

eSubmission Spatial Data  
Submission Standards Manual  
VERSION 1.5: November 2024



# About the Regulator

The BC Energy Regulator (Regulator) is the single-window regulatory agency with responsibilities for regulating oil and gas activities in British Columbia, including exploration, development, pipeline transportation and reclamation.



The Regulator's core roles include reviewing and assessing applications for industry activity, consulting with First Nations, ensuring industry complies with provincial legislation and cooperating with partner agencies. The public interest is protected by ensuring public safety, protecting the environment, conserving petroleum resources and ensuring equitable participation in production.

## Vision, Mission and Values

### Vision

A resilient energy future where B.C.'s energy resource activities are safe, environmentally leading and socially responsible.

### Mission

We regulate the life cycle of energy resource activities in B.C., from site planning to restoration, ensuring activities are undertaken in a manner that:



Protects  
public safety and the  
environment



Supports reconciliation  
with Indigenous peoples  
and the transition to  
low-carbon energy



Conserves  
energy  
resources



Fosters a sound  
economy and social  
well-being



### Values

Respect is our commitment to listen, accept and value diverse perspectives.

Integrity is our commitment to the principles of fairness, trust and accountability.

Transparency is our commitment to be open and provide clear information on decisions, operations and actions.

Innovation is our commitment to learn, adapt, act and grow.

Responsiveness is our commitment to listening and timely and meaningful action.

# Additional Guidance

As with all Regulator documents, this document does not take the place of applicable legislation. Readers are encouraged to become familiar with the acts and regulations and seek direction from Regulator staff for clarification.

The Regulator publishes both application and operations manuals and guides. The application manual provides guidance to applicants in preparing and applying for permits and the regulatory requirements in the planning and application stages. The operation manual details the reporting, compliance and regulatory obligations of the permit holder. Regulator manuals focus on requirements and processes associated with the Regulator's legislative authorities. Some activities may require additional requirements and approvals from other regulators or create obligations under other statutes. It is the applicant and permit holder's responsibility to know and uphold all legal obligations and responsibilities. For example, Federal Fisheries Act, Transportation Act, Highway Act, Workers Compensation Act and Wildlife Act.

Throughout the document there are references to guides, forms, tables and definitions to assist in creating and submitting all required information. Additional resources include:

- [Glossary and acronym listing](#) on the Regulator website.
- [Documentation and guidelines](#) on the Regulator website.
- [Frequently asked questions](#) on the Regulator website.
- [Advisories, bulletins, reports and directives](#) on the Regulator website.
- [Regulations and Acts](#) listed on the Regulator website.

In addition, this document may reference some application types and forms to be submitted outside of the Application Management System but made available on the Regulator's website. Application types and forms include:

- Heritage Conservation Act, Section 12
- Road use permits
- Water licences
- Master licence to cut
- Certificate of restoration
- Waste discharge permit
- Experimental scheme application
- Permit extension application

# Table of Revisions

The Regulator is committed to the continuous improvement of its documentation. The table below highlights the revisions to the eSubmission Spatial Data Submission Standards Manual. Once published, revisions are highlighted in this section and posted to the [Documentation section](#) of the Regulator's website.

For more information about the Regulator's documentation processes, visit the [Documentation Section](#) of the Regulator's website. For more information on eSubmission please visit the [eSubmission Online Services](#) section of the Regulator's website. Stakeholders are invited to provide input or feedback on Regulator documentation to [servicedesk@bc-er.ca](mailto:servicedesk@bc-er.ca).

Posted Date	Effective Date	Chapter	Summary of Revision(s)
July 7, 2023	July 10, 2023	Chapter 3	Added "REST" as an allowable value for AS_TYPE in the Post Construction Plan section / Associated and Ancillaries – Shapefile Standards.
November 8, 2024	November 8, 2024	Chapter 6	Added "Notice of Pipeline Segment Split" section. Users are encouraged to review in full. Added "OSET" as an allowable value for AS_TYPE in the Associated and Ancillary section pg.21

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# Preface

## About

The eSubmission Spatial Data Submission Standards Manual is intended to be a reference document for permit holders and contractors working on their behalf, and is meant to provide an overview of the requirements and procedures for preparing the spatial data packages required by eSubmission to fulfill reporting requirements. The manual has been prepared to be as comprehensive as possible; however it is not all encompassing and may not cover all situations. This manual is meant to be used in conjunction with the [eSubmission User Guide](#).

