Under the *Forest Act*, the owner of the scale site, the operator of the scale site, the mark holder and the scaler are all individually responsible for submitting the results of the scale in the form of a scale return. This chapter covers a number of related areas:

- an explanation of Ministry forms and their use,
- timing requirements for submission of scale returns,
- penalties for late submission of scale data,
- electronic submission of scale results,
- data retention requirements,
- data loss,
- changes to scale data, and
- accessibility of scale data to the public.
11.1 Scale Documentation

11.1.1 Introduction

The purpose of this section is to familiarize all users with the submission of the forms used to document the scale and related scaling activities.

Two types of documents are in place:

- the scale return and the documents used to prepare the scale return, and
- other documents which support the scale data control and scaling administration.

Scale Returns, for the purposes of this chapter, include the original scale tally (or detailed log listing), the weight scale load slips and include any other documentation that is used as the basis for a billing, including summaries. All scaling forms are available along with detailed instructions on their reverse side at:

Public Forms Index

11.1.2 Documentation Conventions

Before detailing each document you should understand the conventions common to completing every document. These conventions include:

<table>
<thead>
<tr>
<th>Formats</th>
<th>Standard formats, set by the ministry help ensure satisfactory control of scale data. All computer generated facsimiles of the scale returns must be approved prior to their use.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Originals</td>
<td>In all cases the original signed copy of the scale return must be submitted to the ministry whether using electronic or paper versions.</td>
</tr>
<tr>
<td>Legibility</td>
<td>All hand-written documents must be legible. Always use a sharp pencil, a pen or fresh printer cartridge when preparing originals for submission.</td>
</tr>
<tr>
<td>Scaler's Signature</td>
<td>As detailed further in this section the primary or secondary scaler performing the scale is responsible for signing various scale documents, either on the paper return or electronically. For information on how to receive an electronic authentication signature key please refer to HBS at: HBS Public Training Manual</td>
</tr>
<tr>
<td>Supporting Documentation</td>
<td>Any supporting documentation such as tally sheets, should always be retained at the scale site or attached to the paper scale return.</td>
</tr>
</tbody>
</table>
All documentation must be filed in an orderly manner and submitted to the ministry, or retained in a safe place as per the applicable authorization. This will facilitate retrieval if required for review by a Forest Officer.

**It is the obligation of the scaler, the site operator, and the computing service to ensure they are aware of all documentation requirements including retention and submission as per the scaler authorization, the scale site authorization, and/or computing authorization.**

Contact the local Ministry office if clarification on the completion or submission requirements of any document is required. For information on using commonly misinterpreted characters please refer to Section 2.1.4 of the Timber Marking and Branding chapter of the Scaling Manual.

### 11.1.3 Electronic Reporting

As per the *Forest Act* (s.97) and the *Scaling Regulation* (s.12), if a licensee is scaling over 500 m$^3$ of timber a year the scale data should be submitted electronically to the HBS either by electronic file transfer or entered online in the designated screen(s) on the HBS web site.

While no paper copies of the scale details are required when they are submitted electronically to the HBS, there are some reports that must be printed out and kept at the scale site or sent to the Ministry District Office as required in the Scale Site Authorization.

If a licensee is scaling less than 500 m$^3$ of timber a year they are permitted to manually record the scale information on the designated Ministry paper forms and submit them in accordance with their scale site authorization.
11.2 Scale Returns

Standard scale return forms and their computer generated equivalents are required to ensure scale data are captured in an orderly manner and the format is compatible with the processing phase of scale billing which ultimately results in invoices being issued.

All scale return tallies produced manually (hand-written) must be legible and signed by the scaler performing the scale. Scale returns are a key component of the documentation trail used for auditing and checking purposes. As such, any changes made by the scaler should always be initialled by the scaler making the return. Any changes made by the ministry must follow the conventions set under Section 11.6.

