IN THE MATTER OF A COMPLAINT filed with the Wheatland County Composite Assessment Review Board (CARB) pursuant to Part 11 of the *Municipal Government Act*, being Chapter M-26 of the Revised Statutes of Alberta 2000

BETWEEN:

Federated Co-operatives Limited as represented by Altus Group – Complainant

-and-

Wheatland County represented by Reynolds Mirth Richards & Farmer LLP – Respondent

Roll #	8695000
Assessment Value	$118,617,850
Assessment Year	2012
Tax Year	2013

BEFORE:
C. Griffin, Presiding Officer
J. Anderson, Member
E. Deeg, Member

Board Counsel:
G. Stewart-Palmer, Barrister & Solicitor

Staff:
J. Laslo, Composite Assessment Review Board Clerk

A merit hearing was held on December 9-12, 2013 relating to a complaint about the assessment of the following property tax roll number:

Roll #8695000 Assessment $ 118,617,850

PART A: BACKGROUND AND DESCRIPTION OF PROPERTY UNDER COMPLAINT

[1] This appeal relates to an assessment of a fuel tank farm which is under construction in Wheatland County. This fuel tank farm is located on land legally described as:

SW 9-22-26-W4M
Lot 1
Block 2
Plan 1012248

PART B: MERIT MATTERS

[2] The CARB derives its authority to make decisions under Part 11 of the *Municipal Government Act,* R.S.A. 2000, c.M-26 ("MGA").

Position of the Parties

[3] In coming to its decision on the merits, the CARB reviewed both the written materials filed in this hearing and the oral testimony given by the witnesses. In addition, the CARB has reviewed the legal arguments filed by the parties.

[4] The following is a brief summary of the positions of the parties and the evidence provided by the witnesses at the hearing.

Position of the Complainant

[5] The assessment of the Carseland facility is governed by the provisions of section 291(2) of the MGA.

> ***291(1)*** *Unless subsection (2) applies, an assessment must be prepared for an improvement whether or not it is complete or capable of being used for its intended purpose.*
>
> ***(2)*** *No assessment is to be prepared*
>
> *(a) for linear property that is under construction but not completed on or before October 31, unless it is capable of being used for the transmission of gas, oil or electricity,*
> *(b) for new improvements that are intended to be used for or in connection with a manufacturing or processing operation and are not completed or in operation on or before December 31, or*
> *(c) for new improvements that are intended to be used for the storage of materials manufactured or processed by the improvements referred to in clause (b), if the improvements referred to in clause (b) are not completed or in operation on or before December 31.*

[6] As the Carseland facility is intended to be used for or in connection with a manufacturing or processing facility and is not complete, it should not be assessed. For this reason, the assessment should be reduced to $5,079,120 comprised of

- land at $2,651,850
- Cardlock facility – $2,427,230

[7] The issue before the CARB is whether there is manufacturing or processing at the facility. The Complainant indicated that in its view the evidence presented to the CARB establishes that the entire facility is to be used for manufacturing and processing.

[8] The Complainant presented 2 witnesses:

a) Mr. Steven Eady; and
b) Ms. Lyne Ricard, P.Eng.

Mr. Steven Eady

[9] The Complainant sought to qualify Mr. Eady as an expert in the area of assessment. However, upon cross examination, it became apparent that Mr. Eady was not an assessor, nor had he completed the appropriate training. Although he was an associate member of the Alberta

Assessors' Association, the Association did not have any continuing education criteria for associate members nor was Mr. Eady aware of any discipline which could be imposed by the Association for the conduct of associate members. Mr. Eady confirmed that he was not an engineer and was not attempting to give engineering evidence. He also confirmed that he did not have legal training.

[10] While the Board was prepared to permit Mr. Eady the opportunity to give opinion evidence, the Board was not prepared to recognize Mr. Eady as an expert because he did not have qualifications as an assessor, engineer or lawyer.

[11] Mr. Eady dealt with multiple jurisdictions in Alberta and the assessing authorities within them, reporting billions of dollars of facilities. He and his staff determine if construction is complete on a facility as of the condition date of December 31. If the facility is not complete, he and his staff determine the intent of the facility and what will it do if it is operating. They look at the overall facility and each improvement and process area and how they relate to each other. In this regard, section 291 is the critical piece of legislation.

[12] Mr. Eady referred the Board to the definitions of manufacturing and processing in the case law found at Exhibit C3, Appendix H. In addition, he referred the Board to Exhibit C1, pages 12-29 where the Complainant has set out definitions relating to processing and manufacturing.

[13] Mr. Eady looks at the Municipal Government Act, the Regulations and the Guidelines when determining how a site should be assessed. The regulations include the Matters Relating to Assessment and Taxation Regulation (MRAT), the Minister's Guidelines, the CCRG, the Machinery and Equipment Manual, the Linear Assessment Manual, as well as other costing manuals when dealing with types of improvements.

[14] Mr. Eady drew the Board's attention to Exhibit C1, page 14, including the Assessment Notice. Mr. Eady provided an explanation of the facility through reference to the photograph at page 21 which was the most recent aerial photograph of the facility. Mr. Eady outlined the various components on the site, including the gasoline storage tanks, the ethanol storage tank, the diesel storage tanks, the rail unloading area and the truck unloading area.

[15] There are five rail spurs allowing 40 rail cars to be unloaded at the site. Regular gas, premium gas, summer and winter diesel, ethanol and IVD additives are all unloaded by rail via arms and hoses. There are two truck unloading facilities. The only component which is brought in by truck alone is the dye.

