



Waste Plant Submissions

Ministry of Economy

Directive R01 – Petrinex Reporting

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Record of Change

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0.1	July 4, 2014	Charene Kozak	Change logo, add “Ministry of Economy” to cover page and standardize format.
0.2	March 10, 2015	Charene Kozak	Change chapter number to match website numbering.
0.3	May 12, 2015	Alison Dolter	Changes to Facility Subtypes due to the implementation of <i>Directive PNG 017</i> .

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6 Waste Plant Reporting

Operators of waste processing facilities (WP) approved by the Ministry are required to report monthly information to Petrinex (Waste Plant Submissions). Petrinex reporting replaces the reporting previously done on the S-700 Waste/Plant Reclaimers report and the ER61R Recovered Crude Oil Disposition (RCO) report.

WP operators are required to measure/estimate the volume of oil contained in any waste receipts and report those volumes on Petrinex. The entry of a receipt by the WP will auto-populate a disposition at the source (delivering) facility, if that source facility is a Ministry regulated facility, and has a valid facility ID on Petrinex. The source (delivering) facilities will be responsible for including that oil as part of the well production volumes and also for the payment of royalty/tax on those volumes, and therefore the WP operator will not be assessed Recovered Crude Oil (RCO) Tax on the volumes of oil allocated back to source.

The Ministry will monitor volumetric activity at the WP and may apply the Recovered Crude Oil (RCO) Tax in situations where it is determined that the volume of produced oil allocated back to source facilities does not adequately represent the volume of oil disposed of from the Waste Plant.

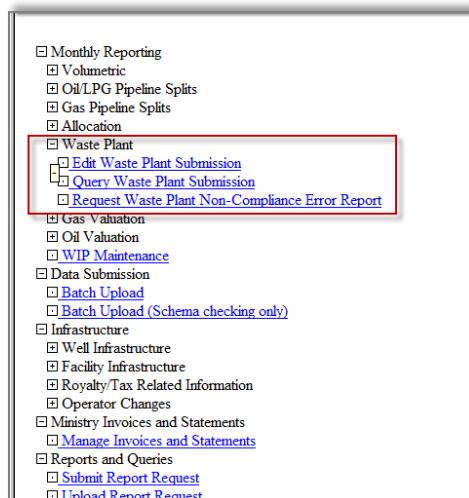
The information submitted through the Waste Plant Submission will auto-populate to other Petrinex facilities. Therefore, valid locations, facility IDs (e.g., SKBT), unique well identifiers (e.g., unlinked well ID), BA codes, and waste codes and reporting codes must be used for successful acceptance of a Waste Plant Submission by Petrinex. See Appendix 13 for a list of available waste codes and reporting codes.

6.1 Waste Plant Submissions

Waste Plant Submissions to Petrinex may be entered directly online or through batch upload files (i.e., CSV or XML). For batch submission see Petrinex Upload Specifications located at <http://www.petrinex.ca/140.asp>.

6.1.1 Online Waste Plant Submissions

On-line Waste Plant Submissions are input through the Waste Plant module, a separate module from the Volumetric Monthly Reporting module most other facilities report to on the Petrinex, see screen shot below.



6.1.2 Edit Waste Plant Submission

On the initial Edit Waste Plant Submission screen the WP's facility ID must be entered, with the production month defaulting to the current production month. The facility ID can either be entered directly or can be found using the facility lookup, only the waste plants operated by the Business Associate (BA) will be available for editing. To set a new WP facility code on Petrinex, see Directive Section 5: Facility Information.

WP operators are to submit all transactions between the WP and other facilities in a given month, certain transactions will be auto-populated from reporting at other facilities (see Pending Transactions) or auto-populated when Petrinex processes are run (e.g. opening inventories).

Each transaction at a WP must identify the following:

- From/To;
- Activity;
- Waste Code;
- Classification (dangerous/hazardous or non-dangerous/non-hazardous); and,
- Composition (oil, water, solid, and gas or a combination thereof).

The Reference Code is an optional user-entered code for a specific Waste Plant Submission. The reference code may contain up to 16 characters.

Del	From/To	Activity	Waste Code	N/D Oil	Water	Solids	Gas
P		INVOP		27.0	230.0	25.0	

6.2 Waste Plant Inventory

Petrinex will maintain a monthly opening inventory for each WP. At the Ministry filing deadline, Petrinex will roll over all closing inventory [INVCL] volumes at the WP to auto-populate the opening inventory [INVOP] in the following month (see screenshot on previous page).

6.2.1 Amending an Opening Inventory

The WP operator cannot directly enter or edit the opening inventory activity by Petrinex. To change the opening inventory [INVOP] in a given month requires the WP operator to amend a previous month and change the closing inventory volume [INVCL]. Once submitted Petrinex auto-populates a pending waste plant submission, changing the opening inventory [INVOP] volume for the subsequent month.

6.2.2 Opening Inventory No Activity

If a WP 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.

If a WP is “active” and there are no receipts, dispositions, or inventory to be reported for the month, the waste plant operator must report a SHUTIN activity.

6.3 Receipts, Dispositions, and Auto-population

Certain rules surrounding Petrinex reporting of receipts, dispositions and auto-population at a Waste Plant may differ from the rules for Volumetric reporting at other facility sub-types.

6.3.1 Receipts at a Waste Plant

Except for gas, materials received at a WP must be reported as receipts [REC] on the Waste Plant Submission. The entry of a receipt [REC] at a WP will auto-populate a corresponding disposition [DISP] at the source facility, if that facility is Ministry-regulated and has valid Facility code on Petrinex. See Appendix 14: Waste Plant Submission Auto-Population.

