SR&ED Scientific Research & Experimental Development Tax Credits

Practitioner workshop Oct. 8, 2015

I) Recent SR&ED tax cases & related issue(s)

TOPICAL AREA	<u>APPELLANT</u>	PRIMARY ISSUE	WIN - LOSE
SR&ED cases regarding "to	echnological eligibility''	•	
Software	Highweb & Page	Software - Java & .NET	LOSS
	Hypercube	Software development	LOSS
Printer design	6379249 Canada Inc.	End of eligible work	WIN
Process improvement	Les Abeilles (GE)	Process improvements - 4 projects	WIN
Food	R&D Pro Innovation	Develop new chocolate spread	LOSS
Evidence retention	Buhler Versatile Inc.	Loss / Destruction of records	LOSS
SR&ED cases regarding Fin	nancial issues		
Use of livestock in R&D	Feedlott Health	Costs paid for study of cattle	WIN
CCPC status	Mindready Solutions	Was private Co. controlled by Public?	LOSS
18 month deadline	6379249 Canada Inc.	Proving project filed with claim	WIN

Highweb & Page – Software -Java & .NET - LOSS

- FACTS/ISSUE:
 - Disallowed: \$25,200 in 2007 & \$37,975 in 2008
 - Allowed: \$2,704 in 2008 ("STA2 Phase II")
- LOSS
- RULING /RATIONALE: No documentation of hypotheses or conclusions
- * IMPLICATIONS: Need to benchmark standard practice / prior art
- SIGNIFICANCE: Moderate

Highweb (webcrawler development) – what they lacked

IDENTIFYING OBJECTIVES & METHODS BEYOND STANDARD PRACTICE:

- The government reviewer cited that there are many well-known techniques of identifying:
 - the OS that an application is running on such as checking for a special DLL, .so (for AIX, Sun Solaris), .a (for Solaris), *SRVPGM in an O/S specific directory for the specific operating system and determining if it exists or not.
 - C#, J#, C++, and Java porting/migrating that are publicly available with plenty of sample code (these can be found in: 1. tutorials within books, 2. the internet, and 3. MSDN). There are also books written about porting C#/C++/J# to/from Java or vice versa.
 - The client did NOT COUNTER any of these arguments

Highweb (webcrawler development) – what they lacked

Strike 1: Lack of formal technical background for developers

Strike 2: Failure to document "standard practice" techniques & variables.

Highweb – Directions

Judge stated that,

- "accurate records provides one with the deductive process for developing a different
- DIRECTION, SPEED OR MODE TO
- CREATE, LOCATE, SIZE, & ARRANGE
- the missing piece in the puzzle"

Since the claimant did not identify the limits of the technologies from the information sources stated the judge concluded that the technology (e.g. J#, SOA Architecture) is being used as intended.

Highweb – review & rewrite

- Case development log Appendix 1
 - Integrate Prior Art Search

Hypercube – software - LOSS

- FACTS/ISSUE: \$28,800 expenses
 - Project consisted of developing a program to read & analyze source code from Web sites to detect weaknesses
 - The only documents introduced in evidence are the program's tree diagram and a log of hours worked. This tree diagram was not specifically explained in Court.
- LOSS:
- RATIONALE: Lack of documentation
- IMPLICATIONS: benchmark prior art
- SIGNIFICANCE: Low

Notable quote:

"What we see depends mainly on what we look for."

- Sir John Lubbock

6379249 Canada Inc. – Printer design - WIN

FACTS/ISSUE:

- The company filed successful SR&ED tax claims for its 2007 and 2008 taxation years to develop a new printer.
- At the end of 2008, 200 printers were released onto the market for sale.
- After its commercial release, company investigated customer complaints by testing 50 printers & determined paper coming out of the printer curled & battery stopped after five to ten pages printed.
- In 2009, they undertook a new SR&ED project with respect to the printer and claimed a SR&ED ITC of \$103,628 in 2009 & \$49,688 for its 2010 taxation year

6379249 Canada Inc. – Printer design - WIN

The Minister took the position that at the time of commercial production, there were no longer technological uncertainties with respect to the printer. In addition, the work performed on the printer during the 2009 and 2010 taxation years was routine engineering.

6379249 Canada Inc. – Background of the claimant

- Mr. Raja Tuli, the Chief Executive Officer ("CEO") graduated in 1988 from the University of Alberta in computer engineering.
- He holds approximately 100 patents in different technologies, software and mechanical designs & nine patents in the field of printing technology.
 - Before developing the miniature printer, he had previously designed and developed printers and slip clutches, which are components of printers.

