

Formulas, Rules and Principles Subject: General

Summary

This section describes how this Manual is to be used for the 2017 revaluation (January 1, 2017 to December 31, 2020).

Regulated property assessments shall be determined in accordance with the formulas, rules and principles established in this Manual.

In this Manual, properties subject to a regulated property assessment are referred to as regulated property.

Base Date

Pursuant to SAMA Board Order dated December 13, 2013, the base date for assessment purposes is January 1, 2015.



Formulas, Rules and Principles Subject: General



Section: Regulated Property Rules of Assessment

Formulas, Rules and Principles

Summary

This section describes the general rules of assessment for regulated property.

Subject:

Assessed Value

The assessed value of regulated property shall be determined in accordance with the present use of the property.

The assessed value of regulated property shall not be determined by any procedure which takes into consideration income or benefits attributable to the property.

The assessed value of agricultural land shall be determined in accordance with the valuation procedures in:

- Chapter 1 Formulas, Rules and Principles and
- Chapter 2 Agricultural Land.

The assessed value of heavy industrial property shall be determined in accordance with the valuation procedures in:

- Chapter 1 Formulas, Rules and Principles;
- Chapter 3 Heavy Industrial Improvements;
- Chapter 4 Resource Production Equipment; and
- Chapter 5 Pipelines.

Computer Generated Assessed Values

Notwithstanding the inclusion in this Manual of rates and schedules of rates to be used to determine assessed values for regulated property, where assessed values are calculated using a computer assisted mass appraisal system (CAMA System) that uses calculations developed from the rates or schedules of rates in this Manual, the assessed values determined by the CAMA System are deemed to be correct, even if they differ slightly from the assessed values determined using the rates and schedule of rates in this Manual, as long as the difference between the assessed values determined by the CAMA System and the assessed values determined using the rates and schedule of rates in this Manual is less than three percent.

Definitions

The meaning of any words not defined in this Manual shall be determined in accordance with the definitions in the applicable legislation or will have the meanings that are commonly assigned to them in the context in which they are used.

In this Manual:

- (a) "building or structure group" means one or more parts of a building or structure that have been grouped for the purposes of determining the rate to be applied to the area of all or a portion of a building or structure.
- (b) "functional obsolescence" means the loss in value from replacement cost new less physical deterioration due to the inability of the building or structure to adequately perform the function for which it is used.
- (c) "heavy industrial building or structure" means an improvement located on heavy industrial property except:
 - (i) the resource production equipment of any mine or petroleum oil or gas well; and
 - (ii) any pipeline on or under land.



SASKATCHEWAN ASSESSMENT
MANAGEMENT AGENCY

Section: Regulated Property

Formulas, Rules and Principles

Subject: Rules of Assessment

- (d) "heavy industrial property" means a property or part of a property that is designed, built, being built or being used for one or more of the following:
 - (i) extracting, producing, processing or refining a mineral resource;
 - (ii) producing, upgrading, refining or transmitting petroleum;
 - (iii) producing ethanol and has a design capacity greater than 50 million litres per year;
 - (iv) manufacturing of plywood, particleboard, wafer board, fertilizer, malt, paper, pulp, steel or steel pipe;
 - (v) generating power; or
 - (vi) manufacturing lumber and other wood products from raw logs in a sawmill and have a design capacity greater than 15 million fbm per year based on 480 shifts a year of 8 hours each shift;

including where a property is not in operation, or not yet in operation, for any reason.