Gas received at a WP from the following Ministry-regulated (or Alberta equivalent) facilities: SKBT; SKGS; SKGP; or SKMS will be auto-populated at the WP from the disposition [DISP] reported by the delivering facility.

Gas received at a WP from the following non-Ministry regulated facilities: SKCO; SKMC; or SKIN, will need to be entered as a [REC] on the WP Submission, as it is as a one-sided transaction.

6.3.2 Waste Plant to Waste Plant

When a WP delivers material to another WP, Petrinex will auto-populate the disposition [DISP] on the Waste Plant Submission of the delivering WP based on the receipt [REC] reported by the receiving WP.

6.3.3 Deliveries from a Waste Plant

Materials delivered from a WP must be reported as dispositions [DISP] on the Waste Plant Submission, with the exception of delivery to a custom treating facility (CT), pipeline (PL), or terminal (TM). See Appendix 16: Activity Type.

The WP can only report dispositions [DISP] to a SK (or AB) Injection facility (IF), or a Saskatchewan Waste Location (WL) (Receiver).

WP deliveries [DISP] to a SKCT, SKPL, or SKTM (or Alberta equivalent) will be auto-populated at the WP based on the receipts reported [REC] at the CT, PL, or TM.

6.3.4 WP Deliveries to an Injection Facility

When a WP delivers material to an injection facility (IF) for a disposal well, Petrinex will auto-populate the receipt [REC] of materials at the IF based on the disposition [DISP] reported at the WP.

See Figure 1 on the next page for additional auto-population scenarios.

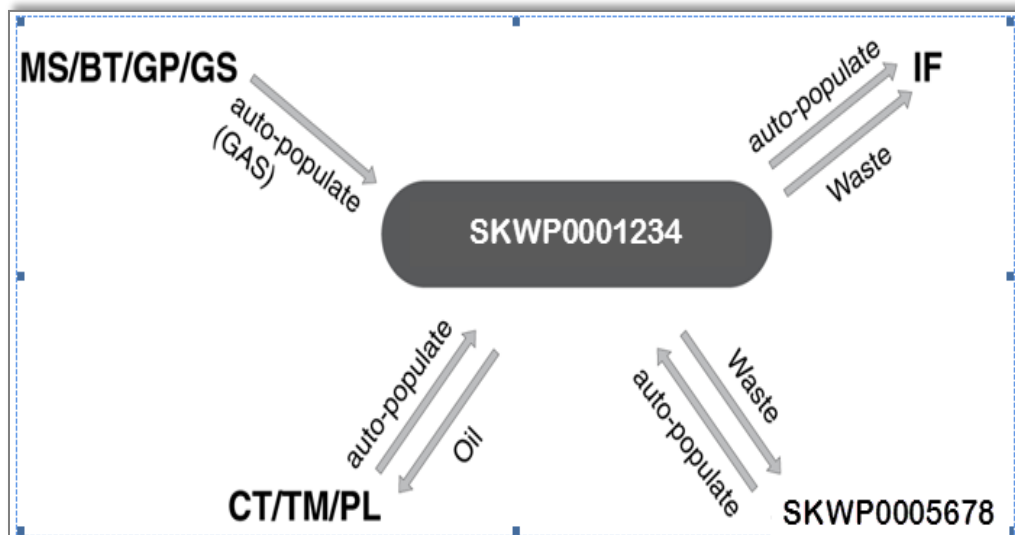


Figure 1. Possible auto-population scenarios for a Waste Plant Submission by SKWP0001234

6.3.5 Pending Transactions

Petrinex will flag the facility as pending (“P”) when it auto-populates the receipt [REC] or disposition [DISP] volumes. Pending transactions are not part of a submission until the WP operator “accepts” the pending dispositions or receipts, even if the WP operator has completed its submission and is only waiting for the auto-populated volumes.

The WP operator must ensure that the auto-populated volumes are accepted and become part of its facility submission.

6.3.6 Modifying Auto-Populated Volumes

A WP operator cannot modify volumes that have been auto-populated based on another facility operator’s submission.

If a WP operator disagrees with a volume that has been auto-populated, it must contact the receiving or disposing facility operator that created the auto-populated volume and request a correction of the volume.

6.4 Waste Plant Balancing and Non-Compliance Reports

Petrinex runs a system process that balances the waste plant, calculates activities (e.g., [REC], [DISP]), and totals individual activities, based on the algorithms below, each time the WP operator submits a WP query, a batch upload or an on-line Waste Plant Submission.

For OIL, WATER, or SOLIDS:

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

For GAS:

$$\text{IMBAL} = \text{total REC} - \text{total FUEL} - \text{total FLARE} - \text{total VENT}$$

The WP operator will receive an on-line notification if balancing issues exist. The WP operator may run the Request Waste Plant Non-Compliance Error Report for any facility for which it submits data prior to the submission deadline; this report may be requested as frequently as necessary by the waste plant operator or person who has been given authorized access.

Petrinex will automatically run a Ministry non-compliance error report on all facilities two days before and on the filing deadline date.

The Ministry recommends that the waste plant operator use the Request Waste Plant Non-Compliance Error Report and make any necessary corrections/amendments in order to avoid non-compliance fees (see Section 14 on Non-Compliance).

6.5 Query Waste Plant Submission Screens

6.5.1 Summary View Screen

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.