6379249 Canada Inc. -

Background of the government reviewer & expert witness:

- Mr. Wierzbica has a doctorate in electrical engineering and technology, metrology from the University of Technology in Warsaw, Poland.
- After immigrating to Canada in 1980, Mr. Wierzbica became a member of the Order of Engineers in 1981. He was employed for almost 20 years by Canadian companies in the high tech industry.
- At Escher-Grad, Mr. Wierzbica, as Vice-President, Engineering successfully developed, with a team of engineers, a low cost photoplotter. A photoplotter is a printer used primarily for the production of PCB's (printed circuit boards).

6379249 Canada Inc. -

Background of the government reviewer & expert witness:

- In 2000, Mr. Wierzbica joined the directorate of SR&ED of CRA as policy advisor. Two years later, Mr. Wierzbica was promoted to the position of National Technology Sector Specialist for information technology, in Ottawa.
- In that capacity, Mr. Wierzbica advised Research Technology Advisors ("RTA") on a national basis on CRA's policies with respect to the SR&ED and also assisted RTA's in their work, also on a national basis

6379249 Canada Inc. – CURRENT CLAIMS - REJECTED FOR 2009 & 2010

With respect to the 2009 and 2010 years, Mr. Wierzbica stated that if Mr. Tuli, the appellant's technical expert, considered the attempted functionality accomplished in 2008, and accordingly released the printer onto the market, the technological uncertainty at the system/printer level had been resolved and could no longer exist in 2009 & 2010.

Issue: What is the point of commercial vs. experimental production?

6379249 Canada Inc. -

WIN – problems > release still eligible SR&ED

- Before ruling the judge commented,
- "Mr. Tuli is recognized as the world's leading expert with respect to miniaturization of hi-tech equipment. Mr. Wierzbica admitted in cross-examination that Mr. Tuli was the "number one expert" in the field of miniaturization of hi-tech equipment such as the printer.
- During his testimony, Mr. Tuli clearly stated that, in his view, technological uncertainties existed in 2009 and 2010 at the system/printer level. The paper was still curling and the battery died out too rapidly. Mr. Tuli stated that these were the same technological uncertainties that had been encountered in 2006 and 2007.
- Mr. Tuli stated that existing standard engineering procedures were not available to competent professionals in the field to solve the technological problems with the printer. If they had been available, the printer workshop Oct. 8, 2015

6379249 Canada Inc. -

WIN – problems > release still eligible SR&ED

- In my view, Mr. Wierzbica (expert witness for CRA) put too much emphasis on the commercial release of the printer. In doing so, he ignored an essential element, namely, that, concretely, the printer did not function and had to be removed from the market.
- During cross-examination, Mr. Wierzbica stated that if the printer had not been commercially released, the project would most probably have been accepted for 2009 and 2010.

Printer design – review & rewrite

- Implications / lessons ?
 - Integrate Prior Art Search

Notable quote:

"They condemn what they do not understand."

- Cicero

Les Abeilles (GE) – Process improvement - WIN

FACTS/ISSUE:

- 3 of 4 projects related to sub-assembly manufacturing of dryers developing flexible production processes while improving productivity at Mabe/General Electric plant in Montreal
- General Electric holds 49% of the shares of Mabe however, Mabe & appellant ones under contract.
- The appellant provided very little documentation to support any hypotheses or related advancements.
- They did provide short logs which contained limited information about the projects.

Les Abeilles (GE) – Process improvement - WIN

- There are three types of "deviations", according to the appellant:
 - (a) substitution;
 - (b) change in engineering;
 - (c) experimental development.
- The controversy here concerns only those tests that represent the last type of deviation each of which involved documented approval requests.

Les Abeilles (GE) – Expert witness evidence

- The appellant called Martin Gariépy as an expert witness. Mr. Gariépy has a bachelor's degree in pure mathematics, a master's degree in aerospace engineering and a doctoral degree in mechanical engineering.
- The respondent (CRA) called Steven Kooi as an expert witness. Mr. Kooi has a Bachelor of Science in chemical engineering, masters and doctoral degrees in mechanical engineering. with 22 years of varied experience in the industry. He was the research & technology advisor (RTA) at the audit stage