11.2.1 Type of Scale

- The method of scaling largely predicates documentation requirements. These methods are:

Piece Scale Documentation

- If Manually Generated
  - FS 1211, FS 1212, FS 701

- If Computer Generated
  - Submit XML File

Diagram:

- Piece Scale
  - If Manually Generated
  - Submit XML File
11.2.1.1 FS 1211 - Piece Scale Detailed Log Listing (NET)

This form must be used to record the piece scale details and red tag scale details for timber that must be reported to HBS. The main use of this form is to submit scale returns under Section 97 of the Forest Act. It may also be used for scaled before rescale and company use. Use scale returns if these types of returns will consume a scaler return number.

Figure 11.1 FS 1211 – Piece Scale Detailed Log Listing (NET).
11.2.1.2 FS 1212 - Beachcomb Piece Scale Detailed Log Listing (NET)

This form is to be used to record the scale details of Marine Salvage timber only. Only net dimensions will be recorded on this, the FS 1211, and the FS 1210.

![Figure 11.2 FS 1212 – Beachcomb Piece Scale Detailed Log Listing.](image-url)
Weight scale Documentation

There are two standard weight scale forms:

- FS 1217 - Weigh Slip
- FS 1210 - Sample Scale Detailed Log Listing (NET)

11.2.1.3 FS 1217 - Weight Slip

This form is used to manually record the details of a weight scale transaction.

![Figure 11.3 FS 1217 – Weigh Slip.](image-url)
11.2.1.4 FS 1210 - Sample Scale Detailed Log Listing (NET)

This form is used to record the scale details of a sample scale load. Instructions are on the reverse side of the form.

Figure 11.4 FS 1210 – Sample Scale Detailed Log Listing (NET).
11.2.2 Electronic Weight Scale Documentation/Reports

If a scale site is scaling over 500 m³ of timber a year the Regional Executive Director may direct that scale data be submitted electronically to the HBS either by electronic file transfer or entered online in the designated screen(s) on the HBS web site.

If sample loads are being recorded in a handheld computer it must indicate the event type: SS – Sample Scale. When complete the load is to be digitally signed, then transmitted to the HBS.

There are three required reports for weight scale sites using electronic data submission. They are:

<table>
<thead>
<tr>
<th>Report Name</th>
<th>Report Purpose</th>
<th>Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Sheet</td>
<td>Recreate the scale information in the event of computer breakdown</td>
<td>Retained for a period of 6 months at the scale site in paper form</td>
</tr>
<tr>
<td>Weight Slip</td>
<td>Recreate the scale information in the event of a computer breakdown</td>
<td>Retained for a period of 6 months at the scale site in paper form</td>
</tr>
<tr>
<td>Daily Audit Log</td>
<td>Record of change to scale data&lt;br&gt;Printed daily and matched to paper LDS documents</td>
<td>Retained for a period of 6 years in electronic or paper form. It is submitted to the Ministry</td>
</tr>
</tbody>
</table>

The first two are interchangeable. The Ministry prefers that the Safety Sheet is used. However, if this report is not supported by the scale site software, weight slips must be printed after every load is weighed in and gross weights and stratum must be written on the Load Description Slip.

The HBS technical Specifications for industry provide the technical specifications and format requirements to assist HBS users with submitting data to the Ministry in electronic format.

Please contact FORHVAP.REVCNTRL@gov.bc.ca to request this document.
Figure 11.5 Weight Scale Safety Sheet Example.

Safety Sheet Definition

This report contains a record of all events that occur at the scale site in CHRONOLOGICAL order. It is expected that the record of events is printed AT THE SAME TIME as the event’s occurrence. The purpose of this report is to be able to recreate the scale information in the event of computer breakdown. If the Safety Sheet is being used then weight slips will not be expected to be printed.

Safety Sheet Print Expectations

The “Safety Sheet” is printed on a continuous basis. This means that for every weighing (weigh in, tare, company use) a line is generated on the report AS THE EVENT IS RECORDED IN THE COMPUTER. This means that two printers may be required at a scale site that also prints weight slips for their own purposes. If two printers are not available then option “Weight Slips” will be suitable if an interim version of the slip is printed after the weigh in event.

