔

Quick List Monthly Allowable Costs Infrastructure Ministry Invoices IOGC Reporting Admin Functions Audit

### Edit Waste Plant Submission

Facility Id: AB WP 0000550    Location: 02-36-030-26W4    Production Month: 2022-01  
 Name: TOMMEE VALLEY WASTE  
 Reference Code:

Filters: From/To     Activity     Waste Code 
**Go**

Del From/To	Activity	Waste Code	N/D	Oil	Water	Solids	Gas
<input checked="" type="checkbox"/> AB BT 0003574	REC	GAS		0.0	0.0	0.0	10.0
<input checked="" type="checkbox"/> AB TM 0000555	DISP	OIL		60.0	0.0	0.0	0.0
<input checked="" type="checkbox"/> AB WP 0000590	DISP	WASTE		0.0	0.0	0.2	0.0
<input type="checkbox"/> AB BT 0003575	REC	COEMUL	N	20.0	10.0	0.2	
<input type="checkbox"/> AB WI 100092403404W40	REC	SLGHYD	D	30.0	20.0	15.0	
<input type="checkbox"/> AB WL 0100670	REC	FRFLDH	N	10.0	3.0	0.1	
<input type="checkbox"/> AB IF 0007397	DISP	WATER			100.0		
<input type="checkbox"/>	FUEL				83.0		10.0
<input checked="" type="checkbox"/>	INVOP				16.0	90.0	
<input type="checkbox"/>	INVCL					105.1	

Add Validate Submit Cancel

## Appendix 7 Waste Plant Submission Autopopulation (Waste Plant 1)

Activity	From/to	Waste/reporting code	N/D	Oil (m <sup>3</sup> )	Water (m <sup>3</sup> )	Solid (m <sup>3</sup> )	Gas (10 <sup>3</sup> m <sup>3</sup> )	Comment
REC	BT, CT, GS, GP, GT, IF, OS, PL, TM, WI, WL (generator), WP, and WS	Approved waste code	Appropriate classification	yes	yes	yes	no	The waste plant will autopopulate to the facilities following the autopopulation rules outlined in D007.
REC	BT, GS, GP, MS	BLANK	Not required	no	no	no	yes	The BT, GS, GP, MS will autopopulate to the waste plant.
REC	MC, CO, IN	BLANK	Not required	no	no	no	yes	
REC	RF, out-of-province WI (BCWI, SKWI, NTWI, YTWI)	NONOFD	Appropriate classification	yes	yes	yes	no	No autopopulation functionality.
DISP	Waste plant (2)	WASTE	Not required	yes	yes	yes	no	Waste plant (2) will autopopulate to waste plant (1).
DISP	IF	WASTE, WATER, or BRKWTR,	Not required	yes	yes	yes	no	The waste plant will autopopulate the IF.
DISP	WL (receiver)	WASTE, WATER, BRKWTR, or MNFCTR	Not required	yes	yes	yes	no	The waste plant will autopopulate the WL (receiver).
DISP	CT, TM, PL	BLANK	Not required	yes	yes	no	no	The CT, TM, PL will autopopulate to the waste plant.



## Appendix 8 Request Waste Plant Non-Compliance Error Report

The screenshot shows the PETRINEX web application interface. At the top left is the PETRINEX logo with the tagline 'CANADA'S PETROLEUM INFORMATION NETWORK'. To the right of the logo are navigation icons for mail, help, user profile, and refresh. Below these is the user information: 'AB' and 'AB05 TOMMEE OIL & GAS LTD.' followed by a user icon and the text 'username'. A dark blue navigation bar contains several menu items: 'Quick List', 'Monthly', 'Allowable Costs', 'Infrastructure', 'Ministry Invoices', 'IOGC Reporting', 'Admin Functions', and 'Audit'. Below the navigation bar is the title 'Request Waste Plant Non-Compliance Error Report'. The main content area includes a 'Facilities' section with three radio buttons: 'All Operated', 'All Current User Assigned' (which is selected), and 'Use List'. Below the radio buttons is a large empty rectangular box with a vertical scrollbar. Underneath this box are two buttons: 'Add Facility' and 'Delete'. The 'Report' section has two radio buttons: 'PDF' and 'CSV'. Below these are two checkboxes: 'Exclude Warnings Prior to Last Extract' (which is checked) and 'Exclude errors between 2009-03 to 2010-02'. At the bottom of the form are two buttons: 'Submit' and 'Cancel'.