[16] Mr. Eady provided a review of the inventory of tanks on site as found in Exhibit C3, Appendix B, page 34. In the truck loading facility, there are eight loading bays with five arms at each for a total of 40 arms to load the trucks.

[17] Mr. Eady took the Board to the Assessment and Industrial Detail found at Exhibit C1, pages 24 – 27. He stated that the Municipal Assessor, Mr. Klem, has assumed that the facility will not be used for manufacturing and processing and therefore has taken the costs to date and

put those costs on the assessment roll to get the value for improvements on the site of $115, 965,960. The assessment for the land is $2,651,890 for a 59.87 acre parcel. The total assessment is $118,617,850 for the industrial land and improvements.

[18] Mr. Eady stated that he and his team had conducted a review of the facility with various meetings with Federated Cooperative personnel. The purpose was to determine what the site was supposed to do and how section 291 should apply to it. Based upon their site tours, and their meeting with site personnel, they determined that there will be manufacturing and processing on site. In his view, section 291 should be applied and all site improvements should not be assessed until operational, except the card lock facility and the land. In his view, the facility met all the tests for manufacturing and processing and it is premature to assess the site prior to it being operational.

[19] Mr. Eady took the Board to Exhibit C1, pages 37 and 38 which provide an overview of the proposed operations of the facility. Raw crude oil is removed from the ground and taken to the Regina refinery which will produce hydrocarbons from the raw crude oil. The product created at the Regina refinery will be shipped to the Carseland facility. Those products are regular gasoline, premium gasoline and diesel. They become three input fuels at the facility. Additives of IVD, dye and ethanol are brought to the facility. The products are mixed before being placed into trucks for hauling. The Complainant confirmed that the addition of IVD and ethanol make the product more marketable.

[20] When a driver comes to the site with an order, he enters a code into the power system. The system draws the appropriate inputs from the various tanks which inputs are then mixed and blended inline in the truck loading arms before being loaded into the truck. Once the truck has been filled, it either drives to a retail facility or to a bulk storage facility. Mr. Eady stated that based upon his discussions with Federated Cooperatives Limited and the engineer, it is his view that the product is physically and chemical changed.

[21] Mr. Eady brought the Board's attention to his Construction Cost Report Guide (CCRG) analysis found at Exhibit C1, page 42. When the site is complete, the next step will be to go through the costs looking for any costs which might be non-assessable. These are set out at page 42 which include items such as abnormal costs. If the Board finds that the property is assessable, the methodology set out at pages 42 and 43 should be used by the Board. The total costs to date have been $130,756,964.19. In its analysis, the Complainant has taken out what it believes to be the non-assessable costs, leaving a net assessable cost of $105, 094,758.97. He stated the next step of the analysis is to figure out how much of the $105,094,758.97 is land, machinery and equipment and then to split that net cost.

[22] On cross examination, Mr. Eady confirmed that the CCRG is the methodology for evaluating machinery and equipment costs alone, and is not the methodology for the valuation of land. The Complainant's position is that the wording of the CCRG in section 1.000 refers to the cost of construction of the facility. For that reason, the Complainant believes that the CCRG can be used in the manner suggested above.

[23] The Complainant's position was that if there is manufacturing and processing on site, pursuant to section 291(2)(b), all improvements in conjunction with the manufacturing and processing should not be assessed. There was no reference to machinery and equipment or structures.

[24] The Complainant did not dispute the land value or the cardlock value, but the office building and railway are part of the appeal. It is the Complainant's position that they are used in connection with the processing of the facility and should not be assessed. The only issue which is not contested in relation to the railway is the use of the Railway Minister's Guidelines.

Ms. Lyne Ricard

[25] Ms. Ricard was recognized as an expert in chemical engineering, specializing in processing.

[26] Ms. Ricard stated she did not put a definition of manufacturing or processing in her report because she understood the scope of her role was to explain the engineering and then for the Board to determine whether that was processing or not. From an engineering point of view, processing was occurring at the facility based upon a definition of processing as being a macro change or a material change.

[27] Ms. Ricard gave a brief overview of the refining process from crude oil primary distillation (the removal of impurities) to the combining of light products such as butane and propane to make gasoline, and the breakdown of heavier, long molecules to make gasoline. All of the equipment is necessary to run the facility.

[28] Her evidence is that E10 (Ethanol 10) is not pure gasoline. It has different performance characteristics. It is important to understand the properties of ethanol and gasoline and how they react. They make a new fuel which does not behave the same way. She stated that ethanol has two carbons which makes it lighter than gasoline.

[29] Refiners follow the Canadian General Standard Board (CGSB) standards (Exhibit C3, Appendix A). Those standards set specifications for gasoline based upon location and time of year. The base quality of the product changes because of the standards.

[30] Ms. Ricard discussed the combustibility of the product created by adding ethanol. When ethanol is added, it adds octane to the product. Ethanol is an octane booster. Other octane boosters have been prohibited by law. The boosting power given by ethanol is worth millions of dollars to the industry. In her view, it is a macro change and significant.

[31] In her view, ethanol was not an additive because the CGSB standards provide that up to one percent by volume of additives can be added. In Canada, up to 10 percent ethanol can be added to gasoline. Therefore, it is a mistake to say that ethanol is an additive. Ethanol is not found in crude oil. To use ethanol, it must be first be manufactured. In her view, there is no dispute that refining is processing.