Safety Sheet Submission and Retention Expectations

When used, the paper “Safety Sheet” is NOT expected to be submitted to the ministry. When used, the paper “Safety Sheet” is expected to be retained by the scale site operator for a period of six months. During this time this report must be provided to a forest officer upon request.

Daily Audit Log
**Figure 11.6 Weight Scale Daily Audit Log Example.**

**Daily Audit Log Definition**

This report contains a record of all arriving loads at the scale site in WEIGHT SLIP TICKET NUMBER order. This report will detail ALL changes made to data in which the ministry has an interest. It is expected that the last version of the data on the weight slip will match the data submitted. If a weight slip has been deleted this report must highlight that event.
Daily Audit Log Print Expectations

The Daily Audit Log is printed on a daily basis from the weight scale computer. The report is sorted in weight slip ticket number order and shows the audit trail of modifications for each weight slip. There are two scenarios for representing the audit trail for a weight slip:

- **No Edits were made to the Weigh Slip:**
  
The report will contain just one line for each Weight Slip that will list the data expected to be on the electronically submitted Weight Slip.

- **The Weight Slip was Edited one or more Times:**
  
  Each Weight Slip can be edited multiple times. The last line for each Weight Slip will list the data expected to be on the electronically submitted weight slip. For each edit session there will be a line of data provided that lists the original values of the modified fields and the date / time of the modification. If multiple edits are made during a session all original values will be provided on the edit line.

Daily Audit Log Submission Expectations

This report is expected to be submitted to the ministry. As stated previously, it is expected that the report will be printed once a day. All signed paper Load Description Slips (LDS) original forms will be attached to that report in chronological order for the date of original weighing and also submitted.
11.2.2.1 Computer Generated Weight Slip

<table>
<thead>
<tr>
<th>Province of British Columbia</th>
<th>Ministry of Forests</th>
<th>Computer Generated Weigh Slip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale Date</td>
<td>2001/11/15</td>
<td>Population Stratum Year</td>
</tr>
<tr>
<td>Scale Site</td>
<td>15WX - Desolation Weigh Scale</td>
<td>Gross Weight (kg)</td>
</tr>
<tr>
<td>Scaleer Licence</td>
<td>531X - Mike Smith</td>
<td>Sample Deduction (kg)</td>
</tr>
<tr>
<td>Weigh Slip Number</td>
<td>986988</td>
<td>Tare Weight (kg)</td>
</tr>
<tr>
<td>Timbermark/Source</td>
<td>4418C</td>
<td>Field Scale / Deck</td>
</tr>
<tr>
<td>Cutblock</td>
<td>0697</td>
<td>Outgoing LDS</td>
</tr>
<tr>
<td>Transport Identifier</td>
<td>TX160</td>
<td>Destination</td>
</tr>
<tr>
<td>Load Description Slip Number</td>
<td>AB1239</td>
<td>Comments</td>
</tr>
<tr>
<td>Sample Indicator</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Secondary Scale Licence</td>
<td>5318 - Alice Smyth</td>
<td></td>
</tr>
<tr>
<td>Company Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scaler Signature</td>
<td></td>
<td>Driver’s Signature</td>
</tr>
<tr>
<td>Software Product</td>
<td>Weigher 2002.1.2</td>
<td></td>
</tr>
<tr>
<td>EC - Detail Document Number</td>
<td>SDS674EW8HTER2</td>
<td></td>
</tr>
<tr>
<td>EC - Document Version</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>EC - Hash Total</td>
<td>28054565</td>
<td></td>
</tr>
<tr>
<td>EC - Digital Signature</td>
<td>76657106</td>
<td></td>
</tr>
<tr>
<td>Event Type</td>
<td>PS - Primary Scale</td>
<td></td>
</tr>
<tr>
<td>Ministry Report Number</td>
<td>W5600</td>
<td></td>
</tr>
</tbody>
</table>

Figure 11.7 Weight Slip Example.