One of the expected outcomes of the Regulator's eSubmission Spatial Data Submission Standards Manual is to ensure that clients assemble their spatial data in a consistent and accurate manner. By doing so will maximize the Regulator's ability to incorporate both business and spatial data in the most efficient and accurate means possible. All companies and contractors working on behalf of those companies must adhere to the following criteria for spatial data standards.

The Regulator's GIS systems are based on the ESRI ArcGIS suite of software and as a result the following standards outline how spatial submissions must be prepared in order to be incorporated without issue.

This document will be revised annually but may be updated periodically during the year as well. If there are any changes or updates, release notes will be sent out at that time. Where circumstances or scenarios arise and are not covered by this manual, please contact the Regulator.

## Manual Structure

Beginning with general spatial data submission requirements, this manual guides the client through the preparation of data for submission in eSubmission. Each chapter follows the same structure: data structure, mandatory attributes and specific topology rules for each post permit submission type.

The appendices and links to other documentation included in this manual can be referenced when compiling information required by the Regulator.

## Manual Scope

This manual is limited in scope to the submission of spatial data post permit reporting requirements to the Regulator issued under regulation or specified enactments.

# Spatial Data Submission Packages

The applicant is required to assemble a spatial data package containing a series of shapefiles and, if required, a PDF representing post permit oil and gas submissions.

Submissions of spatial and PDF files are accepted for the following post permit activities:

- Drilling Waste Disposal Final Plans
- Geophysical Final Plans
- Post Construction Plans
- Post Construction Plans – No New Land
- Statutory Right of Way Plans

## Shapefile Data Format

All spatial data must be submitted as an ESRI™ polygon, polyline or point feature and must conform to the shapefile spatial data format. These shapefile standards are outlined in the ESRI White Paper, [ESRI Shapefile Technical Description](#).

## Shapefile Templates

Spatial data for eSubmission must meet stringent data standards in order to be accepted by the system. Templates representing the mandatory requirements for the shapefiles with the correct structure of each submission type are available for download on the [Regulator's eSubmission webpage](#) to support spatial submissions.

## Shapefile Package Naming Convention

All shapefile packages uploaded into eSubmission require a specified naming convention. This naming convention is noted at the beginning of each of the following chapters. A sample noted here shows the general format.

<Permit Number>\_<PPCP>\_<YYYYMONDD>\_<OPTIONAL TEXT>.

Please note that the Permit Number refers to the Permit Application Determination Number (Permit AD) which is a 9 character numeric field. Permit Application Determination Numbers (Permit AD) have been assigned to all existing permissioned activities and will be assigned to all new permits.

## Projection



Clients can choose to either include their projection file as part of the shapefile submission, or upon upload of the spatial data package select the applicable projection from the dropdown menu. All data must be spatially referenced to GCS North American 1983 and projected in one of the following:

Universal Transverse Mercator (UTM) Zone [9](#), [10](#), [11](#)

Or

BC Albers Equal Area, with the parameters of:

Central meridian: -126.0 (126:00:00 West longitude)  
 First standard parallel: 50.0 (50:00:00 North latitude)  
 Second standard parallel: 58.5 (58:30:00 North latitude)  
 Latitude of projection origin: 45.0 (45:00:00 North latitude)  
 False northing: 0.0  
 False easting: 1000000.0 (one million metres)

## Data Capture Methods

All spatial data prepared for submission of application spatial data to the Regulator must use one of the following acceptable data capture methods. It is understood that capture methods will vary depending on the application and activity types.