[32] When adding the additives such as IVD or dye, it is possible to put in more than the recommended amount and not put the product off specification. This is to be contrasted with blending (the combining of gasoline and ethanol) where there is a science and the final product can be off specification.

[33] When the ethanol is blended with gasoline, the ethanol disappears. It is an alcohol, not a hydrocarbon. It creates a new product – a biofuel. Further, the dye and the inline valve detergent (IVD) cannot be recovered after being added. The final product has a different effect on health and equipment. The molecules are different and their effect on equipment is different.

[34] Ms. Ricard stated that ethanol mixed with gasoline is a blend and blending is a process. One mixes additives since they are not fuels. They are different products, but are required to be added according to the standards. The blending at the Carseland facility is done in line. Although it requires fewer assets, it is still blending. The product created by blending has better combustibility.

[35] Ms. Ricard stated that the market will accept 10 percent biofuel, but the percentage of ethanol may be more in the future. The molecules of the biofuel are different. There are specific standards in the CGSB for denatured fuel ethanol for use in automotive spark ignition fuels. The standard is to regulate and provide guidance to those making ethanol for biofuels. Ms. Ricard stated that because ethanol grabs water, retailers who choose to sell biofuel need to convert their gas station after cleaning and retailers generally choose not to move between the two products.

[36] In her view, it did not matter if the DBM indicated that the Carseland facility is a storage facility. The DBM in her view does not address functionality.

[37] On cross examination, Ms. Ricard confirmed that she did not feel that her definition of processing was relevant. Her role was to describe what the facility does and then the CARB can determine whether that is processing or not.

[38] She confirmed that there are no crackers, cokers, reformers, or vacuum distillation at the Carseland site.

[39] Ms. Ricard confirmed that each fluid stays in its own pipe until it gets to the inline blending area. It is only after the point of connection that the fluids are mixed in the pipe. The base pipe is 4 inches in diameter, but the pipe where the inline blending occurs is 2 inches in diameter. Due to the small size, it creates the turbulence which causes the blending. Ms. Ricard stated that the blending can occur completely within eight feet; however, there is more than 20 feet from the injection site to the end of the pipe. Ms. Ricard confirmed that blending and mixing occurs for 20 feet in each of the 40 loader arms.

[40] Ms. Ricard confirmed that some diesel may leave the site with no additives and no other elements added to it. However, diesel may have dye added to it, if required.

[41] Ms. Ricard was not aware of what percentage of diesel leaving the facility would leave without any mixing or blending. However, she proffered that it could be between 20 and 40

percent of the total diesel on site. Ms. Ricard was not aware of how much gasoline has ethanol. At the present time, the facilities have no ability to add ethanol to premium gasoline.

Position of the Respondent

[42] The Respondent's position was that the assessment meaning of "manufacturing or processing" requires a "change in nature or form," or a material transformation. The Respondent indicated that section 291(2)(b) applies in two circumstances as follows:

> *new improvements that are intended to be used for manufacturing or processing operation*
>
> *or*
>
> *new improvements that are intended to be used in connection with a manufacturing or processing operation*
>
> *and*
>
> *which are not completed or in operation on or before December 31,*

[43] The improvement protected by section 291(2)(b) must be machinery and equipment. When assessing property, the first step for the assessor is to determine what kind of improvement, which then provides for the valuation standards, and gives the assessor guidance if the improvement is under construction by virtue of section 291. In the Respondent's view, the meaning of machinery and equipment must be the same in the MGA and the regulations.

[44] What goes on at the different aspects of the facility is not particularly in dispute. However, its significance and whether what goes on meets the definition of manufacturing or processing is where the difference lies. The Respondent sees how the Complainant describes its property when it applied for a development permit and in the DBM as important. The Respondent's position is that there is no manufacturing and processing. Alternatively, if there is, the only place that it occurs is in the loading arms.

[45] The Respondent called two witnesses:

a) Dr. Ed Thompson; and
b) Mr. Dennis Klem.

Dr. Ed Thompson

[46] Dr. Thompson is a mechanical engineer with experience in facility design engineering, design and manufacturing processes who was qualified to give expert evidence in the areas of facility design, site engineering and designing of manufacturing and refining facilities.

[47] Dr. Thompson stated that he has never referred to ethanol as a hydrocarbon. In the previous years' hearing, he referred to them as carbohydrates. He understands that ethanol is derived from bio mass. He has used the word infinitesimal to mean approaching zero, but not

zero. It is an exceedingly small amount. However, it can be measured. His use of the word "macro" was a derivative from the hearing last year.

[48] In response to the evidence of Mr. Eady, who has stated that there must be a change in nature or a fundamental transformation, Dr. Thompson stated that he has seen no fundamental transformations. Ethanol is a scavenger which scavenges moisture out of tanks. Although the chemical composition would change, that change in chemical properties is not sufficient to meet the test of a material change or fundamental transformation.

[49] Dr. Thompson stated that the activity at the tank is similar to that of a retail purchaser of gasoline who comes to a retail gasoline outlet and seeks mid-grade fuel. The fluid comes from the two tanks and is mixed.

[50] At the Carseland facility, the fluid comes from the tanks and is stopped by a control valve. Everything in a single pipe is dedicated to one product. There is no interaction until after the control valve. Dr. Thompson stated that the recommended practice for blending is 17 feet, so the fact that there are 20 feet of line for blending is appropriate and he agreed with the evidence of Ms. Ricard in that regard. Dr. Thompson stated that blending or mixing does not occur in the bulk of the plant, but only in the 20 feet of pipe before the product is loaded into the trucks. Dr. Thompson agreed that inline blending is the current state of art.