Weight Slip Definition

It is recognized that there will be company use information included on the documents as well. The purpose of this report for the ministry is to be able to recreate the scale information in the event of computer breakdown. If the Safety Sheet is not being used then the weight slip is suitable if an interim version of the slip is printed after the ‘weigh in’ event.

Weight Slip Print Expectations

The tare weighing occurs shortly after the weigh in event. A Weight Slip is expected to be printed for each arriving load at the time of the tare weighing if the Safety Sheet is NOT being used.

Tare Weighing and Weigh In are Separated

The tare weighing occurs some time after the weigh in event. Typically in this situation, the timber on the truck is sent to another scale site (sample to be measured elsewhere). The truck must then return to the original scale site for the tare weighing. A Weight Slip is expected to be printed for each arriving load after the tare weighing if the Safety Sheet is NOT being used. An interim version of the slip may be printed after the weigh in event.
Weight Slip Corrections

At any point after the tare weighing, a scaler may correct data.

Weight Slip Digital Signing

Digital Signing will most likely occur as a batch process. Each electronic log tally submitted will be digitally signed by either the weigh-in scaler or the weigh out scaler. There are provisions in the data model for the weigh-in scaler and the weigh out scaler to be different. The Weight Slip is NOT expected to be ‘printed and physically signed’ after the digital signing event.

Weight Slip Submission and Retention Expectations

When used, the paper Weight Slip is NOT expected to be submitted to the ministry if a safety sheet is being used. When used, the paper Weight Slip is expected to be retained by the scale site operator for a period of six months. During this time these must be provided to a forest officer upon request.
11.2.2.2 FS 222 - Special Forest Products Scale Return and Transportation Document

This form is used to record the details of the following special forest products:

- Shake and Shingle Bolts, Blocks and Blanks,
- Shakes,
- Firewood,
- Mining Timbers,
- Stakes and Sticks,
- Cants,
- Posts and Rails (Split and Round).

Figure 11.8 Example and Instructions for Completing the Special Forest Products Scale Return and Transportation Document.
11.2.2.3 FS 200 - Christmas Tree Return

Christmas trees are classified as a special forest product, but because they are scaled only using a piece and size count they require a separate form. The FS 200 is the ministry form used in collecting return information on Christmas trees and it also serves as a transport document. The instructions for its completion are on the reverse side.

Figure 11.9 FS 200 – Load Description Slip/Christmas Tree Scale Return.
11.2.2.4 FS 701 - Volume Estimate - Other

All special forest products must be summarized onto an FS 701. The FS 701 must then be attached to the FS 222 or FS 200 and sent to the Ministry office required in the scale site authorization. Instructions for completing this form is given on the reverse side. This form is also used to capture other volumes that are estimated, such as fuel logs.

Figure 11.10 FS 701 – Volume Estimate - Other.
11.3 Administrative Documents

Other documentation is required to ensure controlled timber transport and a complete and accurate scale. As scaling and timber transport occur under a diversity of operating conditions, documentation requirements may vary to reflect these conditions.

Load Destination Notice (FS 1146)

Load destination notices are similar to the Load description slip, but are large pieces of sturdy paper that are physically attached to the load. They provide a forest officer with clearly visual description of the timber being transported and location where it is being transported. This may enable the forest officer to monitor timber movement without having to stop the vehicle in transport. It is often used for timber crossing district or regional boundaries. These documents are included in this manual to reflect the type of administrative documentation which may be required through the scaler and/or scale site authorization - or other directive. Please ensure you are familiar with the specific requirements as set by the ministry.

Scaler’s Raft Tags (FS 308)

Raft tags are tags attached to the parcel by the scaler, to show the parcel has been scaled. The tag provides the parcel number,

a. scaler number,

b. timber mark,

c. piece count, and

d. scaler return number.