<i>GPSD</i>	<i>GPS - Differential</i>
<i>GPSND</i>	<i>GPS - Non Differential</i>
<i>ORTHO</i>	<i>Ortho Photography</i>
<i>CGWC</i>	<i>Coordinate Geometry With Control</i>
<i>SNK</i>	<i>Source not Known</i>

## Data Integrity

When shapefiles uploaded into eSubmission are validated, they are tested for geometry errors that would prevent the data in the shapefile from being accepted into the Regulator's spatial database. If geometry errors are identified the validation will fail and the system will return an error to the applicant. An example of a geometry error could be a self-intersecting line. It is recommended that applicants use tools such as 'Check Geometry' and 'Repair Geometry' in the ESRI Desktop suite or 'Geometry Validator' within Feature Manipulation Engine (FME) on prepared shapefiles to ensure the success of upload validation.

Specific topology rules are outlined as part of the following chapters and a list of error messages caused by topology are included in the appendix.

# 1. Drilling Waste Disposal

The Drilling Waste Disposal submission requires the following mandatory data set collections:

- [Mandatory] Drilling Waste Disposal – polygons

## Data Package File Naming Standards:

Name of File	File Type	Submission Value	Mandatory/Optional
Spatial Submission File	.zip	<Disposal Number>_<WDSP>_<YYYYMONDD>_<OPTIONAL TEXT>.ZIP	Mandatory

## Drilling Waste Disposal – Shapefile Standards:

**Feature Name:** Drilling Waste Disposal

**Description:** Capture spatial data on types of Drilling Waste Disposal areas that define the spatial extent of the land where the disposal of drilling waste is deposited.

**Geometry:** Polygon

**File Naming Convention:** (\*\_dwd.\*)

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
FID	ObjectID	System Defined		Mandatory	Unique identifier for spatial features
Shape	Geometry	System Defined		Mandatory	Contains the spatial feature
WD_NUMBER	NUMBER(9)	Any number		Mandatory	The value used to identify the waste disposal number
LAND_STAT	String(4)	PRIV	Private Land	Mandatory	Indicates whether the application is on crown, or private land.
		CRWN	Crown Land		

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
SOURCE	String(5)	CGWC	Coordinate Geometry With Control	Mandatory	Describes how the spatial data was captured; with inferred accuracies.
		GPSD	GPS - Differential		
		GPSND	GPS - Non Differential		
		ORTHO	Ortho Photography		
		SNK	Source Not Known		

## Drilling Waste Disposal – Business and Topology Validation Rules:

- Must be single part line
- A Waste Disposal site must not:
  - Self-intersect.
  - Self-overlap.
  - Intersect with a well and/or facility point.
  - Intersect with a well/facility land area or a well/facility land area.
  - Intersect with a pipe centre-line.
  - Intersect with a pipeline land area.

## 2. Geophysical Final Plans

The Geophysical Final Plan submission requires the following mandatory data set collections:

- [Mandatory] Geophysical Lines – lines
- [Mandatory, if present] Associated Activities – polygons
- [Mandatory, if present] Changes in and about a Stream – points

### Data Package File Naming Standards:

Name of File	File Type	Submission Value	Mandatory/Optional
Final Plan Cover Sheet	.pdf	<Geophysical Program Name>_GFPL_<YYYYMONDD_<OPTIONAL TEXT>.PDF	Mandatory
1:50,000 Final Plan Map			
Spatial Submission File	.zip	<Geophysical Program Name>_GFPL_<YYYYMONDD_<OPTIONAL TEXT>.ZIP	Mandatory

### Geophysical Final Plan– Shapefile Standards:

**Feature Class Name:** Geophysical

**Description:** Capture spatial data on types of Geophysical seismic lines.

**Geometry Type:** Line

**File Name Convention:** (\*\_gl.\*)

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
FID	ObjectID	System Defined		Mandatory	Unique identifier for spatial features

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
Shape	Geometry	System Defined		Mandatory	Contains the spatial feature
LAND_STAT	String(4)	PRIV	Private Land	Mandatory	Indicates whether the application is on crown, private, or both.
		CRWN	Crown Land		
GEO_NUM	String(8)	YYYY-9999		Mandatory	Number to identify the individual Geophysical Program
LINE_TYPE	String (6)	COMBO	Combination	Mandatory	Describes purpose of geophysical line.
		NONE	No Source/No Receiver		
		REC	Receiver		
		SOURCE	Source		
CUT_TYPE	String (5)	ECC	Existing Cat Cut	Mandatory	Describes the GAFA Line Type
		EHC	Existing Hand Cut		
		EMC	Existing Mulcher Cut		
		EPO	Existing Push Out		
		GRAV	Gravity/Aeromagnetic		
		NCC	New Cat Cut		
		NCPO	New Cut Push Out		
		NHC	New Hand Cut		
		NMC	New Mulcher Cut		