[51] Dr. Thompson stated that the primary purpose of the facility is the storage of fuel. The tanks have no equipment to modify fuels. He stated the DBM is the best document to review the matter and the DBM is used to define the process. Dr. Thompson referred the Board to various pages of the DBM which contain no reference to processing activities.

[52] The major operational characterization of a facility is storage and distribution. The total volume of fuel is 134,000 cubic meters. The volume of the dye tank is 9 cubic meters. The ratio is very small. The dye itself is 1/3 dye with the rest is aromatic hydrocarbon components. The impact of the dye to the ratio of products stored is .00002, which is very small as compared to the amount of the raw material.

[53] Dr. Thompson contrasted this with the amount of HCO_3 (hydrogen carbonate) in a bottle of water which is 221 milligrams per liter which is 100 times more than the dye in the gasoline. In his view, the amount of dye in the gasoline is so infinitesimal that it does not change the quality of the fuel. It can be measured; it is not zero, but it is very small compared to the whole. The IVD ratio is about .00004. Again, it is infinitesimal as compared to the whole. Adding such a small quantity to the fluids does not change the nature of the substance and therefore does not meet the definition of processing.

[54] Dr. Thompson stated that 65 percent of the diesel flows straight through the facility with no mixture and no blending. It comes in from the rail cars and straight through to the trucks and off to market.

[55] In his view, the pipes transfer fluids from the storage trucks to the truck loading and have no function. No mixing can occur upstream of the injectors. The pumps and control valves are for fluid transfer and are not a process. Further, in the DBM, the tanks are defined as storage,

which is not a process. The tanks have no equipment to do anything other than store products although they do measure temperature and the height of the liquid.

[56] Dr. Thompson stated that the density of the product may change, the specific gravity may change and the viscosity may change a bit, but it remains "fuel in and fuel out". In his view, therefore, there is no process.

[57] Dr. Thompson stated that in his view, dispensing and blending are equivalent. The change must be obvious, non-technical and observable. Processes are activity specific and that one must consider the specific matter to determine if there is a process. He stated for an assessment application, the impact must be observable and there must be an obvious change in nature for it to be a process under an assessment application.

[58] On cross examination, Dr. Thompson confirmed that E10 gasoline is not the same as gasoline. However, he stated that there were no macro changes nor a change in the nature or form of the fuel or new material transformation.

[59] In relation to section 3.9 of exhibit C3, Tab A at page 70, did not state that the adding of ethanol is the adding of a gasoline component. Dr. Thompson stated that a gasoline component is a different thing and gasoline components are added at Regina. In his view, a gasoline component is a hydrocarbon fraction.

Mr. Dennis Klem

[60] Mr. Dennis Klem is the Municipal Assessor. He was recognized by the Board as an expert in assessment matters.

[61] Mr. Klem provided an overview of the facility and an overview of the assessment which he prepared for the facility. The assessed value for the land is $2,651,890. The non-residential assessment is $118,617,850.

[62] Mr. Klem advised that he based his assessment on reported costs for the 2011 year end. He then took a conversion factor of .77 to bring the figure to the Manual cost. He then applied a base year modifier to bring the Manual cost to the base year of the assessment and then applied depreciation. The only depreciation is for physical depreciation based on age. Because this facility is one year old, one year's depreciation had been applied. He used this methodology for all major components on site. In regard to the maintenance building, this assessment amount was calculated using the 1984 manual. The base year modifier was applied to bring it to the current year.

[63] Mr. Klem stated that as of December 31, 2011, there were $72 million worth of costs. The sub-unit 2 adjustment was done to remove the valuation of the building done on a Manual cost because the building was included in the cost report of $72 million for 2011. He reduced the assessment by $265,680 to ensure that the building was not double counted in the assessment.

[64] Sub-unit 4 was the 2012 adjustment. Because he did not receive a clear indication of how the costs had been attributed to the various items, he subtracted $72 million from the $126,030,040 to determine the difference between the 2011 and the 2012 costs. The resulting

$54,001,622 is the new cost in 2012. He then converted that amount to the manual cost, applied the base year modifier and came up with the additional assessment of $49,645,520. He stated that one could not determine the increase for each component.

[65] Mr. Klem stated that in his view, if processing does not occur, then the CCRG is not applicable. The CCRG applies to determining costs for machinery and equipment.

[66] For building and structures, the most reasonable approach was the cost approach.

[67] Mr. Klem stated that he believed that rail trackage was not to be an issue in the current year's hearing.

[68] Mr. Klem also advised the Board that when he was reviewing the property, he reviewed the development permit which indicates that it is for a petroleum storage facility. The DBM also indicates that the facility is a petroleum storage facility. He also reviewed the Petroleum Tank Management Association approval which refers to this facility as a storage facility.

[69] In his view, the tanks are used exclusively for storage. Because they have no mixers, they are not machinery and equipment. If dispensing of ethanol, IVD and dye are a process, the only place that can exist is at the truck loading racks. He recommended that the CARB confirm the value of $118,617,850 as the non-residential class assessment.

[70] In cross examination, in relation to the definition of hazardous industry, Mr. Klem indicated that the definition of hazardous industry includes a qualifier "or" which suggests that a hazardous industry includes the product or the means and materials used in the manufacturing of the product. In his view, the product is produced at Regina, not produced at site.