This form is shown below:
Scalers Diary or Scaler Site Diaries

Scaler diaries are documents that list all the timber that a scaler has scaled for a specified time period. It includes details such as timber marks, piece counts, load numbers, and is signed by the scaler upon completion. The diaries are used to ensure the ministry receives all the scale returns completed by the scaler. Although very useful, scaler diaries are currently being phased out. Please check with the applicable district office for documentation requirements.
Scale Site Arrival and Departure Ledgers (FS 523 and FS 524)

Site ledgers are documents that record every parcel or load of timber that is received at, or transported from a scale site. It lists the load number, the timber mark, scaling information, and must be signed by the scale site operator. An example of Arrival and Departure ledgers are shown below. Detailed instructions for their use are printed on the reverse side of each sheet.

Figure 11.11 Site Arrival and Departure Ledgers.
Load Description Slips (LDS) (FS 649)

Load description slips are documents that accompany timber in transport from the cut block or initial load out area to the place of scale, and provides a description of timber being transported, its origin, and its destination. They are also used for scaled timber, in which case they must identify the place where the timber was scaled. A forest officer can use this to monitor the movement of timber while in transport. The ministry requires the use of load description slips to accompany scaled or unscaled timber in transport. Alternatively, industry load slips may be approved by the ministry provided they contain all the necessary information.

The use of electronic load description slips may be approved by the Ministry if all the requirements under the Timber Marking and Transportation Regulation are met. If an electronic device does not function properly it will not be considered to be a valid load description slip. The truck driver’s signature which is a legal requirement will be met if the truck driver has to “accept the information” on the device. Where electronic LDS is approved, the scale site must provide them in an electronic readable format, monthly to the ministry.

The LDS records must be kept in electronic or paper form for a period of 6 years.
Figure 11.12  FS 649 – Load Description Slip.
Instructions for completion of the FS 649:

<table>
<thead>
<tr>
<th>Position</th>
<th>Field Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Date</td>
<td>Enter the date and time the timber is being transported from the cutblock.</td>
</tr>
<tr>
<td>B</td>
<td>Timber Mark</td>
<td>Enter the timber mark that is applied to the timber.</td>
</tr>
<tr>
<td>C</td>
<td>Destination</td>
<td>Enter the scale site where the timber is being transported for scaling.</td>
</tr>
<tr>
<td>D</td>
<td>Contractor</td>
<td>Enter the contractor's name (not monitory).</td>
</tr>
<tr>
<td>E</td>
<td>Carrier Identification</td>
<td>Enter the truck driver's name.</td>
</tr>
<tr>
<td>F</td>
<td>Landing Supervisors Comments</td>
<td>Not mandatory.</td>
</tr>
<tr>
<td>G</td>
<td>Landing Supervisors Signature</td>
<td>Landing supervisor's signature must be obtained prior to departure (not monitory).</td>
</tr>
<tr>
<td>H</td>
<td>Transport Operator's Name</td>
<td>Name of driver.</td>
</tr>
<tr>
<td>I</td>
<td>Transport Operator's Signature</td>
<td>Must be obtained before delivery of the timber.</td>
</tr>
<tr>
<td>J</td>
<td>Receiver’s Signature</td>
<td>Must be obtained at the time of delivery to the scale site or mill (not monitory).</td>
</tr>
<tr>
<td>K</td>
<td>Geographic Location of Timber’s Origin</td>
<td>Enter the location name.</td>
</tr>
<tr>
<td>L</td>
<td>Tenure No. or Legal Description</td>
<td>Enter where applicable.</td>
</tr>
<tr>
<td>M</td>
<td>Cut Block/Landing/Setting No.</td>
<td>Enter where applicable.</td>
</tr>
<tr>
<td>N</td>
<td>Carrier Licence No.</td>
<td>Enter the appropriate licence number.</td>
</tr>
<tr>
<td>O</td>
<td>Description of Timber and Load</td>
<td>Check the appropriate species box, and special forest products if applicable. If the special forest products box is marked, enter the product code(s) on the 'type' lines listed below the box.</td>
</tr>
<tr>
<td>P</td>
<td>Haul Distance</td>
<td>The distance in km from cutblock to scale site.</td>
</tr>
<tr>
<td>Q</td>
<td>Certification of Previously-scaled Timber Status</td>
<td>Check this box if the timber has been scaled.  Proof of scale may be required by a forest officer.</td>
</tr>
<tr>
<td>R</td>
<td>Signature of Scaler or Authorized Designate</td>
<td>Signature of scaler.</td>
</tr>
<tr>
<td>S</td>
<td>Licence No.</td>
<td>Enter the Scaler’s Licence Number.</td>
</tr>
</tbody>
</table>
11.4 Timing Requirements for Submitting Scale Data