If all OWMFs are to be analyzed, select the All Operated button; if only specific OWMFs are to be analyzed, select the User List button to narrow the review.

When using the User List, use Add Facility to select the desired OWMF approval for review.

This report will be generated automatically as an Auto-Created Warning and Auto-Created Final report (submitter will receive a notification and the report will be placed in the BA inbox).

Note: These reports will only show the OWMFs that have an associated error; they will not report a balanced OWMF.

The waste plant submission for a particular facility and production month will be totalled at the activity and waste product group level. These totals will then be used to balance the facility. The balancing for each facility will be done at the waste product group level. Any difference for the waste product group is referred to as an imbalance. If any of the waste product groups is out of balance, the whole facility will be considered out of balance.

## Appendix 9 Waste Plant Submission Summary and Facility Activity View

### Summary View

**PETRINEX**  
CANADA'S PETROLEUM INFORMATION NETWORK

AB AB05 TOMMEE OIL & GAS LTD. username

Quick List Monthly Allowable Costs Infrastructure Ministry Invoices IOGC Reporting Admin Functions Audit

#### Query Waste Plant Submission

Facility Id: AB WP 0000550 Location: 02-36-030-26W4 Production Month: 2022-01

Name: TOMMEE VALLEY WASTE Amendment #: Submitted: 2022-02-19 09:43

Reference Code: AER Extracted: 2022-02-21 19:10

View: Summary Product Group: Water

Balancing Activity	Volume
IMBAL	0.0

Product Totals: Water

Activity	Volume
DISP	100.0
INVCL	16.0
INVOP	83.0
REC	33.0

Cancel

### Facility Activity View



AB AB05 TOMMEE OIL & GAS LTD. username

- Quick List ▾
- Monthly ▾
- Allowable Costs ▾
- Infrastructure ▾
- Ministry Invoices
- IOGC Reporting ▾
- Admin Functions ▾
- Audit ▾

### Query Waste Plant Submission

Facility Id:  Location: 02-36-030-26W4 Production Month:  < >  
 Name: TOMMEE VALLEY WASTE Amendment #:  < >  
 Reference Code: Submitted: 2022-02-19 09:43  
 AER Extracted: 2022-02-21 19:10

View:  ▾  
 Filters: From/To  Activity  Waste Code

Go

From/To	Activity	Waste Code	N/D	Oil	Water	Solids	Gas
AB BT 0003575	REC	COEMUL	N	20.0	10.0	0.2	
AB WL 0100670	REC	FRFLDH	N	10.0	3.0	0.1	
AB WI 100092403404W400	REC	SLGHYD	D	30.0	20.0	15.0	
AB BT 0003574	REC	GAS					10.0
AB F 0007397	DISP	WATER			100.0		
AB WL 0108287	DISP	OIL		10.0	3.0	100.0	
AB WP 0000590	DISP	WASTE		60.0			
AB TM 0000555	INVOP						90.0
	FUEL				16.0	5.3	
					30.0		

Cancel

## Appendix 10 Miscellaneous/Province/State Codes

<b>Province type code</b>	<b>Name</b>	<b>Description</b>	<b>Products/reporting codes allowed</b>
AB CO	Commercial	The OWMF approval holder may enter ABCO when GAS is received from a non-Petrinex reporting facility gas source.	Gas
AB IN	Industrial	The OWMF approval holder may enter ABIN when GAS is received from a non-Petrinex reporting facility gas source.	Gas
AB MC	Miscellaneous	An OWMF approval holder may use ABMC when the gas is received from a source not identifiable by another code.	Gas
AB RO	Run-off	An OWMF approval holder may use ABRO for the receipt of surface runoff water (e.g., from rain or melted snow) generated on site.	FSHWTR, CWATER

