



ENVIRONMENT IN THE COURTROOM

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An Overview of Expert Evidence in Canada

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Opinion Evidence: Not Just the Facts

The justification for admitting opinion evidence is to explain complexity. As it has evolved, however, the purpose of explaining substantive complexity has introduced considerable procedural complexity into the trial process. As set out in the leading decision of *R. v. Mohan*:¹

Admission of expert evidence depends on the application of the following criteria:

- (a) relevance;
- (b) necessity in assisting the trier of facts;
- (c) the absence of any exclusionary rule;
- (d) a properly qualified expert.

Our Canadian courts are not entirely comfortable with expert opinion evidence. The Supreme Court of Canada has repeatedly cautioned that vigilance must be undertaken to ensure that the potential “mischief” of expert evidence does not overwhelm the benefits to the trier of fact. Indeed, the focus of the court’s analysis in *Mohan* was on the dangers that expert evidence can bring to the adjudicative process. In *R. v. D.D.*,² Major J., said this:

In *Mohan*, Sopinka J. stated that the need for expert evidence must be assessed in light of its potential to distort the fact-finding process. . . .

The potential for expert evidence to overwhelm the process is likely even greater in an administrative tribunal setting, where many environmental issues are heard.

As it has evolved, and as discussed below, there are now three categories of opinion evidence: expert scientific evidence, expert non-scientific evidence, and lay opinion evidence.

The Big Four

Adducing expert evidence in the environmental law context requires careful focus on four issues:

- Selecting the precise question with respect to which the opinion is sought;
- Ensuring that the expert is qualified with respect to that precise question;
- Determining the assumptions necessary to underpin the opinion and ensuring that those assumptions can be proven; and
- Ensuring that the expert opinion meets the requirements of admissibility (the *Mohan* factors as they have evolved).

We will address each of these in turn.

SELECTING THE QUESTION

For the most part, environmental law issues are statute driven. That is the case in environmental prosecutions, in environmental assessment litigation, and in statute-based contaminated sites litigation. As such, the first question for counsel is what statutory requirements must be established (or disproved) and what, if any, expert evidence, if available, may be helpful in order to meet that burden of proof. The earlier that this process occurs the better.

QUALIFICATIONS

One of the *Mohan* factors deserves particular early consideration. This is, it is not enough that the person selected to provide an opinion is an expert in his or her field. It is necessary to establish that the person providing the opinion is an expert in the precise discipline or area of knowledge with respect to which the opinion is directed. (An expert hydrogeologist experienced with groundwater flow dynamics may well not be an expert in toxicity issues related to that groundwater.)

ASSUMPTIONS

An opinion based on a set of assumptions may be completely rejected if the assumptions underlying the opinion are not proven. In the recent BC Environmental Appeal Board case, *Seaspan ULC v. Director, Environmental Management Act*,³ in which a number of assumptions on which the expert relied were upset on cross-examination, the board recounted that the expert “at the conclusion of his cross-examination ... conceded that if any of the information he considered in reaching his conclusion was incomplete, or if any of the assumed facts were incorrect, then at the very least, he would have to reconsider his opinion.”⁴ In that case the expert was not re-examined.

ADMISSIBILITY

In 2014, in *R. v. Sekhon*,⁵ the Supreme Court of Canada again reviewed the admissibility factors contained in *R. v. Mohan*:

A. Requirements for Expert Opinion Evidence

[43] As set out *R. v. Mohan*, [1994] 2 SCR 9, at pp. 20–25, and affirmed in *R. v. J.-L.J.*, 2000 SCC 51, [2000] 2 SCR 600, and *R. v. D.D.*, 2000 SCC 43, [2000] 2 SCR 275, the admission of expert evidence depends on the following criteria: (1) relevance; (2) necessity in assisting the trier of fact; (3) the absence of any exclusionary rule; and (4) a properly qualified expert.

[44] With respect to the “relevance” criterion, *Mohan* states that the judge must conduct a cost-benefit analysis to determine “whether its value is worth what it costs” (p. 21, quoting *McCormick on Evidence* (3rd ed. 1984), at p. 544). The cost-benefit analysis requires the judge to balance the probative value of the evidence against its prejudicial effect (*Mohan*, at p. 21).