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
LINE_WIDTH	Decimal (6,2)	NNNN.NN		Mandatory	Width of the seismic line in metres
CONS_CODE	String(4)	CONS	Constructed	Mandatory	Indicates the construction progress of the location.
		NTBC	Never to be constructed		
		TBC	Future construction		
SOURCE	String(5)	CGWC	Coordinate Geometry With Control	Mandatory	Describes how the spatial data was captured; with inferred accuracies.
		GPSD	GPS - Differential		
		GPSND	GPS - Non Differential		
		ORTHO	Ortho Photography		
		SNK	Source Not Known		

## Geophysical Final Plans – Business and Topology Validation Rules:

- Lines must be single part.
- Geophysical lines must not:
  - Self-intersect.
  - Self-overlap.
  - Intersect with a well and/or facility point.
  - Intersect with a well/facility land area or a well/facility land area.
  - Intersect with a pipe centre-line.
  - Intersect with a pipeline land area.

## Changes in and about a Stream – Shapefile Standards:

**Feature Class Name:** Changes In and About a Changes in and about a Stream Locations

**Description:** Capture spatial data on types of Changes in and about a Stream for Changes in and About a Stream that defines the spatial location of the impact.

**Geometry Type:** Point

**File Naming Convention:** (\*\_si.\*)

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
FID	ObjectID	System Defined		Mandatory	Unique identifier for spatial features
Shape	Geometry	System Defined		Mandatory	Contains the spatial feature
CIAS_NUM	String(7)	A text string of length 7, or less		Mandatory – must be unique	Unique Change In and About a Stream Number
LOC_ID	Number(5)	Any number (NNNNN)		Mandatory – must be unique within a project	Unique Location ID Number
WC_NAME	String (50)	A text string of length 50, or less		Mandatory	The name of the Water Course that is impacted
RIP_CLASS	String (4)	S1	S1	Mandatory	Indicate the riparian class and lake classification.
		S2	S2		
		S3	S3		
		S4	S4		
		S5	S5		
		S6	S6		
		L1-A	L1-A		
		L1-B	L1-B		

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
		L2	L2		
		L3	L3		
		L4	L4		
		W1	W1		
		W2	W2		
		W3	W3		
RIP_VER	String (4)	DESK	Desk Top Verified	Mandatory	Indicates how the riparian class was verified
		FIEL	Field Verified		
DURATION	String (4)	T	Temporary	Mandatory	Describes the purpose duration of a feature
		P	Permanent		
TYPE	String (4)	AERL	Aerial	Mandatory	Describes the type of a feature. Where a CIAS was permitted as “multi-type”, the permit holder should select the appropriate crossing method which advises ‘how’ they crossed the stream.
		BEPR	Bank Erosion Protection		
		BRDG	Bridge		
		CBRD	Clearspan Bridge		
		CULV	Culvert		
		DEBR	Debris Removal		
		FLIS	Flow Isolation		
		GRVR	Gravel Removal		
		HDD	(HDD) Directional Drill		
		ICBR	Ice Bridge Crossing		
		MATT	Matting		



Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
		MCUL	Major Culvert		
		MTUN	Micro Tunnelling		
		OCUT	Open Cut		
		PUBO	Punch and Bore		
		SNFL	Snow Fill Crossing		
		STRD	Stream Diversion		
		TFRD	Temporary Ford		
CONS_CODE	String(4)	CONS	Constructed	Mandatory	Indicates the construction progress of the location.
		NTBC	Never to be constructed		
		TBC	Future construction		
SOURCE	String (5)	CGWC	Coordinate Geometry With Control	Mandatory	Describes how the spatial data was captured; with inferred accuracies.
		GPSD	GPS - Differential		
		GPSND	GPS - Non Differential		
		ORTHO	Ortho Photography		
		SNK	Source not Known		

## Changes in and about a Stream – Business and Topology Validation Rules:

- Points must be disjoint.