## Appendix 11 Activity Type List

Activity code	Activity name	Description	Reporting code	Volume column	Manual or autocreated	From/to facility type
DISP	Disposition		[WASTE], [WATER], [BRKWTR], or [FSHWTR]	Oil, water, and solid	Manual or autopopulated activity	IF
DISP	Disposition		[WASTE], [WATER], [BRKWTR], [FSHWTR] or [MNFCTR]	Oil, water, and solid	Manual or autopopulated activity	WL (receiver)
FUEL	Fuel	An approval holder will enter FUEL to report volume of gas used for fuel at the OWMF.	Blank	Gas	Manual activity	None allowed
IMBAL	Imbalance	Petrinex will enter IMBAL and the imbalance volume to report the difference in measurement between the OWMF inlet (receipts and opening inventory) and deliveries (dispositions, closing inventory, and inventory adjustment).	Blank	Oil, water, and solid	Autocreated activity	None allowed
INVADJ	Inventory adjustment	The OWMF approval holder will enter INVADJ to report gains and losses that cannot be identified by a specific activity and/or production month. If the approval holder knows the cause of the gain or loss, an amendment must be filed.	Blank	Oil, water, and solid	Manual activity	None allowed
INVCL	Closing inventory closing	The OWMF approval holder will enter INVCL to report the volume held in inventory at the end of the production month. Closing inventory is the total of all oilfield waste materials remaining on site. Petrinex will deem the reported closing inventory as the next month's opening inventory.	Blank	Oil, water, and solid	Manual activity	None allowed

INVOP	Opening inventory	Petrinex will autopopulate INVOP volume for each product (e.g., oil, water, solid) using the previous month's closing inventory. To correct an opening inventory volume, the approval holder must submit an amendment for the previous month's closing inventory.	Blank	Oil, water, and solid	Autogenerated activity	None allowed
REC	Receipt	An OWMF approval holder will enter REC to report a receipt of oilfield or non-oilfield wastes using the appropriate AER waste codes or reporting codes. When an OWMF approval holder enters a REC code, it must also enter the unique well identifier, facility ID, or waste location ID of the delivering location.	All waste codes (blank not valid)	Oil, water, solid, and gas	Manual or autopopulated activity (only gas is autopopulated)	See appendix 7
SHUTIN	Shut-in	An OWMF approval holder will enter SHUTIN when a facility has no inventory.	Blank	None allowed	Manual activity	None allowed

## Appendix 12 Waste Location ID Screen for Non-oilfield Waste and Non-AER-Regulated Facilities

**PETRINEX**  
CANADA'S PETROLEUM INFORMATION NETWORK

AB AB05 TOMMEE OIL & GAS LTD. username

Quick List Monthly Allowable Costs Infrastructure Ministry Invoices IOGC Reporting Admin Functions Audit

### Request Waste Location ID

Waste Location ID: \_\_\_\_\_ Start Date: 2022-09 < >  
End Date: \_\_\_\_\_

Name: \_\_\_\_\_  
Description: \_\_\_\_\_  
Approval Number: \_\_\_\_\_

*Location/Address is the physical location the waste is generated at or disposed to. It should not be the company head office.*

AB Location: LE LSD SEC TWP RGE M W  
Non AB Location: \_\_\_\_\_  
Status: Active  
Address: \_\_\_\_\_  
City: \_\_\_\_\_  
Province: Alberta  
Postal Code: \_\_\_\_\_

**Submit**

When the Request Waste Location ID screen is initially entered, all fields are set to blank except for

- Start Date – defaults to current Petrinex production month but can be set to a prior month as well. The start date cannot be set for a production month past the current production month.
- Status – defaults to ‘Active’
- Province – defaults to ‘Alberta’

For OWMF approval holders, the possible selection for the field ‘province’ includes Alberta, Saskatchewan, British Columbia, Yukon, and the Northwest Territories. Regardless of the province selected, the generated Waste Location ID will begin with AB.

At least one AB Location, Non AB Location, or Address must be entered. More than one is allowed.

The system will look for the name, location, type, and address entered to determine whether the Waste Location already exists in Petrinex. This is in attempt to avoid creating duplicate Waste Locations within Petrinex.

If an OWMF approval holder requests a Waste Location Report, all Receiver Waste Location IDs will be reported regardless of the creator and only the Generator Waste Location IDs created by the requesting BA can be reported. This report is scheduled to run during the day.