Les Abeilles (GE) – Types of eligible SR&ED evidence

- The judge cited the case of RIS Christie:
 - "...the only sure-fire way of establishing that scientific research was undertaken in a systematic fashion is to adduce documentary evidence which reveals the logical progression between each test and preceding or subsequent tests."
 - If, however, a taxpayer has a plausible explanation for the failure to adduce such evidence, it is still open to the court to hold that, on a balance of probabilities, systematic research was undertaken.
 - RIS-Christie Ltd. v. Canada, [1998] FCJ No. 1890 (QL), Federal Court of Appeal

Les Abeilles (GE) – Types of eligible SR&ED evidence

- ...for example, where research notes are accidentally destroyed, it should be permissible for the trial judge to infer that systematic research was conducted, having regard to the totality of the evidence.
- In reviewing the trial decision in RIS-Christie, it is clear that there was a limited documentation that did not meet all of the Agency's requirements. For example, where research notes are accidentally destroyed, it should be permissible for the trial judge to infer that systematic research was conducted, having regard to the totality of the evidence.

Les Abeilles (GE) — Objectivity & role of RTA vs expert witness

- The judge noted some confusion between his role as a scientific advisor during the audit & as an expert witness.
 - * "Mr. Kooi often seems to be guided more by the Canada Revenue Agency's guidelines & policies than his personal expertise."
- The judge cited instances where Mr. Kooi refers to the degree of contemporaneous documentation as required by the Agency instead of providing his own scientific opinions.

Les Abeilles (GE) — Ruling & rationale: WIN – oral testimony of credible witnesses

- "It would have been useful to have expert evidence that focused more specifically on the current state of practices and knowledge respecting assembly methods and techniques. Mr. Gariépy's report is relatively general.
- However, the Act and the Regulations do not require that such written reports be produced ... it is possible to adduce evidence by way of oral testimony.
- Whether the Minister or a judge could conclude that the activities purported to have been carried out by the taxpayer were actually carried out then becomes a question of credibility."

Les Abeilles (GE) — Objectivity & role of RTA vs expert witness

The judge stated,

"I note that what is important is the impartiality of the expert witness rather than his independence."

Les Abeilles (GE) – Review & rewrite

- Implications / lessons ?
- Integrate Prior Art SearchReview log

Notable quote:

"A dwarf on a giant's shoulders sees the further of the two."

- George Herbert

R&D Pro Innovation – new chocolate spread - LOSS

Facts:

- Project involved development of a chocolate spread with cream & maple syrup, cold temperature, with no synthetic ingredients or preservatives.
- Claimed ITC's of \$ 3,841 for 2009 and \$ 6,021 for 2010 .

R&D Pro Innovation – new chocolate spread - LOSS

Issue: Whether the work SR&ED?

- RTA claimed activities carried out in a non-systematic way.
- According to him, it was simply varied the concentrations of selected ingredients & processes without addressing any specific technological uncertainties.

R&D Pro Innovation – new chocolate spread - LOSS

- Relevant legislation and analysis: ITA 248(1)
- According to the CRA, the work done by the appellant constituted the "quality control or routine testing of materials, devices, products or processes" under paragraph 248 (1) f) or "normal data collection" under paragraph 248 (1) k) of the Act.

R&D Pro Innovation –

LOSS – failure to define advancement Judge stated,

- * "In this case, the appellant .. used ingredients of food products that are very well known as cocoa butter, maple syrup, cream & other dairy products, carbohydrates & proteins.
- She interchanged ingredients or their proportions by formulating the spread.
- It was then used to cold tempering process, which is a known method, by varying the speed, time and the tempering temperature.

R&D Pro Innovation –

LOSS – failure to define advancement Judge stated,

- * "The work of the appellant were essentially about the use of existing methods and ingredients to try to formulate a better spread. This work included routine engineering and usual procedures.
- Having studied all the evidence and case law, I am not convinced that the work in question involved a risk or technological uncertainties that could not be removed by standard procedures or routine engineering.

R&D Pro Innovation – Implications?

- Strike 1: Lack of formal technical background for developers
- Strike 2: Failure to document standard practice techniques & variables.
- Strike 3: small claim \$
- Others?

Notable quote:

"Two roads diverged in a wood, and I took the one less traveled by and that has made all the difference."

- Robert Frost

Buhler – loss of records - LOSS

Facts:

- Having its original SR&ED claim denied the appellant provided 5 binders of technical information to the Canada Revenue agency (CRA).
- These were returned to the client.