### 3. Post Construction Plans

The Post Construction Plan submission requires the following mandatory data set collections:

- [Mandatory or Optional] Land Area – polygons. Mandatory only where a change in CONS\_CODE is occurring. Otherwise, optional.
- [Mandatory, if present] Associated Activities – polygons
- [Mandatory, if present] Changes in and about a Stream - points

#### Data Package File Naming Standards:

Name of File	File Type	Submission Value	Mandatory/Optional
Post Construction Survey Plan	.pdf	<Permit Number>_<PPCP>_<YYYYMONDD>_<OPTIONAL TEXT>.PDF	Optional
Spatial Submission File	.zip	<Permit Number>_<PPCP>_<YYYYMONDD>_<OPTIONAL TEXT>.ZIP	Mandatory

#### Land Area – Shapefile Standards:

**Feature Name:** Land Area

**Description:** Capture spatial data on the types of Post Construction Land Areas that defines the spatial extent of the land where construction has taken place on the land.

**Geometry:** Polygon

**File Naming Convention:** (\*\_la.\*)

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
FID	Object ID	System Defined		Mandatory	Unique identifier for spatial feature.
Shape	Geometry	System Defined		Mandatory	Contains the spatial feature.
LAND_ID	Number (9)	Any number		Mandatory	Indicates the previously

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
					permitted polygon.
LAND_TYPE	String(4)	PLA	Pipeline Land Area	Mandatory	Indicates the type of activity that occurs within the polygon area.
		RLA	Road Land Area		
		WFLA	Well Facility Land Area		
LAND_STAT	String(4)	PRIV	Private Land	Mandatory	Indicates whether the application is on crown or private land
		CRWN	Crown Land		
CONS_CODE	String(4)	CONS	Constructed	Mandatory	Indicates the construction progress of the land.
		NTBC	Never To Be Constructed		
		TBC	Future Construction		
SOURCE	String(5)	CGWC	Coordinate Geometry With Control	Mandatory	Describes how the spatial data was captured; with inferred accuracies.
		GPSD	GPS - Differential		
		GPSND	GPS - Non Differential		
		ORTHO	Ortho Photography		
		SNK	Source Not Known		

## Land Area – Business and Topology Validation Rules:

- Land areas must not overlap within the same permit.
  - Exception: Only Road and Pipeline land areas can overlap each other within the same permit.
- Well and/or Facility land areas must not:
  - Overlap road centerlines and/or another road land area.
  - Overlap geophysical lines.
- Pipeline land areas must not:
  - Overlap geophysical lines.
- Road land area must not:
  - Intersect with a well point or a facility point.

## Associated and Ancillaries – Shapefile Standards:

**Feature Class Name:** Associated Activities

**Description:** Capture spatial data on types of Associated Oil & Gas Activities (AOGA) that defines the spatial extent of the land where an Associated Activity is located.

**Geometry Type:** Polygon

**File Naming Convention:** (\*\_anc.\*)

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
FID	Object ID	System Defined		Mandatory	Unique identifier for spatial feature
SHAPE	Geometry	System Defined		Mandatory	Contains the spatial feature
LAND_ID	Number (9)	Any number		Mandatory	Indicates the previously permitted polygon.
AS_TYPE	String (4)	ACCS	Access	Mandatory	Describes the type of the Associated Activity.
		AGRO	Aggregate Operations / Borrow Pit		
		AGWL	Above Ground Fresh Water Line		
		AIR	Air Strip		
		CAMP	Campsite		
		COMS	Communication Site		
		CPAB	Cathodic Protection / Anode Bed		
		DECK	Deck Site		
		FWS	Fresh Water Storage Site		

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
		GATE	Gate Monitoring		
		HELI	Helipad		
		INV	Investigative Use - General		
		INVW	Investigative Use - Water Well Testing		
		MONS	Monitoring Site		
		OSET	Offset		
		POWR	Powerline		
		REST	Restoration		
		SREM	Site Remediation		
		STAR	Staging Area		
		STOR	Storage Area		
		SUMP	Sump		
		WASD	Water Source Dugout		
		WSPC	Workspace		
LAND_STAT	String(4)	PRIV	Private Land	Mandatory	Indicates whether the application is on crown, or private land.
		CRWN	Crown Land		
CONS_CODE	String(4)	CONS	Constructed	Mandatory	Indicates the construction progress of the land.
		NTBC	Never To Be Constructed		
		TBC	Future Construction		