Query Waste Plant Submission

Facility Id: **Location:** 15-01-001-01 W3 **Production Month:**

Name: SASK WASTE PLANT #1 **Amendment #:**

Reference Code: **Submitted:** 2012-03-27 15:02 **Extracted:**

View:

Product Group:

WPE0004 Message: Imbalance is other than 0.0. Detail: [OIL] IMBAL = [-259.0].
WPE0006 Message: Imbalance is other than 0.0. Detail: [WATER] IMBAL = [415.0].
WPE0007 Message: Imbalance is other than 0.0. Detail: [SOLIDS] IMBAL = [12.0].
WPE0010 Message: Imbalance is other than 0.0. Detail: [GAS] IMBAL = [100.0].

Balancing Activity	Volume
IMBAL	-259.0
Product Totals: Oil	
Activity	Volume
DISP	350.0
INVOP	26.0
REC	65.0

The summary screen is display only, and data found on it cannot be edited. To change any values on this screen, the waste plant operator must change the facility details used in the balancing calculations.

Note: The waste plant operator will never be able to enter the opening inventory activity or change a volume that was auto-populated by Petrinex.

The waste plant operator 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 WP.

Petrinex will also compare the total volume of each specific product (i.e., oil, water, or solid) received [REC] and total adjustment [INVADJ] reported for each. If the total [INVADJ] is greater than 10 per cent of the total [REC] for a product, an error message is displayed in the Ministry Waste Non-compliance Report.

6.5.2 Facility Activity View Screen

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,FLARE,VENT),
- Waste Code,
- Classification (e.g., DOW, non-DOW), and
- Product Group (e.g., oil, water, solid, gas).

[Monthly Reporting] > [Waste Plant]

Query Waste Plant Submission

Facility Id: Location: 15-01-001-01 W3 Production Month:

Name: SASK WASTE PLANT #1 Amendment #:

Reference Code: Submitted: 2012-03-27 15:02

View:

Filters: From/To Activity Waste Code

From/To	Activity	Waste Code	N/D	Oil	Water	Solids	Gas
SK BT G203960	REC						100.0
SK BT B2H0056	REC	SLGHYD	N	65.0			
SK WP V100005	REC	WASTE	N		200.0	100.0	
SK CT C100008	DISP			200.0			
SK CT C200010	DISP			50.0			
SK CT C200013	DISP			100.0			
SK WL 0001726	DISP	WASTE			10.0	100.0	
	INVOP			26.0	225.0	12.0	

6.6 Oilfield and Non-Oilfield Waste Receipts and Dispositions

In order for the Waste Plant Submission to be considered complete, WP operators must ensure that it contains the waste receipts [REC] (oilfield and non-oilfield) and dispositions [DISP] (to Ministry and non-Ministry-regulated facilities) information identified below.

The information may be submitted by using on-line screens or batch up-load files, by auto-population from Petrinex, or by a combination thereof.

a) From/To:

Receipts [REC] at a WP must include the facility ID of the site that generated the oilfield waste being received. Allowable facility IDs include:

- Valid SK (or AB) facility ID's (BT, CT, GS, GP, IF, OS, PL, TM, WP, RF, WS);
- Valid unlinked SK (or AB) well ID's;
- Unlinked well ID's from out-of-province (MBWI, NTWI, NDWI, MTWI) may be entered but will not be validated;
- Waste Location (WL) Generator IDs, created through Petrinex to report the receipt of non-oilfield waste to a non-Ministry-regulated facility (*see Section 7.9: Waste Locations*).

Dispositions [DISP] from the WP must include the facility ID to which the material is being delivered to. Allowable facility IDs include:

- Valid SK (or AB) facility ID's (CT, TM, PL, WP, IF); and
- Waste Location (WL) Generator IDs, created through Petrinex to report the receipt of non-oilfield waste to a non-Ministry-regulated facility (*see Section 7.9: Waste Locations*).

Petrinex infrastructure reports (e.g., Well Infrastructure, Facility Infrastructure) may be used to assist in the determination of valid SK (and AB) facility and well IDs. Facility IDs are associated with surface locations and unlinked well IDs are associated with the bottomhole location.

b) Activity:

The receipt of oilfield and non-oilfield waste must be recorded as [REC] and disposition of oilfield waste must be recorded as [DISP].

Exception: To facilitate cross-border reporting between Alberta and Saskatchewan facilities Alberta WP's are provided a window of time prior to the Alberta Volumetric deadline where an Alberta facility can report receipt and disposition activity which is usually invalid. During the cross-border window an AB WP can report a disposition [DISP] of WASTE to a Saskatchewan WP, auto-populating a pending receipt [REC] at the SK WP.

c) Waste Codes:

Petrinex contains an extensive list of waste codes which can be used by Industry to report the receipt of oilfield waste at the WP. (See Appendix 13 for a complete listing of the waste codes and reporting codes)

Table 6. The list of waste codes available in Petrinex is based on the waste code list used for Waste Plant reporting in Alberta. This will accommodate cross-border transactions, and allow Industry to standardize reporting between jurisdictions or other regulatory bodies.

Table 7. While the Ministry does not require Industry to report to the level of detail that would be attainable by use of the entire list of the waste codes, Industry must report to a level of detail consistent with the Waste Plant Approval issued by the Ministry.

In the future, the Ministry may deem the reporting of certain waste codes as necessary. If so, updated reporting requirements will be communicated to Industry at that time.

Non-Oil Field Wastes

[NONOFD] reporting code must be used to report the receipt of non-oilfield waste.