DECISION AND REASONS

[71] The assessment is reduced to $5,079,120, comprised of

- land at $2,651,850
- Cardlock facility – $2,427,230

[72] The CARB retains jurisdiction to address questions arising from its direction in paragraph 71 above. Any questions following this decision must be referred to the CARB in writing within 7 days of receipt of this decision.

REASONS

[73] The CARB's jurisdiction is found at section 467(1) of the MGA. It must decide whether to change or not change the assessment.

> ***467(1)*** *An assessment review board may, with respect to any matter referred to in section 460(5), make a change to an assessment roll or tax roll or decide that no change is required.*

[74] The dispute before the CARB can be succinctly stated as whether the assessment for the Federated Cooperatives Ltd. Carseland facility is governed by the provisions of section 291(2)(b) of the MGA.

[75] Section 291 of the MGA states:

> ***291(1)*** *Unless subsection (2) applies, an assessment must be prepared for an improvement whether or not it is complete or capable of being used for its intended purpose.*
>
> ***(2)*** *No assessment is to be prepared*
>
> *(a) for linear property that is under construction but not completed on or before October 31, unless it is capable of being used for the transmission of gas, oil or electricity,*
> *(b) for new improvements that are intended to be used for or in connection with a manufacturing or processing operation and are not completed or in operation on or before December 31, or*
> *(c) for new improvements that are intended to be used for the storage of materials manufactured or processed by the improvements referred to in clause (b), if the improvements referred to in clause (b) are not completed or in operation on or before December 31.*

[76] The answer to the issue set out in paragraph 74, above, requires the CARB to answer the following questions:

a) What is "manufacturing or processing"?
b) Is there "manufacturing or processing" at the Carseland facility? If so, where?
c) Are the new improvements intended to be used for a manufacturing or processing operation?
d) Alternatively, are the new improvements intended to be used in connection with a manufacturing or processing operation?

[77] There is no dispute that pursuant to section 285 of the MGA, the assessor must prepare an annual assessment for each property in the municipality.

> *S.285 Each municipality must prepare annually an assessment for each property in the municipality, except linear property and the property listed in section 298.*

[78] The assessor's duty applies to improvements, whether or not the improvement is complete, or capable of being used for its intended purpose, except to the extent that certain statutory exemptions apply. This duty is found in section 291(1) of the MGA.

[79] "Improvement" is defined in section 284(1)(j) of the MGA as:

> *(j) "improvement" means*
> *(i) a structure,*
> *(ii) any thing attached or secured to a structure, that would be transferred without special mention by a transfer or sale of the structure,*

(iii) a designated manufactured home, and
(iv) machinery and equipment;

[80] The word "structure is defined in section 284(1)(u) as follows:

(u) "structure" means a building or other thing erected or placed in, on, over or under land, whether or not it is so affixed to the land as to become transferred without special mention by a transfer or sale of the land;

[81] "Machinery and equipment" is defined in section 284(1)(l) as follows:

(l) "machinery and equipment" has the meaning given to it in the regulations;

[82] Section 1(j) of MRAT defines "machinery and equipment" as

(j) "machinery and equipment" means materials, devices, fittings, installations, appliances, apparatus and tanks other than tanks used exclusively for storage, including supporting foundations and footings and any other thing prescribed by the Minister that forms an integral part of an operational unit intended for or used in

(i) manufacturing,

(ii) processing,

(iii) the production or transmission by pipeline of natural resources or products or by-products of that production, but not including pipeline that fits within the definition of linear property in section 284(1)(k)(iii) of the Act,

(iv) the excavation or transportation of coal or oil sands as defined in the Oil Sands Conservation Act,

(v) a telecommunications system, or

(vi) an electric power system other than a micro-generation generating unit as defined in the Micro-Generation Regulation (AR 27/2008),

whether or not the materials, devices, fittings, installations, appliances, apparatus, tanks, foundations, footings or other things are affixed to land in such a manner that they would be transferred without special mention by a transfer or sale of the land;

[83] Here the CARB notes that the words "manufacturing" and "processing" are used in both the definition of "machinery and equipment" in MRAT and section 291(2). However, neither the MGA, nor MRAT defines "manufacturing" or "processing". Since the same words are used in both places, the legislative intention must mean that the same meaning must be meant for the words.

[84] In order to determine whether the exemption claimed in section 291(2)(b) applies, one of the first determinations this CARB must make is what "manufacturing" or "processing" is.

What is "Manufacturing or Processing"?

[85] In the written and oral arguments provided by the parties were a number of cases, some of which dealt with the definition of "manufacturing" and "processing" in the context of income tax cases, and some of which were in the context of assessment cases.

[86] The Respondent urged the CARB to consider and apply the reasoning in the decision in Federated Cooperatives Limited as represented by Altus Group v. Wheatland County, CARB Board Order 0349-001-2013, the decision of the CARB in the 2012 tax year complaint issued on June 27, 2013.

[87] The CARB notes that it is not bound by a previous decision of the Wheatland CARB (or any other CARB, for that matter), but has reviewed the purposive and contextual analysis conducted in that case. The CARB in this matter agrees with the reasoning set out in paragraph 70 and 71 of that decision in relation to the purpose of the MGA. For ease of reference, those excerpts are set out below.