- (e) "Marshall Valuation Service" means the version of the Marshall Valuation Service published by Marshall & Swift/Boeckh as of the October 2014 service update.
- (f) "non-primary industrial land" means heavy industrial land located in a city or located at an oil or gas well site, a refinery or an upgrader.
- (g) "oil or gas well site" means the area of land on or under which is located resource production equipment used to raise or pump the oil or gas to the surface; resource production equipment used to inject air, water, steam or gas to enhance the production of a well; or resource production equipment at a water source well, where the resource production equipment was operated for 30 or more days in the 12 month period ending July 1st of the preceding year to which the assessment roll relates.
- (h) "perimeter" means the outside linear dimension of the floor area covered by a building or structure, or section of a building or structure.
- (i) "physical deterioration" means the loss in value from replacement cost new due to wear and tear, decay and structural defects caused by the forces of nature;
- (j) "primary industrial land" means land that is not located in a city and associated with:
 - (i) oil and gas well production, including the land associated with batteries, satellites, gas plants, and compressor stations but does not include oil or gas well sites, refineries and upgraders;
 - (ii) mine operations, including the land associated with the mining, milling and handling facilities, and the land associated with general offices, general stores, rooming houses and recreational facilities located at the mine site; or
 - (iii) pipeline facilities, including the land associated with pumping stations but does not include the continuous strip of land or pipeline right-of-way except where the line of pipe is located on the surface of the land.
- (k) "replacement cost new less depreciation" means the replacement cost new of a building or structure less the amount of physical deterioration and functional obsolescence.



Formulas, Rules and Principles Subject: Rules of Assessment

(l) "section" means:

- (i) a part of a building or structure classified separately from other parts of the building or structure for the purpose of calculating the replacement cost new of the building or structure; or
- (ii) a building or structure no part of which has been classified separately from any other part of the building or structure for the purpose of calculating the replacement cost new of the building or structure.
- (m) "substitute building or structure" means a building or structure of equal utility as the subject building, and constructed using current materials, design and construction standards.



Formulas, Rules and Principles Subject: Rules of Assessment



Formulas, Rules and Principles Subject: Agricultural Land

General

The assessed value of arable agricultural land and non-arable agricultural land shall be determined in accordance with this section and the valuation procedures in Chapter 2 - Agricultural Land.

Arable Agricultural Land

The assessed value of arable agricultural land shall be determined by application of the following formula:

 $LV = PR \times E \times PF \times U$

where: LV = assessed value of land

PR = productivity rating
E = economic factors
PF = provincial factor
U = number of land units

Non-Arable Agricultural Land Except Waste Land

The assessed value of pasture land shall be determined by application of the following formula:

 $LV = R \times PF \times U$

where: LV = assessed value of land

R = rating

PF = provincial factor U = number of land units

Non-Arable Agricultural Waste Land

The assessed value of non-arable agricultural waste land shall be determined by the application of the following formula:

 $LV = R \times U$

where: LV = assessed value of land

R = base land rate

U = number of land units



Formulas, Rules and Principles Subject: Agricultural Land



Formulas, Rules and Principles Subject: Agricultural Land - Mixed Use

Summary

This section contains the valuation procedures for determining the value of agricultural mixed use land.

Agricultural Mixed Use Land

Agricultural mixed use land includes land used for agricultural use and non-agricultural use. For the purposes of the agricultural mixed use land valuation procedures in this Manual, non-agricultural use shall mean land used for purposes other than agriculture, including residential, multi-residential, recreational, institutional, commercial and light industrial uses. Any land that is used for a purpose that is subject to valuation elsewhere in this Manual (such as heavy industrial, resource production equipment or pipelines) shall be excluded from agricultural mixed use land and shall be valued in accordance with the relevant formulas, rules and principles in this Manual.

Formulas, Rules and Principles

Where a parcel of land is governed by municipal zoning that prohibits the land from being used for agricultural production purposes, such land shall not be considered agricultural land, including agricultural mixed use land, and is therefore not valued using the formulas, rules and principles in this Manual; provided that if such land is used for a purpose that is subject to valuation elsewhere in this Manual, such as heavy industrial, resource production equipment or pipelines, it shall be valued in accordance with the relevant formulas, rules and principles in this Manual.

The assessed value of agricultural mixed use land where the mixed use base land rate is less than or equal to the average market value for agricultural use land shall be valued using agricultural land valuation procedures in this Manual.