- The receipt of non-oilfield wastes must be authorized by the WP approval, and only the specific types of non-oilfield wastes listed in the approval can be received at a WP. Non-oilfield wastes include waste generated by sites within Saskatchewan that are not licensed or regulated by the Ministry, received at a WP.
- Waste generated by a refinery is considered non-oilfield waste and must be reported using the appropriate reporting code [NONOFD].

[WASTE] must be used to report dispositions of either water or solid (with small amounts of oil) from the WP. For dispositions of oil (with small amounts of water), the waste code column must be left blank.

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. A Waste Location (WL) ID must be created when reporting [DISP] of [MNFCTR].

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

The waste plant operator must also use appropriate waste codes or reporting codes for fluids being accepted for management (e.g., [WATER], [FSHWTR]) and/or accepted for processing of previously received wastes/materials. The appropriate waste codes or reporting codes for the disposition [DISP] of materials must also be used.

Note that there are different types of water source IDs (WT, WS, and RO) and they differ according to the sources of water:

- Water Source (WT) facility subtype 907 (fresh water source);
 - Water Source (WT) facility subtype 906 (formation water source);
 - Water Source (WS) facility subtype 905 (surface water source) are used to report water received from non-Ministry regulated fresh water sources from a shallow source well, river, lake, or other surface locations.
 - Surface run-off water [RO] (e.g., rain or snowmelt) is on the site of the WP and used for processing received wastes/materials.
- d) **N/D:** Petrinex requires the entry of either (D) for dangerous oilfield waste/hazardous non-oilfield waste or (N) for non-dangerous oilfield waste/hazardous non-oilfield waste based on the classification of the receipt of oilfield and non-oilfield waste received.

While entry is required the Ministry will not audit this field. The N/D designation should correspond to Hazardous (Dangerous) and Non-Hazardous (Non-Dangerous) used for Waste Classification in Saskatchewan.

The inclusion of (D) or (N) is optional, not required, for the disposition of material from the WP.

- e) **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 (m³) rounded to one decimal place.

For the receipt or disposition of multiple shipments of the *same* waste/material (i.e., 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 (m³) rounded to one decimal place in the Oil, Water, and Solids columns.

The receipt of produced water [WATER] must be reported as a receipt on the Waste Plant Submission for the WP. 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].

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.

6.7 Gas Reporting at a Waste Plant

6.7.1 Receipt of Fuel Gas

In most instances, the receipt [REC] of fuel gas at the WP is auto-populated from the [DISP] of gas to the WP from the gas supplier's facility (e.g., meter station [SKMS] or gas plant [SKGP]), if the fuel gas receipt is from a facility that does not auto-populate at the WP then the WP must report the receipt of gas from one of the three following facility codes:

- 1) Saskatchewan Miscellaneous (SKMC),
- 2) Saskatchewan Commercial (SKCO), or
- 3) Saskatchewan Industrial (SKIN).

(See Appendix 15 Miscellaneous/Province/State Codes for more details.)

6.7.2 Reporting Fuel, Flared or Vented Gas

WPs are required to account for gas consumed for the entire site. To report natural gas which has been consumed as fuel, flared or vented at the WP, the following information must be recorded in the Waste Plant Submission:

- a) **From/To:** this field must be left blank.
- b) **Activity:** [FUEL] must be reported to document the consumption of gas as fuel;
[FLARE] must be reported to document the gas flared; or,
[VENT] must be reported to document gas vented.
- c) **Gas:** the volume consumed as fuel, flared or vented in thousands of cubic metres (10^3 m^3) rounded to one decimal place, must be reported in the Gas column.

6.8 Waste Location ID

WP operators are required to report monthly transactions between their WP and non-Ministry regulated facilities and locations.

Waste Locations (WL) are created by the WP operator to identify non-Ministry regulated facility or locations within Saskatchewan, or a neighbouring province/territory facility or location, which have either generated waste delivered to the WP or received materials from the WP.

A WL ID must not be created for the following situations:

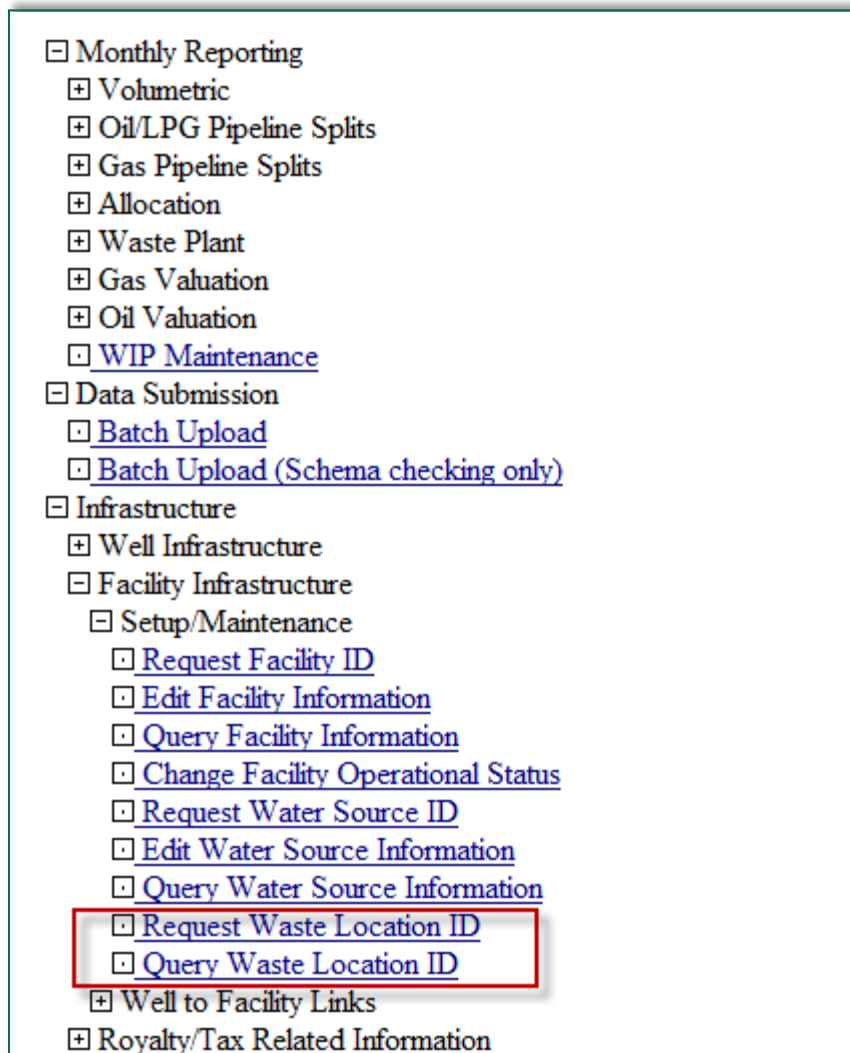
- out-of-province well; the use of the specific well ID is required (e.g. MBWI, NDWI, NTWI, or MTWI);
- valid unlinked well ID (SKWI or ABWI) facility ID from Petrinex;
- abandoned well linked to a facility; the use of the linked facility ID is required;
- abandoned well linked to a suspended facility; the use of the suspended facility ID is required;
- suspended facility; the use of the suspended facility ID is required; or,
- abandoned well or facility; the use of the unlinked well ID or facility ID is required.

There are two types of Waste Locations:

- 1) Waste Location Generators are set up to report receipts [REC] from non-Ministry regulated facilities or locations (such as spills). Each WL Generator ID is proprietary to the WP which set it up and will only be available to that WP on the facility lookup. WL Generator IDs are not available to other WP; each WP will need to set up a unique WL Generator for a location.
- 2) Waste Location Receivers are setup to report dispositions [DISP] from the WP to non-Ministry regulated facilities (such as landfills). A WL Receiver ID are not proprietary to the WP that set it up and are available to all WP on the from/to lookup for Petrinex reporting.

6.8.1 Creation of Waste Location

WL IDs are created and can be queried on Petrinex under the Setup/Maintenance option of Facility Infrastructure.



The WP operator must enter the following information in order to create a unique WL ID, see screenshot below. Please note all locations and addresses are for the WL and not the address of a company's office.

- **Name:** enter the name of the non-oilfield waste generator or the non-Ministry-regulated facility that is to receive the WP’s disposition.
- **Description:** select the best descriptor of the generating location (e.g., gas/service station generator) or approved non-Ministry-regulated receiving facility from a drop-down list. (See Appendix 17: Waste Location Descriptions.)
- **Approval Number (OPTIONAL):** enter the approval number of the generating location if one exists (e.g., Sask Environment approval or registration number) or the approval number for the approved non-Ministry-regulated facility.
- **Location (SK or Non SK) 1:** enter the location of the generating location or the waste receiving location. If the location of the generating site is within Saskatchewan the LE, LSD, SEC, TWP, RGE and M must be entered. For non-Saskatchewan generating locations, complete the space provided.

Table 8. The location/ address entered must be for the generating/ receiving location, not the company’s main office location or the disposition location for the non-Ministry-regulated facility.

- **Address:** enter the street address of the generating location or the non-Ministry-regulated facility.

¹ In order to successfully obtain a Waste Location ID, the waste plant operator must enter an SK location, non SK location, or address.

- **City:** enter the city or town in which the generating location is located or the non-Ministry-regulated facility.
- **Province/State:** enter the Canadian province or territory, or US state in which the waste generating/ receiving location is located. Provinces or States from countries outside Canada or the US can be input on the Other Countries Box to the right.
- **Postal Code/ZIP:** enter the postal code of the generating/ receiving location.
- **Country:** enter the country where the generating facility is located.

Once successfully submitted, a unique WL ID (e.g., SKWL0000123) is generated and available for Petrinex reporting. Petrinex will maintain WL ID's created for Waste Plant reporting from the same location in subsequent months.

6.9 Opening and Closing Inventories and Adjustments

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 WP operator must report information set out below.

- a) 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) auto-populates to the following 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 solids in the Summary View of the Waste Plant Submission screen in Petrinex.
- b) In order to correct an [INVOP] due to adjustments, the WP approval holder must make a change to the prior month's [INVCL]. This can be done by amending the specific row of the previous month's Waste Plant Submission.
- c) Adjustments [INVADJ] are used to account for errors due to shrinkage or errors in volume determinations. If the receipts are greater than the disposition for a product group (i.e., oil, water, or solid), the adjustment must be positive; if the receipts are less than the disposition for a product group (i.e., oil, water, or solid), the adjustment must be negative.

Adjustments are calculated as follows for one month:

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

- 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.
- The Ministry will monitor inventory adjustments [INVADJ] on an ongoing basis, along with other factors, to ensure that the methodology chosen to allocate oil, water and solids back to source facilities is adequate. Frequent and substantial adjustments over time, could lead to a further audit and application of the Recovered Crude Oil Tax on any outstanding volumes.