> *Purpose of the Act*
> *[70] The Ag-Pro case referred to at Exhibit R3, Tab 2 at paragraph 169 indicated that the purpose of the MGA (at least in relation to assessments) was "to ensure fair and equitable assessment of property in Alberta". Further the court noted that*
>
> > *169 . . . .Alongside this purpose are policy driven considerations, such as the encouragement of various activities and industries. In particular, the purpose of the machinery and equipment assessment scheme, as noted by Mr. Driscoll, is to encourage the building of manufacturing and processing facilities in Alberta.*
> >
> > *170 The Respondent argues that this purpose is more in line with a robust interpretation of processing, involving active or productive treatment, resulting in a change in nature or form. This may well be so, and in fact the MGB prefers such an interpretation in the current specialized context of grain elevator assessment. However, in adopting this interpretation, the MGB does not wish to imply that it has identified a universally applicable definition of "processing".*
>
> *[71] The CARB accepts that the purpose of the assessment portion of the MGA is to ensure fair and equitable assessments in Alberta.*

[88] The CARB also agrees with the reasoning in relation to the grammatical and ordinary senses of the meaning of the words "manufacturing" and "processing" as set out in paragraphs 74, 75, 76, 79, 80, 81 and 83 and adopts that reasoning for this case. The CARB notes that the balance of the discussion in the 2012 tax year complaint decision (CARB Order 0349-001/2013) applies the definition of "manufacturing" and "processing" to the evidence which was before that CARB. For ease of reference, those excerpts are set out below.

> *Grammatical and Ordinary Sense*
> *[74] When examining the words in their grammatical and ordinary sense, the CARB noted that the parties did not include in their materials dictionary definitions for these two terms. Although both of the words "manufacturing" and "processing" are used in section 291(2), the parties focussed on the word "processing" (or process) and the CARB will focus on that aspect, as the CARB is of the view that there is no manufacturing occurring at this facility. The definition of "manufacturing" as found in 1695408 Ontario Ltd v. Municipal Property Assessment Corp. No 22 (Exhibit C2-1, Tab 1, page 11, found at the enclosed tab 6) illustrates that no manufacturing is occurring at the facility. That case characterizes manufacturing as:*

"the wholesale production of a vendible product from raw or prepared materials by hand or by machinery"

[75] The evidence before the CARB was that gasoline and diesel that had been produced at the Regina refinery were transported and held at this facility. No "cracking" or refining of the crude oil occurs in Carseland. Gasoline and diesel (both without additives) are transported and held at this facility.

[76] In the Tenneco Canada Inc. v. R. (Exhibit C2-1, Tab 1, page 12, found at the enclosed tab 8), the court indicated that assembly could be "manufacture", but the assembly must create a new product. The activity occurring at the facility in this case is not "assembly", but the CARB notes that the output is not a fundamentally new product – it remains either gasoline or diesel, with additives.

...

[79] The CARB examined the Ag-Pro case (see Exhibit R3, Tab 2). Although that case dealt with grain terminals, the CARB noted the comments of the MGB at paragraphs 179, 180 and 182 are of relevance to this case.

> *179 The Appellants rely on the Federal Court decision in Range Grain to argue that processing is simply making the product more marketable. With respect, the MGB does not agree with the Appellants' interpretation of the Range Grain case. The Range Grain case does not stand for the principle that anything that makes a product more marketable will fall within the definition of processing. It simply provides that processing should make a product more marketable. This suggests that an activity can be excluded from constituting processing, as that term is used in AR 289/99, because it does not make the thing at issue more marketable. However, this does not mean that every activity which makes a thing more marketable is necessarily processing, as contemplated under the Act and regulation.*
>
> *180 In the present appeals, the Appellants are ensuring that the grain does not deteriorate while awaiting shipment. They are maintaining the grain, not improving it or changing it. As in the Newell and Versacold cases, the Appellants are maintaining the quality of the product while it is awaiting forwarding or shipment. Maintaining the quality of the grain is incidental to forwarding the grain. It is not processing, as that term is used in AR 289/99. Based on the evidence before the MGB, the grain in the subject grain terminals does not change in nature or form, nor does the grain undergo a material transformation.*
>
> *. . .*
>
> *182 . . . .With respect, it is the opinion of the MGB that processing, as the term is used in AR 289/99, must be something more than a commercial operation made up of a series of steps. Processing in the context of assessment of grain elevators requires not only that operation consists of a series of steps, but more importantly that it results in a change in nature or form or a material transformation of the thing undergoing the series of steps.*

[80] In Tenneco, the court referred with approval to the dictionary definition of "process" as "to subject to a particular method, system or technique of preparation, handling or other treatment designed to effect a particular result." The CARB notes that the case is a tax case, and notes the different objectives to legislation related to income tax in comparison to assessment.

[81] The CARB notes that the Complainant has referred to the Jorgensen case – a recent decision of the Alberta Court of Queen's Bench. The Court referred to the assessment review board's decision in which it described what it applied as the test for processing.

The Board finds that the facility is a processing operation. C-1, pg. 16 describes the processing operation of the subject property. Also on this page, it states that the judicial test to be applied in determining whether processing has taken place, is whether there has been a change in the form, appearance or other characteristics of the goods and whether the goods become more marketable. The Board accepts that the improvements of the subject property were intended for the processing of materials.

. . ..

[83] The CARB believes that in the absence of a dictionary definition of "process" in the materials submitted by the parties, the definition from these cases are a starting point for its own analysis. The CARB does wish to fully explore the matter before it, considering any guidance from the cases put before it, and applying that guidance to the particular findings of fact that the CARB will make.