The screenshot shows the PETRINEX web application interface. At the top left is the logo for PETRINEX, CANADA'S PETROLEUM INFORMATION NETWORK. To the right of the logo are navigation icons for mail, help, user profile, phone, and refresh. Below the logo, the user's location is shown as 'AB' and the company as 'AB05 TOMMEE OIL & GAS LTD.' with a user profile icon and the text 'username'. A dark blue navigation bar contains several menu items: 'Quick List', 'Monthly', 'Allowable Costs', 'Infrastructure', 'Ministry Invoices', 'IOGC Reporting', 'Admin Functions', and 'Audit'. Below the navigation bar is the 'Submit Report Request' section. It features a 'Report:' dropdown menu with 'Waste Location Report' selected and a 'Go' button. Below this are two radio button options: 'Waste Location Identifiers: All' (selected) and 'List'. To the right of these is a scrollable list box. Below that are two radio button options: 'Facility Operational Status: All' (selected) and 'Select'. To the right of these is a scrollable list box containing the following options: 'ABANDONED', 'ACTIVE', 'CANCELLED', 'NEW', and 'NON-REPORTING'. Below the status options is an 'As of Date:' label with a '(yyyy-mm):' format and a text input field containing '2023-03'. Below the date field are three radio button options for 'Report Format': 'PDF' (selected), 'XML', and 'CSV'. A note below the format options states: 'Note: This report will be queued for processing. You will receive an e-mail notification when the report is ready.' At the bottom of the form are three buttons: 'Submit', 'Cancel', and 'Save'.



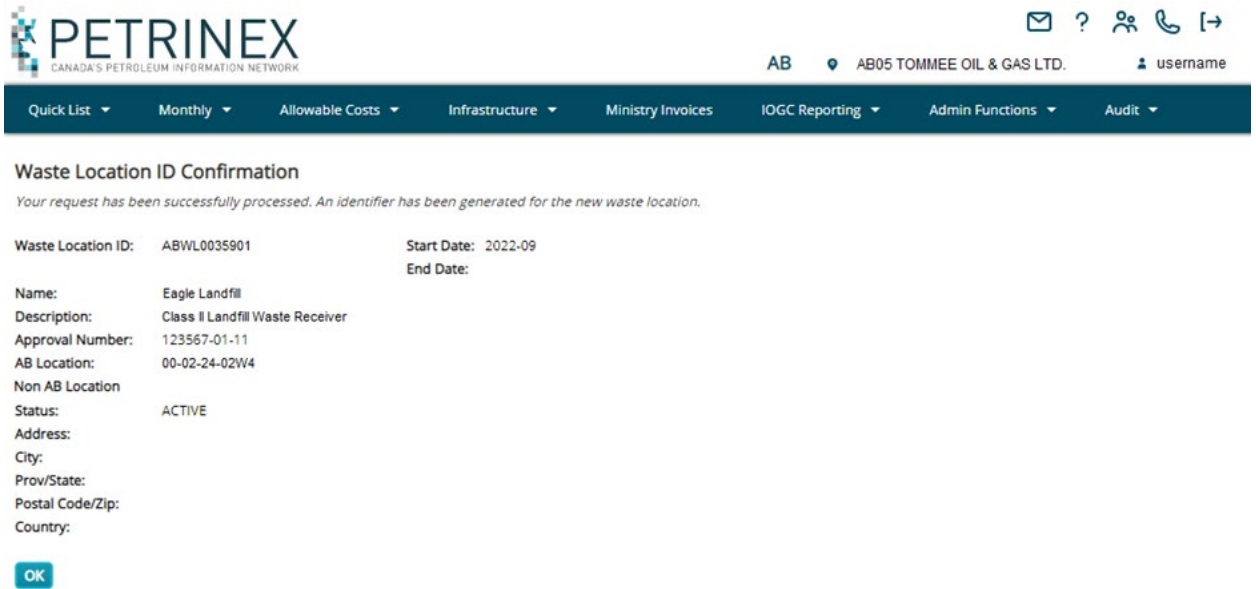
## Appendix 13 Partial List of Waste Location Descriptions

Disposition to a receiver	Receipt from a generator
Biodegradation Facility Receiver	Car Wash Sump Generator
Cavern Receiver	Class I Landfill Generator
Class 1a Disposal Well Receiver	Class II Landfill Generator
Class 1b Disposal Well Receiver	Class III Landfill Generator
Class I Landfill Receiver	Exploration and Production Generator
Class II Disposal Well Receiver	Gas/Service Station Generator
Class II Landfill Receiver	Industrial/Commercial Waste Generator
Class III Landfill Receiver	Manufacture Waste Generator
Manufacture Waste Receiver	Oil/Gas Service Company Generator
Oilfield Waste Processing Facility Receiver	Oilfield Waste Processing Facility Generator
Recycling Facility Waste Receiver	Recycling Facility Waste Generator
Refinery Waste Receiver	Refinery Waste Generator
Storage Facility Waste Receiver	Storage Facility Waste Generator
Swan Hill Facility Receiver	Tank/Truck Wash Generator
Thermal Treatment Receiver	Transfer Station Waste Generator
Transfer Station Waste Receiver	Used Oil Recycling Waste Generator
Used Oil Recycling Waste Receiver	Utility Waste Generator