To ensure the needs of the various scale data users are served, it is important that scale data is submitted and processed on a timely basis. Scale data submission requirements must be clearly defined under the scale site authorization. See the Scaling Administration chapter of this manual for a discussion of scale site authorization.

Under the Forest Act, the owner of the scale site, the operator of the scale site and the scaler are all responsible for ensuring the scale details are recorded in the approved form or electronically, and the scale return is completed and submitted within the time prescribed in the scale site authorization. Other requirements may be set where conditions warrant them.

The following data submission guidelines for inclusion in the scale site authorization are in place.

11.4.1 Weight Scale Site

Accurately completed Weight Slip and Log Tally data shall be transmitted daily to the Ministry. Pursuant to section 18 of the Electronic Transactions Act, scale returns shall be received by the Harvest Billing System no later than six (6) calendar days after the date of scale.

11.4.2 Piece Scale Site

For the purposes of section 97(1) of the Forest Act and section 11 of the Scaling Regulation, accurately completed scale details and returns shall be delivered within the periods outlined below:

a. Scale Returns
   i. If the submission method is on original paper forms, deliver scale returns to the Ministry no later than six (6) calendar days after the end of the month in which the timber was scaled.
   
   ii. If the submission method is by electronic file transfer, transmit the scale returns daily to the Ministry. Pursuant to section 18 of the Electronic Transactions Act, scale returns shall be received by the Harvest Billing System no later than six (6) calendar days after the date of scale. No paper submission is required, however a back-up document shall be retained for six (6) years in paper or electronic format.
   
   iii. If the submission method is by online data entry, enter the data online into the Harvest Billing System. Pursuant to section 18 of the Electronic Transactions Act, scale returns shall be received by the Harvest Billing System no later than six (6) calendar days after the date of scale. Submit the original paper form at month’s end to the Ministry Regional Office.
To assess compliance with these requirements, all scale returns are date stamped by the ministry upon receipt.

11.4.3 Penalties for Late Submission of Scale Returns

When a scale return is not received by the ministry by the due date specified in the scale site authorization penalties may be assessed.

When penalties are assessed, the amount of the penalty is determined as follows:

a. If no stumpage is payable, $25.00.

b. If stumpage is payable, and

   i. the scale return is delivered fewer than 31 days after the due date, $25.00, or

   ii. the scale return is delivered more than 30 days after the due date but fewer than 61 days after the due date, $50.00, or

   iii. the scale return is not delivered 61 days after the due date, $100.00 plus $2.00 for each day following the 61 days that the scale return is not delivered to a maximum of $200.00.

c. If the scale return is based on the method of scaling timber described in section 5(1) of this regulation, $100.00.

See Scaling Regulation, Section 11 for more details.

To assess a penalty for late submission of scale data, the Scaling Regulation requires the scale site authorization to define when scale returns are to be received by the ministry.
11.4.4 Electronic Submission of Scale Results

The Regional Executive Director may order the scale site owner or operator to enter into arrangements to submit scale returns to the ministry electronically under the authority of the Forest Act, where:

- the Regional Executive Director estimates the annual volume of timber scaled at a scale site will exceed 500 cubic metres per year, and

The reasons for using electronic data submission include:

- greater accuracy in scale returns, as errors in scale data processing are reduced,
- streamlining administrative effort in processing scale data, and
- significantly improved audit control.
11.5 Scale Data Computation and Documentation Standards and Controls

1. The completeness, accuracy and security of scale data is the responsibility of all parties who collect, process, or submit scale data.