The assessed value of all other agricultural mixed use land shall be determined as follows:

- a) Parcels less than three acres shall be assessed in a manner equivalent to the methodology that would be applied under the market valuation standard for a similar sized parcel.
- b) Parcels three acres or greater shall be assessed as follows:
 - (i) A minimum of three acres, or the actual area of the parcel used for non-agricultural use, whichever is greater, shall be assessed in a manner equivalent to the methodology that would be applied under the market valuation standard for a similar sized parcel.
 - (ii) The remainder of the area of the parcel exceeding the area determined in (i) shall be assessed at a value determined using the agricultural land valuation procedures in this Manual.

Improvements on Agricultural Mixed Use Land

Improvements located on an agricultural mixed use parcel of land shall be valued in a manner equivalent to the methodology that would be applied under the market valuation standard for the purposes of determining an assessment for such improvements.



Formulas, Rules and Principles Subject: Agricultural Land - Mixed Use



Formulas, Rules and Principles Subject: Heavy Industrial Land

General

The assessed value of heavy industrial land shall be determined in accordance with this section.

Heavy Industrial Land

Heavy industrial land includes both primary industrial land and non-primary industrial land.

Primary Industrial Land

The assessed value of primary industrial land, excluding land used for residential or agricultural purposes, shall be determined by application of the following formula:

 $LV = R \times U$

where: LV = assessed value of primary industrial land

R = base land rate

U = number of land units

Non-Primary Industrial Land

The assessed value for non-primary industrial land shall be determined using the market valuation standard.

Rate Schedule

Primary Industrial Land Rate Schedule

Classification	Description	Rate (\$/acre)
High (INDH)	High volume traffic areas. Land associated with buildings and equipment used in conjunction with the primary operation of the facility, and general office areas.	54,970
Medium (INDM)	Medium volume traffic areas. Land associated with buildings and equipment used in conjunction with secondary operations at the facility, and general stores, rooming houses and recreational facilities. Land used for the storage or disposal of waste or unusable materials produced from the operation of the facility.	15,870
Low (INDL)	Low volume traffic areas other than land used for the storage or disposal of waste or unusable materials produced from the operation of the facility.	2,050



Formulas, Rules and Principles Subject: Heavy Industrial Land



Formulas, Rules and Principles Subject: Railway Roadway

Railway Roadway

The assessed value of railway roadway shall be determined by the application of the following formula:

 $LV = R \times U$

where: LV = assessed value of railway roadway

R = base land rate U = number land units

For each railway subdivision, the base land rate shall be determined from the "Railway Roadway Rate Schedule" on the basis of net tonnage for the railway subdivision. Net tonnage shall be the average of annual carried tons per mile calculated for the three year period ending December 31, 2014.

Railway Roadway Rate Schedule

Classification	Net Tonnage (millions)	Rate (\$/mile)
1	≥ 15	609,500
2	10 to < 15	554,500
3	5 to < 10	338,000
4	1 to < 5	143,000
5	< 1	18,900



Formulas, Rules and Principles Subject: Railway Roadway



Formulas, Rules and Principles Subject: Heavy Industrial Buildings and Structures

General

The assessed value of heavy industrial buildings and structures shall be determined in accordance with this section.

Heavy Industrial Buildings and Structures

The assessed value of heavy industrial buildings and structures, excluding oil and gas well site buildings and equipment, shall be determined by the application of the following formula:

 $BV = ((RCN - Phys) - Funct) \times CAF$

where: BV = assessed value of buildings and structures

RCN = replacement cost new
Phys = physical deterioration
Funct = functional obsolescence
CAF = closure adjustment factor

The replacement cost new, physical deterioration, functional obsolescence and closure adjustment factor shall be determined in accordance with the valuation procedures in Chapter 3 – Heavy Industrial Improvements and Marshall Valuation Service.