SOURCE	String (5)	CGWC	Coordinate Geometry With Control	Mandatory	Describes how the
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Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
		GPSD	GPS - Differential		spatial data was captured; with inferred accuracies.
		GPSND	GPS - Non Differential		
		ORTHO	Ortho Photography		
		SNK	Source not Known		

\*NOTE: If the permit was issued prior to July 2016, the OGAA associated oil and gas activity or CER related ancillary may have been permitted with a historical associated or ancillary types (AS\_TYPE) from the options listed above. In these cases, the originally permitted AS\_TYPE may be used.

## Associated and Ancillary – Business and Topology Validation Rules:

- None

## Changes in and about a Stream – Shapefile Standards:

**Feature Class Name:** Changes In and About a Changes in and about a Stream Locations

**Description:** Capture spatial data on types of Changes in and about a Stream for Changes in and About a Stream that defines the spatial location of the impact.

**Geometry Type:** Point

**File Naming Convention:** (\*\_si.\*)

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
FID	ObjectID	System Defined		Mandatory	Unique identifier for spatial features
Shape	Geometry	System Defined		Mandatory	Contains the spatial feature

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
CIAS_NUM	String(7)	A text string of length 7, or less		Mandatory – must be unique	Unique Change In and About a Stream Number
LOC_ID	Number(5)	Any number (NNNNN)		Mandatory – must be unique within a project	Unique Location ID Number
WC_NAME	String (50)	A text string of length 50, or less		Mandatory	The name of the Water Course that is impacted
RIP_CLASS	String (4)	S1	S1	Mandatory	Indicate the riparian class and lake classification.
		S2	S2		
		S3	S3		
		S4	S4		
		S5	S5		
		S6	S6		
		L1-A	L1-A		
		L1-B	L1-B		
		L2	L2		
		L3	L3		
		L4	L4		
		W1	W1		
		W2	W2		
		W3	W3		
RIP_VER	String (4)	DESK	Desk Top Verified	Mandatory	



Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
		FIEL	Field Verified		Indicates how the riparian class was verified
DURATION	String (4)	T	Temporary	Mandatory	Describes the purpose duration of a feature
		P	Permanent		
TYPE	String (4)	AERL	Aerial	Mandatory	Describes the type of a feature. Where a CIAS was permitted as “multi-type”, the permit holder should select the appropriate crossing method which advises ‘how’ they crossed the stream.
		BEPR	Bank Erosion Protection		
		BRDG	Bridge		
		CBRD	Clearspan Bridge		
		CULV	Culvert		
		DEBR	Debris Removal		
		FLIS	Flow Isolation		
		GRVR	Gravel Removal		
		HDD	(HDD) Directional Drill		
		ICBR	Ice Bridge Crossing		
		MATT	Matting		
		MCUL	Major Culvert		
		MTUN	Micro Tunnelling		
		OCUT	Open Cut		
		PUBO	Punch and Bore		
		SNFL	Snow Fill Crossing		
		STRD	Stream Diversion		

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
		TFRD	Temporary Ford		
CONS_CODE	String(4)	CONS	Constructed	Mandatory	Indicates the construction progress of the location.
		NTBC	Never to be constructed		
		TBC	Future construction		
SOURCE	String (5)	CGWC	Coordinate Geometry With Control	Mandatory	Describes how the spatial data was captured; with inferred accuracies.
		GPSD	GPS - Differential		
		GPSND	GPS - Non Differential		
		ORTHO	Ortho Photography		
		SNK	Source not Known		

## Changes in and about a Stream – Business and Topology Validation Rules:

- Points must be disjoint.