2. All parties collecting, processing or submitting scale data must have an adequate system of internal controls, including scale data controls, processing conventions and administrative processes to ensure all scale data is complete, accurate and secure.

3. The Ministry will conduct checks and audits to assess the accuracy and completeness of scale data and the adequacy of controls.

To ensure that scale data is consistent and reliable for all users, it must be captured, compiled, and reported in accordance with set standards. Where the ministry considers controls to be deficient it may deny parties from processing and submitting data. These standards are set by the Ministry and are available from Timber Pricing Branch.

The ministry may set other standards regulating the submission, computation, control, and documentation of scale data. All persons processing scale data must ensure they are conversant with ministry requirements and ensure their standards are current.

In addition to setting scale computation and documentation standards and controls, the Ministry is responsible for ensuring they are complied with. This responsibility is met through two activities:

- approving all applications to process scale data, and
- assessing compliance with standards and controls.
11.5.1 **Compliance Checking**

District, regional, and headquarters staff are jointly responsible for assessing and ensuring compliance with ministry scale computation and documentation requirements.

The standards, conditions, and approval of the electronic submission of scale data will be set by Timber Pricing Branch.

Related activities include:

- on-site inspections,
- routine checking of tallies and computed reports,
- periodic rekeying of data,
- routine checking of summaries of scale reports used for billing input,
- periodic audits of computed submissions, including:
  - verifying that the parties submitting the data have the necessary approvals in place,
  - verifying receipt of all tallies (log listings from handhelds) for the submission or package,
  - verifying receipt of all supporting documentation as specified in the approval to compile data,
  - verifying that documentation is complete, is in the correct format, signatures are in place, and there are no omissions,
  - rekeying of raw data to ensure key entry, calculations, and roll up of segregations are correct,
  - notifying parties submitting data of unacceptable submissions or errors, and
  - follow-up checking to ensure deficiencies have been remedied.
11.6 Correction of Errors

All scale returns submitted to the ministry may be subject to scrutiny for completeness and accuracy prior to further processing. Where errors or omissions are detected they must be corrected.

The following conventions apply to all errors:

- to facilitate timely processing, obvious errors will be corrected by the ministry, and
- a copy of the corrected paper return will be returned to the originator.

The correcting of errors on scale returns is detailed in the following link to the HBS Guide – Chapter 11 - Correcting Errors:

HBS Industry Reference Guide

11.6.1 Key Punch/coding Errors

The following conventions apply:

- to enable timely processing, obvious errors will be corrected by the ministry, and
- a copy of corrected paper returns will be returned to the originator.

11.6.2 Measurement/Grade Errors and Missing Dimensions

The scaler should be contacted directly if feasible. If in agreement the scaler should consent to changes by initialling all changes.

If the scaler is not in agreement with the changes, changes will not be made unless the return cannot be processed, in which case ministry staff will use their best judgement. A copy of the corrected returns will be returned to the originator.

Where the scaler cannot be contacted, either verbally or in writing, and no response is received in seven (7) days, the return will be processed by ministry staff using their best judgement.

In the case of weight scale samples, missing dimensions will result in cancellation of the sample unless the missing dimension can be completed and there is little doubt about its accuracy.
11.7 Data Loss

While computer technology greatly enhances the collection, computation, and reporting of scale data, there is an ever present risk that data may be lost through hardware/software failure or user error. It is essential that provisions are always in place to:

- minimize the impact of data loss, and
- reconstruct data where they are deemed lost.