6.10 Oilfield Waste Cavern Reporting Requirements

Oilfield waste caverns have surface infrastructures that are used to receive and prepare or slurry the waste for injection into the cavern, as well as to receive 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 WP. In addition, transfer of all materials between the surface infrastructures and associated caverns (e.g., displaced brine from a cavern) must be reported as receipts or dispositions, as appropriate.

- 1) The surface infrastructure, which is typically approved as a waste processing facility, as well as each cavern receiving waste from the surface infrastructure must have an appropriate reporting facility ID code (i.e., SKWP0000123).
- 2) Waste Plants which consist of oilfield waste caverns and associated surface infrastructure must complete and submit monthly Waste Plant Submissions.
- 3) 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 WP. This includes documenting the transfer of cavern brine between the surface infrastructure and cavern.

The reporting must reflect that the oil recovered from the cavern was received at the surface infrastructure and then was delivered from the surface infrastructure to the receiving facility (e.g., custom treating facility, terminal, or pipeline).

- 4) The closing inventory for a cavern must cumulatively account for the solids it receives. The lifetime of a cavern, pending operational problems, is often concluded when the volume of accumulated solids approaches the capacity of the cavern.
- 5) If the received waste contains free liquids, approval holders must verify the oil, water, and solids composition of the waste receipts through sampling or an alternative method accepted in writing by the Ministry. 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 Ministry.

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 auto-population function of Petrinex.

Following a cavern measurement event (e.g., sonar survey), the remaining cavern volume must be assessed. Within three months of the measurement event, appropriate adjustments must be made to the Waste Plant Submission to reflect cavern volumes (e.g., oil, water, and solid).

6.11 Facility Status

A WP must have a status of ACTIVE or SUSPENDED in order to report through Petrinex's Waste Plant Submission.

A WP with a status of SUSPENDED is only allowed to report a receipt [REC] of freshwater [FSHWTR] to allow for processing of previously received wastes/materials and can continue to deliver oil, water, and solids in order to eliminate inventory prior to abandonment, or until such time that the facility commences operations again.

ACTIVE or SUSPENDED Waste Plants must report to Petrinex or will incur non-compliance penalties. A SUSPENDED WP can avoid non-compliance penalties by reporting an activity of SHUTIN.

Appendix 13 Waste Codes and Reporting Codes

In the following two tables, an asterisk indicates a new waste or reporting code.

Waste Codes

ACID	Acid Solutions (unneutralized)
ACTCRB	Activated Carbon
ADDMAT	Additives used in WP Processing
ASBEST	Asbestos
BATT	Batteries (wet and dry cell)
BLBDWT	Boiler Blowdown Water
CATNS	Catalyst (non-sulphur)
CATSU	Catalyst (sulphur)
CAUS	Caustic Solutions (unneutralized, spent)
CEMENT	Cement (returns dry)
COEMUL	Crude Oil/Condensate Emulsions (residuals after treatment)
CONMAT	Construction and Demolition Material
CORINH	Corrosion Inhibitor/Oxygen Scavenger Solutions
CWATER*	Waters Contaminated (leachate, collected surface waters)
DESICT	Dessicant
DMDS	Dimethyl Disulphide Solutions
DOMWST	Garbage/Domestic Waste
DRWSHC*	Drilling Waste Hydrocarbon
DRWSGC*	Drilling Waste Gel Chemical
DRWSAC*	Drilling Waste Advanced Gel Chemical
EMTCON*	Aerosol Cans; Barrels, Pails; Crude Oil Sample Bottles; Cutting Oil Tubes; Grease Cartridges; Mud Sacks – Drilling; Paint Cans, Brushes; Pipe Dope Containers, Brushes
FILAPC	Filters - Air Pollution Control
FILFWT	Filters - Raw/Fresh Water
FILGLY	Filters Glycol
FILLUB	Filters - Lube Oil
FILMTH	Filters - Methanol
FILOTH	Filters - Other (raw/fuel gas, NGLs)
FILPWT	Filters - Produced/Process Water
FILSWT	Filters - Gas Sweetening (MEA, DEA, MDEA, sulphinol)
FILWTT	Filters (Media) - Water Treatment
FLBWSW	Filter Backwash Liquids (gas sweetening)
FLBWWT	Filter Backwash Liquids (water treatment)
FRCSND	Frac Sand - Non-Radioactive
FRFLDW*	Frac Fluid (water based)
FRFLDH*	Frac Fluid (hydrocarbon based)
FRFLDR*	Frac Fluid Radioactive
FRMFNS*	Residual formation fines after treatment and settlement
FRSDR	Frac Sand - Radioactive (plus other radioactive diagnostic materials)
GLYC	Glycol Solutions (no heavy metals)
GLYCHM	Glycol Solutions (containing lead or other heavy metals)