Buhler – loss of records - LOSS

- According to the CRA the five binders of supporting information consisted primarily of emails that appear to be a mass printing of Outlook folders ...
- the client has not has not identified the relevance of any of the information,
- multiple copies of many of the emails included &
- the header on most emails was missing; therefore, not evident when the emails were sent or to/from

Buhler – loss of records - LOSS

- During the examination for discovery of the Appellant's representative, counsel for the Respondent asked the representative, Mr. Allan Minaker, to provide copies of the Five Binders.
- The Appellant refused to provide the Five Binders. It stated, "As this case is not a judicial review, all relevant documents have been provided."

Buhler - loss of records - LOSS

Issue(s):

Is the claimant required to produce records to the court if they had already been provided to the CRA?

- Relevant legislation and analysis:
 - Requirement to Produce Under Subsections 85(3)
 and 105(1) of the Tax Court Rules.

Requirement to Produce

- Subsection 105(2) reads as follows:
 - * "Where a person admits, on an examination, that he or she has possession or control of or power over any other document that relates to a matter in issue in the proceeding and that is not privileged, the person shall produce it for inspection by the examining party forthwith, if the person has the document at the examination, and if not, within ten days thereafter, unless the Court directs otherwise."

Buhler – loss of records must maintain even after CRA review

- In the judges opinion, the Rules require the Appellant to produce the Five Binders within 30 days.
- Furthermore, the judge believed the Appellant's actions have lengthened unnecessarily the duration of these proceedings he fined them costs of \$2,000.

Implications?

Facts:

- This appeal relates to 4 research projects (the "Projects") involving study of special diets, supplements & vaccines on cattle which were undertaken for sponsors.
- The Projects were designed to test the relationship between new diets & additives to the health & performance of cattle.

- Approximately 7,000 cattle owned by third parties were studied for purposes of the Projects.
- The cattle were maintained in commercial feedlots and were raised for commercial production on behalf of their owners.
- The commercial production used standard methods, subject to the protocols of the Projects

- The disputed amounts totaling \$1,649,537 represent the amounts invoiced and paid by FHMS to Jim Farms with respect to the supply of cattle for purposes of the Projects.
- These costs were claimed as materials consumed based on the fact that they were intended to correlate with the feed costs.

Issue(s):

The issue is whether the disputed expenditures qualify for deduction under the proxy method in s. 37(8)(a)(ii)(B) of the Act

Relevant legislation and analysis:

ITA 37(8)(a)(ii)(B) & 248(1)

Feedlott Health – Relevant legislation and analysis:

The judge analyzed whether the cost were related to:

- a lease of equipment,
- payment to a subcontractor for SR&ED,
- materials transformed &/or
- the commercial use of a process.

Feedlott Health – Relevant legislation and analysis:

Ultimately the judge concluded;

"The work undertaken by Jim Farms is SR&ED since it is with respect to testing and data collection which qualifies"

Additional comments on commercial vs. experimental use.

Feedlott Health – Implications

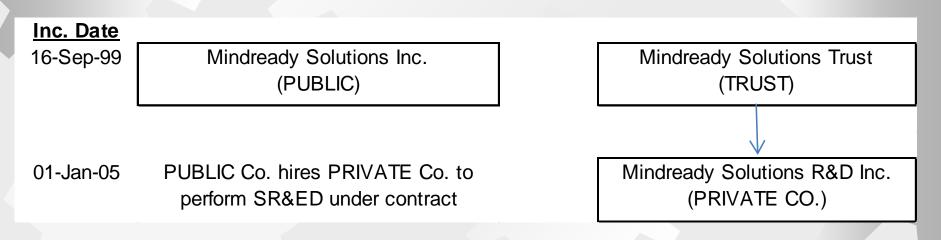
- Case gives direction on a variety of issues in determining the SR&ED costs to study living organisms (including humans).
- It further recognizes the scope of SR&ED work may include "testing" by third parties that may not constitute SR&ED on its own included to extent necessary to address SR&ED uncertainties of project.

- Mindready Solutions Inc. (PUBLIC INC.) incorporated 1999 listed on designated Canadian stock exchange
- field of technology for embedded systems.
- Before 2005, PUBLIC INC. claimed SR&ED ITC's at non-refundable 20%
- During 2005, PUBLIC INC. reorganized by isolating the SR & ED in a newly created company with all shares held by a Trust

- This new company began conducting the SR&ED activities
- Claiming an enhance 35% rate of ITC's. For the year in dispute these amounted to \$253,957 in federal credits.
- Management control of all corporate group companies was exercised by the same people.

Issue:

Was the company a Qualified Canadian Controlled Private Corporation as defined in the income tax act?