[89] This CARB has reviewed the cases provided to it, and finds the following excerpts of assistance. In ***1695408 Ontario Ltd. v. Municipal Property Assessment Corp., Region No. 22,*** 2009 CarswellOnt 8240, the board set forth its conclusions in regarding definitions for "manufacturing" and processing:

> 69 From the foregoing case law and dictionary definitions, the Board concludes:
> 1. That "manufacturing" means the wholesale production of a vendible product from raw or prepared materials by hand or by machinery;
> 2. That "producing" means the same as "manufacturing"; and
> 3. That "processing" means subjecting goods to a particular method, system or technique of preparation, handling or other treatment designed to effect a particular result and which makes them more marketable and effects a change in their appearance or nature.

[90] In *Black's Law Dictionary* (8th Ed), "manufacture" is defined as:

manufacture: *A thing that is made or built by a human being, as distinguished from something that is a product of nature; esp. any material form produced by a machine from an unshaped composition of matter.*

[91] In ***British Columbia (Assessor of Area 11 -Richmond/Delta) v. CCS Corporation,*** 2012 BCSC 1864, the Court considered definitions for "processing".

> [*15] The applicant Assessor brings to my attention several dictionary definitions of the word "process" or "processing" as follows:*
>
> > *"process" - a course of action or procedure,* ***esp. a series of stages in manufacture or some other operation****; the progress or course of something (in process of construction); handle or deal with by a particular process; treat*
> > *Oxford English Reference Dictionary*

> *"processing" - includes changing the nature, form, size, shape, quality or condition of a natural product by mechanical, chemical or any other means; with respect to mineral substances, any form of beneficiation, concentrating, smelting, refining or semifabricating, or any combination thereof*
> *Dictionary of Canadian Law*
>
> *"process"..... Process is a mode, method or operation whereby a result is produced; and means* ***to prepare for market or to convert into marketable form***
> *Black's Law Dictionary, 6th ed. (emphasis added)[in original]*

[92] This CARB has examined the decision of the Edmonton CARB in NO. 0098 349/10, and the decision of the Court of Queen's Bench in ***Edmonton (City) v. Edmonton (City) Composite Assessment Review Board,*** [2012] A.J. No. 201, 2012 ABQB 118 in relation to this issue. Although the cases (the Edmonton CARB, and then on leave, the Court of Queen's Bench) both deal with the question of the application of section 291 of the MGA, the discussion contained in those cases is cursory, and does not provide a fulsome explanation of the question.

[93] This CARB noted the concern expressed by the Respondent in relation to the use of income tax cases; however, it notes that the cases set out above are assessment cases. This CARB has also noted that the Complainant has included references in its materials to definitions from Wikipedia, which the CARB does not accept as a sufficiently authoritative source.

[94] In the 2012 tax year decision, the CARB summarized the question as follows:

> *[84] In light of the above definition for "process", were the inputs "subject to a ... method, system or technique…"? Was there a change in nature or form or a material transformation of the thing undergoing the series of steps?*

[95] This CARB believes that this summary accurately captures the essence of the question.

Is there "manufacturing or processing" at the Carseland facility? If so, where?

[96] Having determined the definition for manufacturing and processing, the question is whether either the evidence establishes that either of those 2 activities is occurring at the facility.

[97] The answer to this question focusses predominantly on the evidence of Ms. Ricard and Dr. Thompson who both gave evidence on this question. Although the CARB heard from Mr. Eady and Mr. Klem, neither of them were engineers, whose evidence the CARB believes should be given more weight than non-engineers on this particular question.

[98] The evidence of Ms. Ricard was that E10 (gasoline with ethanol added) is not pure gasoline, but is a new fuel – a biofuel. It has different performance characteristics than gasoline and E10 does not behave in the same way as gasoline. Moreover, the addition of ethanol which makes the end product lighter than gasoline. Her evidence was that the combustibility of gasoline was changed by adding ethanol. Ethanol is an octane booster, and the boosting power given by ethanol is a macro change and significant. The final product (E10) has a different effect on health and equipment. The molecules are different and their effect on equipment is different. Her evidence was that when ethanol is blended with gasoline, the ethanol disappears. Further, the dye and the inline valve detergent (IVD) cannot be recovered after being added. Ms.

Ricard's position was that the DBM was not an indicator of the purpose of the facility, which she stated to be processing.

[99] By contrast, Dr. Thompson stated that the primary purpose of the facility is to be the storage of fuel and the tanks have no equipment to modify fuels. His position was that the DBM is the best document to provide insight because it is used to define the process to occur at the plant, and there was no reference in the DBM to processing activities. Further, Dr. Thompson's evidence was that the amount of dye to gasoline and IVD to gasoline was miniscule, and thus, while measurable, was so insignificant as to not meet the definition of processing. Further, he stated that 65 % of the diesel flows straight through the facility with no mixing and no blending, coming in from the rail cars and straight through to the trucks and off to market. In his view, the pipes transfer fluids from the storage trucks to the truck loading and have no processing function. No mixing can occur upstream of the injectors. The pumps and control valves are for fluid transfer and are not a process. The facility is a "fuel in-fuel out". In his opinion, the change must be obvious, non-technical and observable.

[100] The CARB has carefully reviewed the evidence of Ms. Ricard and Dr. Thompson.

[101] The CARB notes that the DBM and the wording of the development permit refer to the facility as a petroleum storage facility. While that is some indication of the owner's intention, the CARB believes that the terms of the DBM, development permit, and even the Petroleum Tank Management Association approval (which refers to this facility as a storage facility) do not end the CARB's analysis.