Waste Plant Submissions

HSPWTR*	High Solids Produced Water
HYDOIL	Hydraulic and Transmission Oil
HYDVCH*	Hydrovac Material (chemical/solvents impacted)
HYDVCO*	Hydrovac Material (crude oil/condensate impacted)
HYDVHM*	Hydrovac Material (mercury/heavy metals impacted)
HYDVPT*	Hydrovac Material (pesticide/herbicide impacted)
HYDVPW*	Hydrovac Material (produced/salt water impacted)
HYDVRO*	Hydrovac Material (refined fuels/oils impacted)
HYDVSU*	Hydrovac Material (sulphur impacted)
HYDVEM*	Hydrovac Material (emulsion impacted)
IEXLIQ	Ion Exchange Resin Regenerant Liquids
IEXRES	Ion Exchange Resin
INCASH	Incinerator Ash
INOCHEM	Chemicals (inorganic)
IRNSPG	Iron Sponge
LDDOPE	Lead Based Products (pipe dope/greases)
LDTAPE	Lead Based Products (H ₂ S sensing tape)
LUBOIL	Lubricating Oil (hydrocarbon and synthetic)
METHNL	Hydrotest Fluids - Methanol
NORM	Naturally Occurring Radioactive Materials - NORMs
OILABS	Absorbants
OILRAG	Rags
ORGCHM	Chemicals (organic)
PCBBAL	Polychlorinated Biphenyls (PCBs) - Fluorescent Light Ballasts
PCBLIQ	Polychlorinated Biphenyls (PCBs) Askarel Liquids
PCBSLI	Polychlorinated Biphenyls (PCBs) - Contaminated Solids > 50 ppm < 1000 ppm
PCBSGI	Polychlorinated Biphenyls (PCBs) - Contaminated Solids > 1000 ppm
PCBSLF	Polychlorinated Biphenyls (PCBs) - Contaminated Solids < 50 ppm
PIGWST	Pigging Waste (liquid and wax)
PSTCON	Pesticide/Herbicide Containers
PSTHRB	Pesticides/Herbicides
PWTRHM	Water - Process (with heavy metals)
PWTROR	Water Process (with organic chemicals)
SALT	Salt Heat Medium
SAND	Sand - Produced
SLGCTW	Sludge - Cooling Tower
SLGEML*	Sludge - Emulsion
SLGGLY	Sludge - Glycol/Gas Drying
SLGHYD	Sludge - Hydrocarbon
SLGLIM	Sludge - Lime
SLGPIT	Sludge - Flare Pit
SLGPRO	Sludge - Process
SLGSUL	Sludge - Sulphur
SLGSWT	Sludge - Gas Sweetening Systems
SMETAL	Metal (scrap)
SOILCH	Contaminated Debris and Soil (chemical/solvent)
SOILCO	Contaminated Debris and Soil (crude oil/condensate)

SOILEM*	Contaminated Debris and Soil (emulsion)
SOILHM	Contaminated Debris and Soil (mercury/metals)
SOILPT	Contaminated Debris and Soil (pesticide/herbicide)
SOILPW	Contaminated Debris and Soil (produced/salt water)
SOILRO	Contaminated Debris and Soil (refined fuels/oils)
SOILSU	Contaminated Debris and Soil (sulphur)
SOLALP	Solvents/Residues (non-halogenated aliphatic)
SOLARO	Solvents/Residues (non-halogenated aromatic)
SOLHAL	Solvents/Residues (halogenated)
SWTLIQ	Sweetening Agents (liquids)
SWTSOL	Sweetening Agents (solids)
THPROT	Thread Protectors - Casing/Tubing
TRTHAY	Treater Hay
WATER	Water - Produced (including brine solutions)
WOODCT	Wood (chemically treated/cooling tower)
WPAINT	Paints
WSHORG	Wash Fluids - Organic
WSHWTR	Wash Fluids - Water
WSTCGS	Waste Compressed or Liquified Gases
WSTCLQ	Waste Corrosive Liquid
WSTCSO	Waste Corrosive Solid
WSTFLQ	Waste Flammable Liquid
WSTFSD	Waste Flammable Solid
WSTMIS	Waste - Miscellaneous
WSTOLQ	Waste Oxidizing Liquid
WSTOSD	Waste Oxidizing Solid
WSTPLQ	Waste Poisonous Liquid
WSTPSD	Waste Poisonous Solid
WSTRDM	Waste Radioactive Material
WWOFLD	Well Workover Fluids

Reporting Codes

BUFFOIL*	Buffer Oil used in Cavern Operations
BRKWTR*	Saline Water/Brackish Water – Brackish water is not recognized in Saskatchewan and should only be used for cross-border transactions
FSHWTR*	Non-Saline Water/Fresh water - TDS < 4000 ppm or water received from a fresh water source facility - WS (subtype 905) or WT (subtypes 907)
MNFCTR*	Manufacture
NONOFD*	Non-Oilfield Waste
WASTE*	Special waste code for a waste plant disposing to/receiving from another waste plant or injection facility.

Appendix 14 Waste Plant Submission Auto-Population (Waste Plant 1)

Activity	From/To	Waste Code	N/D	Oil (m ³)	Water (m ³)	Solid (m ³)	Gas (10 ³ m ³)	Comment
REC	BT, CT, GS, GP, IF, PL, TM, WI, WP, and WS	Approved waste code	Appropriate classification	yes	yes	yes	no	The waste plant will auto-populate to valid facilities on Petrinex (SK or AB); however, the oil will be reported as oil and the water and solids will be reported as water.
REC	AB WP*	WASTE	Appropriate classification	yes	yes	yes	no	Exception: During the cross-border window only a DISP from a AB WP will auto populate a REC at a SK WP
REC	Out of province WI (MB, ND, NT, MT)	Approved waste code	Appropriate classification	no	no	no	no	No auto-population functionality.
REC	WL (generator),	Approved waste code	Appropriate classification	no	no	no	no	No auto-population functionality.
REC	BT, GS, GP, MS	BLANK	Not required	no	no	no	yes	The BT, GS, GP, MS will auto-populate to the waste plant.
REC	MC, CO, IN	BLANK	Not required	no	no	no	yes	
REC	RF	NONOFD	Appropriate classification	yes	yes	yes	no	No auto-population functionality.
DISP	Waste plant (2)	WASTE	Not required	yes	yes	yes	no	Waste plant (2) will auto-populate to waste plant (1).
DISP	IF	WASTE, WATER, or FSHWTR	Not required	yes	yes	yes	no	The waste plant will auto-populate the IF.
DISP	WL (receiver)	WASTE, WATER, FSHWTR, or MNFCTR	Not required	no	no	no	no	No auto-population functionality.
DISP	AB WP	WASTE	Appropriate classification	yes	yes	yes	no	The CT, TM, PL will auto-populate to the waste plant.
DISP	CT, TM, PL	BLANK	Not required	yes	yes	no	no	The CT, TM, PL will auto-populate to the waste plant.