Mindready Solutions Relevant legislation and analysis

- The provisions of the Act that are relevant to this dispute are:
 - paragraph a) of the definition of "public corporation" in subsection 89 (1),
 - the definition "private corporation controlled Canadian"
 "as defined in subsection 125 (7),
 - the definition" non-qualifying corporation "in subsection 127 (9) &127 (10.1),
 - the definition of qualified corporation as defined in subsections 127.1 (2), 251 (5), 256 (5.1) 256 (6.1) & 256 (6.2).

Mindready Solutions - Analysis

Court listed factors of economic influence exercised by PUBLIC CO. on the appellant including:

- i) the appellant had only client, PUBLIC CO
- ii) PUBLIC CO provided surety for a loan of \$ 650,000 contracted by the appellant;
- iii) the external auditors have consolidated the financial statements of the appellant with those of PUBLIC CO;
- iv) according to the research contract work to be executed was determined by PUBLIC CO which also retained the intellectual property arising from them;
- v) royalties and revenues from licensing were clearly insufficient to support the cost of research spending

 Based on the factors of influence listed above the judged concluded that there was a de facto control exercised by PUBLIC CO on the appellant. As a result it did not qualify for the enhanced credits.

Mindready Solutions - implications?

- Similar strategies have been used in recent tax cases both successfully (Perfect Fry) & unsuccessfully (Lyrtek).
- While the rewards can be significant this case illustrates that there is a significant degree of judgement professional advice should be considered when structuring such arrangements
 - Others?

Facts:

- Mr. Tuli (President) stated he wrote the scientific report on the last day to claim, put everything in a sealed envelope provided by the accountants
 & one of the accountants delivered to CRA.
- provided receipt evidencing return filed on Sep 30, 2011 at 16:16 hrs.
- The CRA claimed that the project descriptions (form T661 part 2) were missing from the claim.

Issue(s):

Did the appellant file the prescribed information with its Form T661 within the time limits prescribed by subsection 37(11) of the ITA?

Relevant legislation and analysis: ITA 37. (11) ...

- "no amount ... deducted under subsection 37(1) (SR&ED) unless the taxpayer files with the Minister a prescribed form containing prescribed information ... on or before the day that is 12 months after the taxpayer's filingdue date for the year."
- For corporations the filing due date is 6 months from the corporation year end. This effectively creates an 18 month filing deadline for corporations.

The judge stated,

- "It is important to note that the parties introduced little evidence on the issue of timeliness and what little evidence they did introduce was largely hearsay evidence. That being said, I find it difficult to understand why the appellant would have filed the Form T661 without the scientific report.
- In light of the facts that Mr. Tuli was a credible witness and I do not have any reasons to doubt his testimony, I decided to give the benefit of the doubt to the appellant and accept that the scientific report was filed with the T661 on Sep. 30, 2011."

6379249 Canada Inc. – 18 month deadline - implications

- Case highlights degree of risk involved in filing claims near 18 month deadline.
- The CRA administrative policy
 - accept changes & additions if the claims are filed within 15 months of year end.

Notable quote:

"I've missed more than 9,000 shots in my career.

I've lost almost 300 games. 26 times I've been trusted to take the game winning shot & missed. I've failed over & over & over again in my life & that is why I succeed.""

- Michael Jordan

Quebec changes 2014

Report: Update on Québec's economic and financial situation Fall 2014 – section D

- Effective for fiscal years beginning after Dec. 2, 2014, Quebec is imposing minimum expenditure thresholds in order to be eligible for the R & D tax credit.
- Threshold depends on corporation assets.
- Rate varies from 14% to 30% for CCPCs for the first \$3 million in qualified expenditures
- After \$3 million 14% rate applies.

Quebec changes 2014

- Minimum expenditure thresholds for R&D tax credits :
- \$50 000 for corporations with assets of less than or equal to \$50 million;
- \$225 000 for corporations with assets of \$75 million or more;
- an amount that increases linearly between \$50 000 and \$225 000 for corporations with assets between \$50 million and \$75 million.

