

A discussion of the Scientific Research and Experimental Development Program (“SRED”) at the Federal level

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Federal SRED PROGRAM

- Federal tax incentive program administered by CRA
- Provides cash refunds and/or tax credits for expenditures on eligible R&D carried out in Canada
- Preferred ITC rate at 35% for small CCPCs

CCPC

- *Bioartificial Gel Technologies Inc.* (2012 CCI 120) – majority American controlled Canadian corporation was deemed a CCPC due to Unanimous Shareholder Agreement in place.

SRED Program – Chaotic?

“Problems in the administration of the [SR&ED] system include uncertainty with respect to eligibility, tighter definitions that exclude many previously eligible development activities, lack of technical expertise, long processing times, and lack of client[taxpayer] support.”

(2011 quote from the Canadian Manufacturers and Exporters submission to the SRED review panel headed by Tom Jenkins)

Excerpt Ombudsman 02/2011 Report

This is an excerpt from one such Technical Review Report illustrating **vague** rejection:

“Designing a XYZ is not considered an attempted technological advancement. The work is not considered to be performed for the purpose of achieving technological advancement and therefore it does not meet subsection 248(1)(c) of the Income Tax Act.”

Onus is on the taxpayer

- The onus is on the taxpayer to show, on the balance of probabilities, that the expenditures it incurred were for SR&ED - *Zeuter Development Corp.* 2006 TCC 597 [Informal Procedure]

ITA para. 248(1)(c)

- “scientific research and experimental development” means systematic investigation or search that is carried out in a field of science or technology by means of experiment or analysis and that is
 - (c) experimental development, namely, work undertaken for the purpose of **achieving technological advancement** for the purpose of creating new, or **improving existing**, materials, devices, products, or processes, including **incremental improvements** thereto, ...

What is SR&ED?

- Guidance on what constitutes SR&ED comes from case law;
- Leading SR&ED decision is Justice Bowman's decision in *Northwest Hydraulic Consultants Ltd.* 98 DTC 1839 (TCC) upheld by the FCA in *CW Agencies Inc.* 2001 FCA 393 and in *Jentel Manufacturing Ltd.* 2011 FCA 355.

Justice Bowman's five steps

1. Was there a **technological** risk or **uncertainty** which could not be removed by routine engineering or standard procedures?
2. Did the person claiming to be doing SRED **formulate hypotheses** specifically aimed at reducing or eliminating that technological uncertainty?
3. Did the procedure adopted accord with the total discipline of the scientific method including the formulation, **testing** and modification **of hypotheses**?
4. Did the process result in **a technological advancement**?
5. Was **a detailed record** of the hypotheses tested, and results kept as the work progressed?

Technological Risk or Uncertainty as explained by Justice Bowman

- If the resolution of the problem is **reasonably predictable** using standard procedure or routine engineering there is no technological uncertainty as used in this context.

Failure to prove Technical Uncertainty

- *Soneil International Limited* 2011 TCC 391;
- *Jentel Manufacturing Limited* 2011 FCA 2011.

Jentel 2011 FCA 355

- Jentel, a plastic products manufacturer, sought in 2005 to improve its proprietary product known in the market as multi-bins;
- Multi-Bins is a small storage system typically used in industrial and shop-floor settings.



Jentel Cont.

- *Jentel* wished to re-design its multi-bins by making a smaller and significantly lighter version.
- R&D was conducted on testing 8 different types of plastic for thickness and strength purposes.
- Various moulds and casting materials were tested as well as different types of materials for the stand.

Testimony of *Jentel*

- Testimony from *Jentel*:
 - Focus of the testimony centered on product novelty not on technological uncertainty.
- Para. 22 of the Tax Court's judgment:
 - Mr. Hahn described in some detail how the Appellant used both thermo-processing and injection moulding in attempting to design a better Multi-Bin. This involved different moulds, plastics and casting materials.... It is my view that Mr. Hahn was simply describing the use of existing manufacturing processes in an attempt to build a better product, while controlling manufacturing costs.

Soneil International Limited 2011 TCC

391

- 1994 – introduced to the market the application of switch-mode technology in battery chargers,
- *Soneil* Battery chargers are used primarily in wheelchairs.
- The *Soneil* battery chargers are developed in Canada, manufactured in China and Malaysia.

Soneil - Facts

- Soneil claimed SR&ED in 2002 for four projects:
 - Designing a system to allow power to switch from the front wheels of a wheel chair to the back wheels;
 - Designing a device to ensure that power to the wheels of a wheelchair is cut when the wheelchair is being charged;
 - Designing a method to deliver 36 volts from two 12-volts batteries;
 - Developing a multi-voltage output charger which can sense the battery voltage of a specific wheelchair and charge at the appropriate voltage.

Expert Witness at trial level

- In *Soneil*, Mr. Jain, the founder who also headed *Soneil's* R&D was the only expert witness.
- Mr. Jain holds four university degrees (B.Sc. In physics, B.T. in mechanical engineering, MSc in controlled system engineering and an MBA).

Mr. Jain's testimony

- Mr. Jain testified that each of the projects involved areas where products performing similar functions already existed.
- He further stated that while the Appellants used existing parts and components, the research was with respect to the application of the parts and components.
- The judge concluded that “the appellants did not provide sufficient evidence to show that their work with respect to the application of the existing parts and components required more than routine engineering or standard procedures.

Contemporaneous Documentation

- *Murray Arlin Dentistry, Professional Corporation*
(2012 TCC 133)
 - Dr. Arlin tracked the success rates on implants
 - TCC accepted the research as a useful addition to scientific knowledge;
 - SRED denied because failure to formulate hypothesis prior to research and poor record keeping.

1726437 Ontario Inc o/a Airmax Technologies, 2012 TCC 376 [Airmax]

- First case in five years to be won by taxpayer;
- Taxpayer sought to develop a new HVAC system that would reduce noise from vents occurring throughout a house, achieve constant static pressure and adapt a foreign boiler and motor to North American standards in order to use them in a system for which they were not designed and in which they had not previously been tested.

Airmax

- Airmax argued that their R&D involved solving a system uncertainty;
- Although all the constituent parts of Airmax's HVAC were standard technologies, their combination into a product that solved the system uncertainty was non-trivial.
- Justice Hogan found that Airmax's technological uncertainty could not be removed by routine engineering because it involved the non-trivial combination of standard technologies.
- In other words, the R&D could not be solved by routine engineering because the solution required an inventive step.

Airmax

- Unfortunately for the taxpayer, since the case was heard under the informal procedure the Court could only award ITCs of \$12,000 (\$387,553 qualified as SR&ED expenditures).
- The *Airmax* victory brings the success rate for winning a SR&ED appeal before the Tax Court to 6%.

Result of Jenkins Report FPAP

- CRA has announced it is launching the Formal Pre-Approval Process (“FPAP”).
- Purpose of the program is to provide early guidance on whether R&D qualifies as SRED.

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