[45] As for the “necessity” criterion, *Mohan* holds that “[i]f on the proven facts a judge or jury can form their own conclusions without help, then the opinion of [an] expert is unnecessary” (p. 23, quoting Lawton L.J. in *R. v. Turner*, [1975] 1 QB 834, at p. 841). The Court went on to note that the concern “inherent in the application of this criterion [is] that experts not be permitted to usurp the functions of the trier of fact” (p. 24).

[46] Given the concerns about the impact expert evidence can have on a trial—including the possibility that experts may usurp the role of the trier of fact—trial judges must be vigilant in monitoring

and enforcing the proper scope of expert evidence. While these concerns are perhaps more pronounced in jury trials, all trial judges—including those in judge-alone trials—have an ongoing duty to ensure that expert evidence remains within its proper scope. It is not enough to simply consider the *Mohan* criteria at the outset of the expert’s testimony and make an initial ruling as to the admissibility of the evidence. The trial judge must do his or her best to ensure that, throughout the expert’s testimony, the testimony remains within the proper boundaries of expert evidence. As noted by Doherty J.A. in *R. v. Abbey*, 2009 ONCA 624, 97 OR (3d) 330, at para. 62:

The admissibility inquiry is not conducted in a vacuum. Before deciding admissibility, a trial judge must determine the nature and scope of the proposed expert evidence. In doing so, the trial judge sets not only the boundaries of the proposed expert evidence but also, if necessary, the language in which the expert’s opinion may be proffered so as to minimize any potential harm to the trial process. A cautious delineation of the scope of the proposed expert evidence and strict adherence to those boundaries, if the evidence is admitted, are essential. . . . [Emphasis added; citations omitted.]

[47] The trial judge must both ensure that an expert stays within the proper bounds of his or her expertise and that the content of the evidence itself is properly the subject of expert evidence.

THE COURT AS GATEKEEPER

In *R. v. Abbey*,⁶ the court set out a two-step process for the assessment of expert evidence based on the criteria set out in the *Mohan* case. This two-step process has been described as a “rules-based” analysis under the first step (the four criteria for admission of expert evidence in *Mohan*) and under the second step focuses on the court’s role as a gatekeeper.⁷ It is at the gatekeeper phase of the inquiry where the court considers the cost-benefit analysis. The cost-benefit analysis also requires the consideration of the probative value of the evidence versus its prejudicial effect to the hearing.

It is important to note that the 2014 decision of the Supreme Court of Canada in *R. v. Sekhon*, referred to above, can be read to say that the “gatekeeper” function, or cost-benefit analysis, is not a separate step in the assess-

ment of the admissibility of expert evidence but is considered within the relevance and necessity steps in the *Mohan* criteria.

Novel Scientific Theory or Technique

GENERAL PRINCIPLES OF ADMISSIBILITY: RELIABILITY

In *R. v. Mohan*, the Supreme Court of Canada considered expert opinion evidence in the context of a novel scientific theory or technique. The Supreme Court of Canada held that a novel scientific theory or technique is subject to special scrutiny and must satisfy a basic threshold of reliability:

Expert evidence which advances a novel scientific theory or technique is *subjected to special scrutiny to determine whether it meets a basic threshold of reliability* and whether it is essential in the sense that the trier of fact will be unable to come to a satisfactory conclusion without the assistance of the expert. The closer the evidence approaches an opinion on an ultimate issue, the stricter the application of this principle.⁸ [Emphasis added.]

In *R. v. Mohan*, the Supreme Court of Canada did not create a specific test with respect to the admissibility of novel scientific evidence or techniques. Rather, the court set out the criteria to distinguish opinion evidence that is sufficiently reliable and necessary to assist the trier of fact from those opinions that are unnecessary, unreliable, or incompatible with the litigation process. In other words, novel scientific evidence or techniques are subject to the same criteria for admissibility as other expert evidence but with a particular focus on reliability. In *R. v. J.(J.-L.)*, the Supreme Court of Canada confirmed this approach and stated as follows:

Mohan kept the door open to novel science, rejecting the “general acceptance” test formulated in the United States in *Frye v. United States*, 293 F. 1013 (D.C.) CIR. 1923, and moving in parallel with its replacement, the “reliable foundation” test more recently laid down by the US Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, and 509 US 579 (1993).⁹

The Supreme Court of Canada in *R. v. J.(J.-L.)* then went on to determine that a trial judge could evaluate the reliability of novel science or techniques on the basis of the factors identified in the US *Daubert* case. These factors are:

1. Whether the theory or technique can be and has been tested;
2. Whether the theory or technique has been subjected to peer review and publication;
3. The known or potential rate of error or the existence of standards; and
4. Whether the theory or technique used has been generally accepted.¹⁰

NOVEL NON-SCIENTIFIC EVIDENCE

Both *Abbey* and a recent BC Court of Appeal decision (*R. v. Aitken*¹¹) discuss the application of the reliability criteria in the context of novel non-scientific expert evidence. In *Abbey*, the court recognized that the Daubert factors are not essential to the reliability inquiry where the evidence is based on specialized knowledge acquired through training or experience in a particular discipline. *Abbey* was considering the admissibility of expert opinion evidence of a sociologist who was an expert in urban street gang culture in Canada. The court found that the expert's opinion "could not pass scientific muster." However, the court found that the expert's opinion "flowed from his specialized knowledge gained through extensive research, years of clinical work and his familiarity with the relevant academic literature."¹²

The court in *Abbey* then went on to determine that, with respect to non-scientific expert evidence:

Scientific validity is not a condition precedent to the admissibility of expert opinion evidence. Most expert evidence routinely heard and acted upon in the courts cannot be scientifically validated. For example, psychiatrists testify to the existence of various mental states, doctors testify as to the cause of an injury or death, accident reconstructionists testify to the location or cause of an accident, economists or rehabilitation specialists testify to future employment prospects and future care costs, fire marshals testify about the cause of a fire, professionals from a wide variety of fields testify as to the operative standard of care in their profession or the cause of a particular event. Like Dr. Totten, these experts do not support their opinions by reference to error rates, random samplings or the replication of test results. Rather, they refer to specialized knowledge gained through experience and specialized training in the relevant field. To test the reliability of the opinion of these experts and Dr. Totten using reliability

factors referable to scientific validity is to attempt to place the proverbial square peg into the round hole.¹³

It is often said that much of what environmental engineers do is as much an art as a science. An example might be a hydrogeologist making an inference as to groundwater flow path. The “art” aspect of the environmental expert evidence may arise from the expert’s experience while the “science” part is the application of scientific principles in methodology. As discussed in *Abbey*, both types of expert evidence are admissible if otherwise falling within the *Mohan* criteria.

Particular Issues Relating to Objectivity

The Rules of Procedure in many of the provinces mandate objectivity on the part of the expert providing opinion evidence. For instance, Rule 11-2 of the *British Columbia Supreme Court Rules* provides that in giving an opinion to the court, an expert has a duty to assist the court and is not to be an advocate for any party. The Rule then goes on to require the expert to certify in their report that they are aware of the duty and have made the report in conformity with that duty and will give their oral or written testimony in conformity with that duty.

The independence issue is often just below the surface in many environmental contests given the different and sometimes overlapping roles played by environmental experts. The same person may have done the work (remediated the contaminated site) and assisted counsel in preparing to cross-examine, and may be proffered to provide expert evidence on the substantive issue.

Two appellate level decisions, one from Ontario and one from Nova Scotia, discuss the issues of objectivity, independence, and impartiality with respect to expert evidence. The appeal of the Nova Scotia Court of Appeal decision *Abbott and Haliburton Company v. WBLI Chartered Accountants*¹⁴ was dismissed by the Supreme Court of Canada.¹⁵ Both decisions take a less than strict view of issues relating to the “independence” of an expert.

The Nova Scotia decision found that issues related to “independence or even objectivity” go to weight rather than admissibility.¹⁶ The court found that “it is when a court is satisfied that the evidence is, in fact, so tainted by bias or partiality, so as to render it of no or minimal assistance, it can be excluded.”

The Ontario Court of Appeal decision, *Moore v. Getahun*,¹⁷ to the relief of the Ontario Bar, made this finding:

I reject the trial judge's proclamation that the practice of consultation between counsel and expert witnesses to review draft reports must end.

Lay Opinion Evidence

In *Giczi v. Kandola* (the "Bette Midler Case"),¹⁸ Sigurdson J., in the context of somewhat colourful facts, discussed the principles surrounding the admission of lay opinion evidence and held that witnesses from the entertainment field could provide admissible lay opinion "comparing the plaintiff to other tribute performers generally, Bette Midler tribute singers, or Bette Midler." The court referred to the leading authority on this point, *R. v. Graat*.¹⁹ In *Graat*, this is what was said by the court:

The judge in the instant case was not in as good a position as the police officers or Mr. Wilson to determine the degree of Mr. Graat's impairment or his ability to drive a motor vehicle. The witnesses had an opportunity for personal observation. They were in a position to give the Court real help. They were not settling the dispute. They were not deciding the matter the Court had to decide, the ultimate issue. The judge could accept all or part or none of their evidence. . . .