### Notes:

- As waste location IDs are created, they will be added to the list established in Petrinex. Waste locations created for non-AER-regulated generators are confidential to the OWMF approval holder that created it. Those waste locations created for non-AER-regulated waste receivers are viewable and available to all approval holders.
- Disposition is to a receiver; Receipt is from a generator.

## Appendix 14 Waste Location ID Screen Confirmation



**PETRINEX**  
CANADA'S PETROLEUM INFORMATION NETWORK

AB AB05 TOMMEE OIL & GAS LTD. username

Quick List Monthly Allowable Costs Infrastructure Ministry Invoices IOGC Reporting Admin Functions Audit

### Waste Location ID Confirmation

Your request has been successfully processed. An identifier has been generated for the new waste location.

Waste Location ID:	ABWL0035901	Start Date:	2022-09
		End Date:	
Name:	Eagle Landfill		
Description:	Class II Landfill Waste Receiver		
Approval Number:	123567-01-11		
AB Location:	00-02-24-02W4		
Non AB Location			
Status:	ACTIVE		
Address:			
City:			
Prov/State:			
Postal Code/Zip:			
Country:			

OK

## Appendix 15 Cavern Reporting Facility Subtype Conversion Instructions

### Surface Facilities Associated with a Cavern Reporting

- 0) The approval holder is to complete the Cavern Well Status Change Request form (below) and forward it to the AER. Should a 702 for each cavern not exist, the approval holder is required to obtain one (ABWP subtype 702) and complete it before moving to subsequent steps. (Please forward it to the AER one to two days before the transition).
- 1) The AER is to acquire data before proceeding to subsequent steps. Once complete, the AER is to contact the approval holder to proceed.
- 2) The approval holder is to acquire data for all months (March 2009 to present) before a data switch from 503 to 702 (maintain a subset of data before zeroing out the volumetric data).
- 3) The approval holder is to delete or remove volumetric information at the applicable well level.
- 4) The approval holder is to contact the AER to have the well status changed to “Waste NA Cavern NA” based on the information provided in the Cavern Well Status Change Request.
- 5) The AER is to inform the approval holder when the well status change has been completed.
- 6) The approval holder is to resubmit the ABIF, reporting it as “SHUTIN.”
- 7) The approval holder is to show the receipts at a corresponding 701 WP facility instead of the former 503 (it is possible that the approval holder accounted for the receipts at the 701 but then reported to the 503 as required and the closing inventory recorded at the 702 as required).
- 8) The approval holder is to show receipts under the 702 WP facility from the 701 and closing inventory to balance.
- 9) The approval holder is to inform the AER when the above is complete.

## Cavern Well Status Change Request Form

Month	Day	Year

### 1. Contact Information

Company name: \_\_\_\_\_ Company BA code: \_\_\_\_\_

Contact name: \_\_\_\_\_

Telephone: \_\_\_\_\_ Email address: \_\_\_\_\_

### 2. Injection/Disposal Facility

Well surface location

LE	LSD	SEC	TWP	RGE	M

Bottomhole location

LE	LSD	SEC	TWP	RGE	M

Former 503 facility ID: \_\_\_\_\_ Licence no.: \_\_\_\_\_

### 3. Surface Waste Facility

701 location:

LE	LSD	SEC	TWP	RGE	M

701 facility ID: \_\_\_\_\_

### 4. Cavern Waste Facility

702 location:

LE	LSD	SEC	TWP	RGE	M

702 facility ID: \_\_\_\_\_

### 5. Status

Old status of the 503 to be changed: \_\_\_\_\_

New status: **Status fluid:** WASTE **Status mode:** N/A **Status type:** CAVERN **Status structure:** N/A

Well status change effective date: \_\_\_\_\_

Once complete, please email the completed form to AER [PA.Help@aer.ca](mailto:PA.Help@aer.ca).