Recreational Use Buildings and Structures on a Heavy Industrial Parcel

Where a property includes a heavy industrial building or structure, and in addition a building or structure used for recreational purposes, and the use of that heavy industrial building or structure is clearly distinct from and not integrated with or directly related to the building or structure used for recreational purposes:

- (a) the assessed value of that heavy industrial building or structure and any other building or structure on the heavy industrial parcel, except the improvements used for recreational purposes, shall be determined by application of the above formula; and
- (b) the assessed value of the improvements used for recreational purposes shall be determined as if the heavy industrial building or structure was not present using the market valuation standard.

Buildings and Structures on an Oil or Gas Well Site

The assessed value of buildings and structures on an oil or gas well site shall be determined by the application of the following formula:

 $BV = (RCN - Phys) \times PAF$

where: BV = assessed value of oil and gas well site buildings and structures

RCN = replacement cost new

Phys = physical deterioration

PAF = production adjustment factor

The replacement cost new shall be determined in accordance with the valuation procedures in Chapter 3 – Heavy Industrial Improvements and Marshall Valuation Service.

The physical deterioration and production adjustment factor shall be determined in accordance with the valuation procedures in Chapter 4 - Resource Production Equipment, Section 4.1 - Oil and Gas Well Resource Production Equipment.

Date: 20/01/01 Page: 1





Formulas, Rules and Principles Subject: Heavy Industrial Buildings and Structures



Formulas, Rules and Principles Subject: Oil and Gas Well Resource Production Equipment

General

The assessed value of oil and gas well resource production equipment shall be determined in accordance with this section.

The assessed value of oil and gas well resource production equipment, excluding the resource production equipment located at an oil or gas well site, and flow lines, shall be determined by application of the following formula:

EV = RCN - (Phys + DA)

where: EV = assessed value of oil and gas well equipment

RCN = replacement cost new Phys = physical deterioration DA = downtime allowance

The replacement cost new, physical deterioration, and downtime allowance shall be determined in accordance with valuation procedures in Chapter 4 - Resource Production Equipment, Section 4.1 - Oil and Gas Well Resource Production Equipment.

Oil or Gas Well Site and Flow Lines

The assessed value of oil and gas well resource production equipment located at an oil or gas well site, and flow lines shall be determined by the application of the following formula:

 $EV = (RCN - (Phys + DA)) \times PAF$

where: EV = assessed value of oil and gas well equipment

RCN = replacement cost new Phys = physical deterioration DA = downtime allowance

PAF = production adjustment factor

The replacement cost new, depreciation, downtime allowance, and production adjustment factor shall be determined in accordance with valuation procedures in Chapter 4 - Resource Production Equipment, Section 4.1 - Oil and Gas Well Resource Production Equipment.





Formulas, Rules and Principles Subject: Oil and Gas Well Resource Production Equipment



Formulas, Rules and Principles Subject: Mine Resource Production Equipment

General

The assessed value of mine resource production equipment shall be determined in accordance with this section.

The assessed value of mine resource production equipment shall be determined by the application of the following formula:

 $EV = (RCN - (Phys + DA)) \times DAF$

where: EV = assessed value of mining equipment

RCN = replacement cost new Phys = physical deterioration DA = downtime allowance

DAF = downtime adjustment factor

The replacement cost new, physical deterioration, downtime allowance, and downtime adjustment factor shall be determined in accordance with the valuation procedures in Chapter 4 - Resource Production Equipment, Section 4.2 - Mine Resource Production Equipment.



Formulas, Rules and Principles Subject: Mine Resource Production Equipment



Formulas, Rules and Principles Subject: Pipelines

General

The assessed value of pipelines shall be determined by in accordance with this section.

The assessed value of a pipeline shall be determined by the application of the following formula:

 $PLV = (RCN - Phys) \times VAF$

where: PLV = assessed value of pipeline

RCN = replacement cost new Phys = physical deterioration VAF = volume adjustment factor

The replacement cost new, physical deterioration, and volume adjustment factor shall be determined in accordance with the valuation procedures in Chapter 5 - Pipelines.