I accept the following passage from Cross as a good statement of the law as to the cases in which non-expert opinion is admissible.

When, in the words of an American judge, "the facts from which a witness received an impression were too evanescent in their nature to be recollected, or too complicated to be separately and distinctly narrated", a witness may state his opinion or impression. He was better equipped than the jury to form it, and it is impossible for him to convey an adequate idea of the premises on which he acted to the jury:

"Unless opinions, estimates and inferences which men in their daily lives reach without conscious ratiocination as a result of what they have perceived with their physical senses were treated in the law of evidence as if they were mere statements of fact, witnesses would find themselves unable

to communicate to the judge an accurate impression of the events they were seeking to describe.” There is nothing in the nature of a closed list of cases in which non-expert opinion evidence is admissible. Typical instances are provided by questions concerning age, speed, weather, handwriting and identity in general [at p. 448].”²⁰

Something to Think About

One can easily form the view that the practice in Canadian trial courts and administrative tribunals with respect to the treatment of opinion evidence is not entirely in accord with the Supreme Court of Canada jurisprudence. The gatekeeper function for the most part is an open gate. Too often the cost-benefit of admitting expert evidence into the hearing process results in a net deficit. Also too often the question of whether the probative value is worth the cost is not fully addressed.

While expert evidence may be more likely to be useful in the litigation of environmental issues—given the technical overlay—careful thought should be given to whether the expert is actually explaining a complexity that the judge or the board could not on its own determine (especially in the case of expert tribunals).

Stepping back and reminding ourselves of basic principles, we see that the essential purpose of expert evidence is to explain complexity to the trier of fact while trampling as little as possible in the area of the determination of the ultimate issue and avoiding the role of an advocate. Necessity, within the principles set out in *Mohan*, can justify an expert providing a “ready made inference,” particularly where the added ingredient provided by the expert is sourced from experience and not just the application of scientific principles. Is a “ready made inference” provided by an expert “necessary” in many environmental cases? As discussed in *Sekhon*, the court (or tribunal) must control the expert evidence sought to be adduced so that the evidence does not overwhelm the adjudicative process. While it may be tempting to leave it to an expert to opine on what essentially is the ultimate issue, is it necessary in the sense of no other practicable way of determining the issue?²¹

NOTES

1 [1994] 2 SCR 9 at para 17.

2 [2000] SCJ No 44 at para 48.

3 2010-EMA-005 and 006.

4 *Ibid* at para 88. See also *Gregory v Insurance Corp of British Columbia*, 2010 BCSC 651.

- 5 [2014] 1 SCR 272 at paras 43–47.
6 2009 ONCA 624.
7 See *R v Aitken*, [2012] BCJ No 632, where
the BC Court of Appeal summarized this
two-step process for the assessment of
expert evidence at paras 71 to 80 [*Aitken*].
8 [1994] SCJ No 36 at para 28.
9 *R v J(J-L)*, [2000] SCJ No 52 at para 33.
10 *Ibid*.
11 *Aitken*, *supra* note 7.
12 *R v Abbey*, [2009] OJ No 3534 at para 108.
13 *Ibid* at para 109
14 2013 NSCA 66; *Abbott and Haliburton Co.*
v White Burgess Langille Inman, 2015 SCC
23, [2015] 2 SCR 182.
15 The appeal was heard on 7 October 2014
and judgment has been reserved.
16 See also *Conseil Scolaire Francophone*
de la Colombie-Britannique v British
Columbia (Education), 2014 BCSC 851.
17 2015 ONCA 55 at para 66; see also
Westerhof v Gee Estate 2015 ONCA 206
and *White Burgess Langille Inman v*
Abbot and Haliburton Co., 2015 SCC 23.
18 2014 BCSC 508.
19 [1982] 2 SCR 819.
20 *Ibid* at 836–37.
21 See, for example, the class action lawsuit
for decreased property values as a result
of soil contamination, *Smith v Inco Ltd*,
2009 CanLII 63374, where the court
found that while the expert evidence was
helpful to the court, it was not necessary
for the fair determination of the issues.
In this case the court found the evidence
was primarily a compendium of factual
research and not opinion evidence.