# 4. Post Construction Plans – No Existing Land

The Post Construction Plan – No Existing Land submission requires the following mandatory data set collections:

- [Mandatory] Land Area – polygons.
- [Mandatory, if present] Associated Activities – polygons
- [Mandatory, if present] Changes in and about a Stream - points

## Data Package File Naming Standards:

Name of File	File Type	Submission Value	Mandatory/Optional
Post Construction Survey Plan	.pdf	<Permit Number>_<PCPN>_<YYYYMONDD>_<OPTIONAL TEXT>.PDF	Optional
Spatial Submission File	.zip	<Permit Number>_<PCPN>_<YYYYMONDD>_<OPTIONAL TEXT>.ZIP	Mandatory

## Land Area, Associated and Ancillaries, & Changes in and about a Stream – Shapefile Standards

Shapefile standards for these activities in Post Construction Plan – No Existing Land submissions are equivalent to the Post Construction Plan shapefile standards found in Chapter 3 of this manual.

## Land Area, Associated and Ancillaries, & Changes in and about a Stream – Business and Topology Validation Rules

Shapefile standards for these activities in Post Construction Plan – No Existing Land submissions are equivalent to the Post Construction Plan business and topology validation rules found in Chapter 3 of this manual.

# 5. Statutory Right of Way Plans

The Statutory Right of Way submission requires the following mandatory data set collections:

- [Mandatory] Statutory Right of Way – polygons

## Data Package File Naming Standards:

Name of File	File Type	Submission Value	Mandatory/Optional
Survey Plan	.pdf	<Permit Number>_<PSRW>_<YYYYMONDD>_<OPTIONAL TEXT>.PDF	Mandatory
Spatial Submission File	.zip	<Permit Number>_<PSRW>_<YYYYMONDD>_<OPTIONAL TEXT>.ZIP	Mandatory

## Statutory Right of Way Plan – Shapefile Standards:

**Feature Class Name:** Statutory Right of Way

**Description:** Capture spatial data on a Statutory Right of Way that defines the spatial extent of the land where the Statutory Right of Way will exist.

**Geometry Type:** Polygon

**File Naming Convention:** (\*\_srw.\*)

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
FID	Object ID	System Defined		Mandatory	Unique identifier for spatial feature.
Shape	Geometry	System Defined		Mandatory	Contains the spatial feature.
TENURE_NUM	String(8)	A text string of length 8		Mandatory	The Tenure File Number to identify the individual polygon
SOURCE	String(5)	CGWC	Coordinate Geometry With Control	Mandatory	Describes how the spatial data was captured; with inferred accuracies.
		GPSD	GPS - Differential		

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
		GPSND	GPS - Non Differential		
		ORTHO	Ortho Photography		
		SNK	Source not Known		

## Statutory Right of Way Plan – Business and Topology Validation Rules:

- None

## 6. Notice of Pipeline Segment Split

The Notice of Pipeline Segment Split submission requires the following mandatory data set collections:

- [Mandatory] Segment ID - lines.

### Data Package File Naming Standards

Name of File	File Type	Submission Value	Mandatory /Optional
Spatial Submission File	.zip	<Pipeline Project #>_<NPLS_<YYYYMONDD>_<OPTIONAL TEXT>.ZIP	Mandatory

### Pipeline Centre Lines Split – Shapefile Standards:

**Feature Class Name:** Pipeline Split

**Description:** Capture spatial data on pipeline segment splits that define the spatial extent and physical length of the existing segment and the new split off segments.

**Geometry:** Line

**File Naming Convention:** (\*\_pls.\*)

Field Name	Field Type	Allowable Values	Value Description	Mandatory/Optional	Definition
FID	Object ID	System Defined		Mandatory	Unique identifier for spatial feature.
Shape	Geometry	System Defined		Mandatory	Contains the spatial feature.
SEGMENT_ID	Short Integer(3)	NNN	Segment Identifier	Mandatory	User entered unique pipeline original segment and split off segment(s)
PHYS_LEN	Double(10,2)	Any Number	Physical Length	Mandatory	New physical length of the pipeline segments in metres.
SOURCE	String(5)	CGWC	Coordinate Geometry with Control	Mandatory	Describes how the spatial data was captured; with inferred accuracies.
		GPSD	GPS - Differential		
		GPSND	GPS – Non-Differential		
		ORTHO	Ortho Photography		
		SNK	Source Not Known		