Minimum eligible expenditure thresholds for R&D tax credits (dollars, unless otherwise indicated)

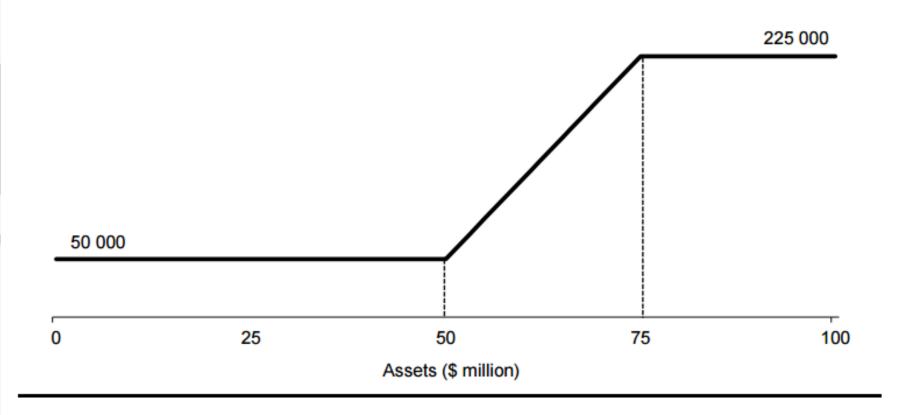


TABLE D.23

Summary of the changes to R&D tax credits

		Rat	te	Tax base	
Tax credits	Size	Before update	After ⁽¹⁾ update		
Researchers' salaries	SME	30%	30%	Salary or 50% of the amount of	
	Large business	14%	14%	the subcontract entered into with a third party at arm's length	
University research contracts	SME	28%	30%	80% of the amount of the	
	Large business	28%	14%	subcontract entered into with a university, a public research centre or a research consortium	
Private partnership	SME	28%	30%	100% of current expenditures	
	Large business	28%	14%	related to R&D work in partnership or 80% of the amount of the subcontract	
Funding of	SME	28%	30%	100% of the amount of eligible	
research consortiums	Large business	28%	14%	fees and dues	

⁽¹⁾ Each of the R&D tax credits has an increased rate of 30% applicable to the first \$3 million of annual eligible expenditures in the case of Canadian-controlled corporations with assets of \$50 million or less. A linear reduction in the rate of the tax credit from 30% to 14% applies in the case of Canadian-controlled corporations with assets between \$50 million and \$75 million. The rate is 14% when assets are \$75 million or more.

Economic Rationale

- The budget claims for 2011:
- 40% of businesses that claimed R&D tax credits had eligible expenditures of less than \$50 000, for an average expenditure of about \$25 000 per business;
- The tax credit does not seem to be an essential deciding factor for carrying out the activities or investments concerned.
- Moreover, the administration of all of these claims entails considerable administrative costs for the government and businesses. In some cases, the administrative costs related to claiming the tax credit can be higher than the tax assistance granted.

Implications?

Hot SR&ED issues in the media

Social Media sites

Linked In Groups which discuss SR&ED tax credit issues:				
<u>Group</u>	<u>Scope</u>	# Members		
SR&ED Canada	Canadian SR&ED issues	1,560		
CATA SR&ED	Canadian SR&ED issues	1,216		
R&D tax credit forum	International R&D Tax credits	1,076		

International definition of an R&D project

"For a ... project to be classified as R&D, its completion must be dependent on a scientific &/or technological advance, the aim of the project must be the systematic resolution of a scientific and/or technological uncertainty."

Source: Frascati Manual 2002, paragraph 135

2015 YMPE set at \$53,600

SR&ED wages - annual limits

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			Specified emp	Non-specified	
SR&ED labour:		YMPE	Wages	Proxy Base	
2012	\$	50,100 \$	250,500	125,250	No limit
2013	\$	51,100 \$	255,500	127,750	No limit
2014	\$	52,500 \$	262,500	131,250	No limit
2015	\$	53,600 \$	268,000	134,000	No limit

^{&#}x27;*Specified employees own >=10% any class of stock (or related to such shareholders).

SR&ED Salary & Wage inclusions

		Specified employees*	Non-specified employee	ITA section
1 <u>R&D</u>	labour for the:			
a)	R&D expenditure pool (for deduction), &			37(1)
<i>b</i>)	Qualified expenses (for ITC calculation)			127(9)
	Type of expense:			
	· salary & wages	In	In	(5-8)
	 bonuses or profit based remuneration 	Out	In	37(9) & 5(1)
	· Expenses paid > 180 days	Out	Out	78(4)
	Maximum	5 x [YMPE]	N/A	37(9.1)
2 Salary	base for proxy amount (for ITC calculate	tion)		
	Type of expense:			
	· Income from employment	In	In	5
	· bonuses/profit based remuneration	Out	Out	5(1) & 37(9)
		Out	Out	6 & 7
	· Expenses paid > 180 days	Out	Out	78(4)
	Maximum	2.5x [YMPE]	N/A	Reg. 2900(7)

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