Appendix 15 Miscellaneous/Province/State Codes

Province type code	Name	Description	Products allowed
SK CO	Commercial	A WP may enter SKCO (or ABCO) when GAS is received from a non- Petrinex reporting facility gas source.	Gas
SK IN	Industrial	A WP may enter SKIN (or ABIN) when GAS is received from a non-Petrinex reporting facility gas source.	Gas
SK MC	Miscellaneous	A WP may use SKMC when the gas is received from a source not identifiable by another code.	Gas
SK RO	Run-off	A WP may use SKRO for the receipt of surface run-off water (e.g., from rain or melted snow) generated on-site.	FSHWTR, CWATER

Appendix 16 Activity Type List

Activity code	Activity name	Description	Waste code	Volume column	Manual or auto-created	From/to facility type allowed
DISP	Disposition		[WASTE], [WATER], or [FSHWTR]	Oil, water, and solid	Manual or auto-populated activity	IF
DISP	Disposition		[WASTE], [WATER], [FSHWTR] or [MNFCTR]	Oil, water, and solid	Manual or auto-populated activity	WL (receiver)
FLARE	Flare	The WP will enter FLARE to report volume of gas flared at the WP.	Blank	Gas	Manual activity	None allowed
FUEL	Fuel	The WP will enter FUEL to report volume of gas used for fuel at the WP.	Blank	Gas	Manual activity	None allowed
IMBAL	Imbalance	Petrinex will enter IMBAL and the imbalance volume to report the difference in measurement between the WP inlet (receipts and opening inventory) and deliveries (dispositions, closing inventory, and inventory adjustment).	Blank	Oil, water, and solid	Auto-created activity	None allowed
INVADJ	Inventory adjustment	The WP will enter INVADJ to report gains and losses that cannot be identified by a specific activity and/or production month. If the waste plant operator 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	The WP 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 auto-populate INVOP volume for each product (e.g., oil, water, solid) using the previous month's closing inventory. To correct an opening inventory volume, the WP must submit an amendment for the previous month's closing inventory.	Blank	Oil, water, and solid	Auto-created activity	None allowed
REC	Receipt	A WP will enter REC to report a receipt of oilfield or non-oilfield wastes using the appropriate Ministry waste codes or reporting codes. When a WP 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 auto-populated activity (only gas is auto-populated)	See Appendix 13

Waste Plant Submissions

Activity code	Activity name	Description	Waste code	Volume column	Manual or auto-created	From/to facility type allowed
SHUTIN	Shut-in	A WP will enter SHUTIN when a facility has no inventory.	Blank	None allowed	Manual activity	None allowed
VENT	Vent	A WP will enter VENT to report volume of gas used for fuel at the WP.	Blank	Gas	Manual activity	None allowed

Appendix 17 List of Waste Location Descriptions*

Waste Location (Receiver) Type	Waste Location (Generator) Type
Biodegradation Facility Waste Receiver ¹	Car Wash Sump Waste Generator
Cavern Waste Receiver ²	Exploration and Production Waste Generator
Disposal Well Waste Receiver ³	Gas/Service Station Waste Generator
Landfill Waste Receiver ⁴	Industrial/Commercial Waste Generator
Manufacture Waste Receiver	Landfill Waste Generator
Oilfield Waste Processing Facility Waste Receiver ⁵	Manufacture Waste Generator
Recycling Facility Waste Receiver	Oil/Gas Service Company Waste Generator
Refinery Waste Receiver ⁶	Oilfield Waste Processing Facility Generator
Storage Facility Waste Receiver	Recycling Facility Waste Generator
Thermal Treatment Waste Receiver	Refinery Waste Generator
Transfer Station Waste Receiver	Storage Facility Waste Generator
Used Oil Recycler Waste Receiver	Tank/Truck Wash Waste Generator
	Transfer Station Waste Generator
	Used Oil Recycler Waste Generator
	Utility Waste Generator

- 1) out of province; or non-Ministry regulated facilities in SK or AB
- 2) out of province caverns only; in SK or AB use Registry Codes
- 3) out of province only; not SK or AB disposal wells
- 4) out of province or non-Ministry regulated facilities in SK or AB
- 5) out of province or non_Ministry regulated facilities in SK or AB

* As Waste Location IDs are created, they will be added to the list established in Petrinex. Waste Locations created for non-Ministry-regulated Waste Generators are confidential to the WP approval holder that created it. Waste Locations created for non-Ministry-regulated Waste Receivers are viewable and available to all approval holders.

Note: Disposition to a receiver; Receipt is from a generator.