11.7.1 Conventions to Minimize Data Loss

Several computer software and operating conventions should be routine to prevent data loss and minimize loss where it does occur:

- always ensure staff are adequately trained and staff are conversant with procedures to follow in the event of an equipment failure,
- always ensure a person is named and available to support any system whether mechanical or manual,
- always backup data to a host computer or other backup device as often as feasible,
- always make hard copies of handheld data as often as feasible and preferably after each load scaled,
- always keep hand-written reports and printouts organized and stored in a safe place where they won't get lost (store copies off-site where feasible),
- always store disks in a safe, dry, dust free place, and avoid temperature extremes (keep away from heaters and magnetic fields),
- always use a reliable power source,
- always ensure backup tapes, disks, disk drives, and other devices are covered in dusty conditions, and
- always ensure any system compiling scale data makes provision for backing up and recovering data to and from an external backup device (e.g., tape backup unit, or floppy disk).

If data loss is detected or suspected:

- contact the system support person for instruction, and
- contact the district scaling supervisor.
11.7.2 Reconstructing Data Which is Lost

Where data are known to be lost, it is essential that:

- the data loss be reported to the district office, and
- the lost data be estimated from previous data as instructed by the district office and submitted to the Ministry for processing.

The following guidelines are in place:

1. Weight Scale Data:
   - Weight Scale Breakdown.
     
     The Weight Scale System chapter of this manual lays out the procedures to be followed in the event of a weight scale breakdown.
   - Loss of Sample Scale Data.
     
     Because weight scale samples are used to estimate volumes for the entire population it is essential that they are accurate. If any data loss is detected, the sample may be cancelled on instruction from Regional staff. Similarly, weight scale samples that contain missing dimension data would usually be cancelled unless the missing dimension(s) can be reconstructed with no doubt about their accuracy.

2. Piece Scale Data:

   Under piece scaling the log-by-log scale details are the basis for billing. Any loss of piece scale data represents a potential revenue loss. As such, it is essential that where losses of this kind are detected they must be estimated and the estimate used as the basis for billing.

   Most piece scale production is scaled in the form of truckloads spread on the ground with all logs on each truck bearing the same timber mark. To reconstruct lost data, you must use the data from scaling immediately prior to the breakdown to estimate the volumes by species and grade for each missing truckload as follows:

   - for each timber mark, determine the five most recently scale loads ensuring the truck size and timber mix are representative,
   - based on the five loads, calculate average volumes for each species and grade combination, and
   - for reporting purposes, ensure any estimated loads are noted with the notation "estimated volume" and include your background calculations identifying which load numbers were used for averaging.
Where data is lost during a boom scale or other scaling arrangements where truckload identities are not maintained, it may be essential to reconstruct lost data using approaches other than truckload averages. Such approaches may include using piece counts.

In all cases, data must be reconstructed using the best and most representative data available from previously scaled timber. Timber scaled after the data loss may be used where there is inadequate data available prior to the loss.
11.8 Access to Scale Data

The release of information such as scale data falls under the *Freedom of Information and Protection of Privacy Act*. The following guidelines apply to the release of scale data:

<table>
<thead>
<tr>
<th>Release of Check Scale Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Upon completion of a check scale, the check scale comparison reports and detailed log listing will always be provided to the scaler who performed the scale.</td>
</tr>
<tr>
<td>2. Check scale comparison reports and detailed log listings are available to other parties upon request, subject to provisions of the <em>Freedom of Information and Protection of Privacy Act</em>.</td>
</tr>
</tbody>
</table>
11.9 Invoices and Volume Statements

Information on Invoices and Statements can be directed to:

<table>
<thead>
<tr>
<th>Region</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
</table>
| Coast Forest Region           | http://www.for.gov.bc.ca/rco/  
2100 Labieux Road  
Nanaimo, BC V9T 6E9  
Phone: 250-751-7001        |         |
| Northern Interior Forest Region | http://www.for.gov.bc.ca/rni/  
5th Floor, 1011 Fourth Ave,  
Prince George, BC V2L 3H9  
Phone: 250-565-6100        |         |
| Southern Interior Forest Region | http://www.for.gov.bc.ca/rsi/  
515 Columbia St.  
Kamloops, BC V2C 2T7  
Phone: 250-828-4131        |         |