[102] The CARB notes that on cross-examination, Dr. Thompson confirmed that E10 gasoline is not the same as gasoline – that it was a different product. This admission is a significant factor for the CARB. If E10 is a different product than gasoline or ethanol, then although the facility could be characterized as "fuel in – fuel out", the CARB believes it would be more accurate to describe it as "gasoline in –biofuel out". The change from gasoline to biofuel (E10) meets the definition of processing.

[103] The CARB is aware that 65% of the diesel comes into the facility and leaves in exactly the same condition – that no processing occurs with diesel. The evidence was not specific, but it appeared that between 20% and 40% of the facility's entire production was unprocessed diesel. However, the CARB was given no evidence to help it determine what portion of the plant was the diesel only portion. For the CARB to make an adjustment based upon this, it would need to have evidence as to how to apportion those costs.

[104] Having found that there was processing occurring, the question is where is that processing occurring. On this question, the two experts agreed, and the CARB accepts their evidence. The only place where the processing occurs is in the loader arms, the location of which was identified by Ms. Ricard in Exhibit C12, and agreed by Dr. Thompson. Thus, the evidence was that the processing occurs in 20 feet of the 40 loader arms and the CARB so finds as a fact.

Are the new improvements intended to be used for a manufacturing or processing operation? Alternatively, are the new improvements intended to be used in connection with a manufacturing or processing operation?

[105] The Respondent urged the CARB, should it find that the processing occurs in 20 feet of each of the 40 loading arms, that it should amend the assessment to reflect that the tanks and other structures are not intended to be used for manufacturing or processing and cannot be so used, because the tanks have no capacity for processing. By contrast, the Complainant argued that the improvements are all part of one integrated system. Without the improvements, such as the tanks, there could be no processing because the inputs (gasoline, ethanol, IVD and dye) all had to be held in tanks and be transported to the loading arms.

[106] The CARB notes that the wording of section 291(2)(b) states the following:

> *(b) for new improvements that are intended to be used for or in connection with a manufacturing or processing operation and are not completed or in operation on or before December 31, or*

[107] The Respondent has correctly identified that this subsection is comprised of 2 parts:

a) new improvements intended to be used *for* a manufacturing or processing operation; and
b) new improvements intended to be used *in connection with* a manufacturing or processing operation.

[108] The CARB agrees that the only type of improvements which can be used for a manufacturing and processing operation are machinery and equipment, as defined in MRAT (see above) and to the extent that the machinery and equipment is not complete by December 31, it is not assessed. In the current case, the loading arms are "used for ... processing" and are not assessable as they were not complete by the condition date (December 31).

[109] The question remains what is the meaning of the word "improvements" as set out in paragraph 107(b), which are to be used "in connection with" a "processing operation". It would make no sense if the meaning of the word improvement in that context was machinery and equipment, because that would exclude other improvements such as structures, which may or may not also be used in connection with the processing.

[110] The Respondent has argued that in this context, the improvements can only be a structure or a manufactured home, which is supported by the preferential tax policies for machinery and equipment. The CARB notes that section 291(2)(c), another exemption, refers to improvements which are intended to be used to store the manufactured, or processed materials.

> *(c) for new improvements that are intended to be used for the storage of materials manufactured or processed by the improvements referred to in clause (b), if the improvements referred to in clause (b) are not completed or in operation on or before December 31.*

[111] In the case before the CARB, the tanks and pipes do not store the processed materials, because the evidence is that the processed materials are sent out in trucks to their destinations, so

section 291(2)(c) is not applicable. However, it supports the view that section 291(2)(b) must be read broadly enough to capture the structures connected to the machinery and equipment.

[112] The CARB accepts that the words "in connection with" are very broad. It is of the view that the "upstream" improvements are to be used in connection with the processing operation, because without the tanks to hold the products, and the pipes to transport the products to the loading arms, there could be no processing in those arms.

[113] It is so ordered.

Dated at the City of Calgary, in the Province of Alberta, this 17th day of January, 2014.

C. Griffin, Presiding Officer

APPENDIX "A" ORAL REPRESENTATIONS

PERSON APPEARING		CAPACITY
1.	Robert Brazzell,	Representative of the Complainant, Altus Group
2.	Steven Eady	Representative of the Complainant, Altus Group
3.	David Porteous	Representative of the Complainant, Altus Group
4.	David Mewha	Representative of the Complainant, Altus Group
5.	Lyne Ricard	Witness
6.	Carol M. Zukiwski	Counsel for the Respondent
7.	Matthew Blimke	Student –at-Law, Counsel for the Respondent
8.	Dennis Klem	Assessor for the Respondent
9.	Ed Thompson	Witness

APPENDIX 'B" MATERIALS PRESENTED TO THE CARB

Exhibit	Description	Date
C1	Evidence Submissions of Complainant	October 24, 2013
C2	Volume of Case Authorities	October 24, 2013
C3	Appendices	October 24, 2013
R4	Respondent's Legal Argument	November 25, 2013
R5	Respondent's Volume of Authorities	November 25, 2013
R6	Respondent's Volume of Legislation	November 25, 2013
R7	Dennis Klem Witness Report	November 25, 2013
R8	Dr. Edward J. Thompson Witness Report	November 25, 2013
C9	Complainant's Rebuttal Submission	December 2, 2013
C10	Complainant's Rebuttal of Thompson Report	December 2, 2013
C11	CV of Steven Eady	December 9, 2013
C12	Excerpt from C3 with marking	December 10, 2013
C13	Selected cases from C2 and C9	December 12, 2013

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Subject	Type	Sub-type	Issue	Sub-issue
CARB				