Formulas, Rules and Principles Subject: Pipelines



Formulas, Rules and Principles Subject: Environmental Contamination

Summary

This section contains the valuation procedures for determining environmental contamination adjustments for Heavy Industrial Property.

Applications

The environmental contamination adjustment accounts for the loss in value to the property due to the presence of a physical environmental contaminant.

An environmental contamination adjustment shall be applied where a contaminated property risk assessment report, also referred to as a "Remedial Investigation" or "Phase III environmental site assessment", including an estimated cost-to-cure for the contamination, has been prepared by an engineer certified with the Association of Professional Engineers and GeoScientists of Saskatchewan.

Formulas, Rules and Principles

Land

The environmental contamination adjustment shall be determined by the cost-to-cure method.

Buildings and Structures

The environmental contamination adjustment accounts for the loss in value to the building or structure due to functional obsolescence associated with the presence of a physical environmental contaminant.

The environmental contamination adjustment shall be determined by application of the cost-to-cure method.

Cost-to-Cure Method

Used For Current Use

Where:

- (a) contamination still exists on the property; and
- (b) the presence of the contamination does not prohibit the property from being used for the use to which it was put prior to the identification of the contamination;

the environmental contamination adjustment shall be 10 percent of the lowest cost option for the cost-to-cure, referred to in the contaminated property risk assessment report. The maximum adjustment shall be 10 percent of the assessed value of the property as if it were uncontaminated.

Not Used For Original Use

Where the presence of a physical environmental contaminant prohibits the property from being used for the use to which it was put prior to the identification of the contamination but does not entirely restrict the property from being used, the environmental contamination adjustment shall be 50 percent of the cost-to-cure the contamination, referred to in the contaminated property risk assessment report, to bring the site to the point that it could be used for the use to which it was put immediately prior to the identification of the contamination. The minimum remaining assessed value of the property shall be 10 percent of the assessed value of the property as if it were uncontaminated.

No Use Permitted

Where the presence of a physical environmental contaminant completely prohibits the use of the property, the environmental contamination adjustment shall be 100 percent of the cost-to-cure the contamination, referred to in the contaminated property risk assessment report, to bring the site to a point that it could be used for the use to which it was put immediately prior to the identification of the contamination.



Formulas, Rules and Principles Subject: Environmental Contamination

Where the environmental contamination adjustment is greater than the assessed value of the property as if it were uncontaminated, then the assessed value of the property shall be one percent of the assessed value of the property as if it were uncontaminated.

Application of the Environmental Contamination Adjustment

Land

The environmental contamination adjustment applicable to land shall be determined with the following cost-to-cure procedure:

- 1. Determine the assessed value of the land without an environmental contamination adjustment.
- 2. Determine the environmental contamination adjustment for the property.
- Determine the environmental contamination adjustment for the land by subtracting the applicable
 environmental contamination adjustment, up to the maximum percentage permitted for the property, from the
 assessed value of the land without an environmental contamination adjustment.

Buildings and Structures

The environmental contamination adjustment applicable to buildings and structures shall be determined by the calculation of a functional obsolescence factor by application of the following cost-to-cure procedure:

- 1. Determine the replacement cost new less physical deterioration of the building or structure.
- 2. Determine the environmental contamination adjustment for the buildings and structures by deducting the environmental contamination adjustment applied to the land from the environment contamination adjustment for the property.
- 3. Determine the adjusted replacement cost new less physical deterioration of the building or structure by subtracting the environmental contamination adjustment applicable to the buildings and structures, up to the maximum percentage permitted for the property, less the adjustment applied to the land from the replacement cost new less physical deterioration of the building or structure.
- 4. Calculate the functional obsolescence factor by dividing the adjusted replacement cost new less physical deterioration of the building or structure by the replacement cost new less physical deterioration of the building or structure.