

ETV Webinar – Question and Answer session
March 31, 2016

Testing vs verification

Q. What is the difference between testing and verification? What is the difference between verification and certification?

Verification is a process to confirm the performance of an environmental technology. Testing data is an input for the verification.

ETV is designed to address the ‘certification gap’ faced by technologies that perform well above normal standards or that present an innovative approach to solving an environmental problem. ETV is not a certification scheme; instead it ensures that a product’s environmental claims are true and verified, and presents a clear assessment of the technology’s environmental potential and value.

Where a need was identified, specific testing protocols were developed for specific types of technologies; these testing protocols are available at etvcanada.ca. In addition, the US Environmental Protection Agency’s website contains a database of over 400 testing protocols developed under the former US ETV program:

<https://archive.epa.gov/nrmrl/archive-etv/web/html/vp.html>

Q. Will ISO 14034 replace the existing standard for products (example: for septic tanks)?

ISO 14034 outlines a *verification* process; testing and certification are still separate activities. ISO 14034 will not replace existing standards. However, a municipality/regulator/etc. may choose to set ISO 14034 as a requirement in their process.

ISO 14034 vs General Verification Protocol – Technical process

Q. Once obtaining ETV following the [*Oil-Grit Separator \(OGS\) Protocol*](#) or following the [*General Verification Protocol*](#), what is the cost of securing the ISO 14034? Will this be a one-time cost, or will there be a reoccurring renewal rubber stamp cost?

In the case of oil-grit separators, the industry developed a common **testing protocol**, i.e. the oil-grit separator protocol. It is important to distinguish that the oil-grit separator protocol is a *testing* protocol, while ISO 14034 and the General Verification Protocol outline the steps for *verification*. Testing data is an input for the verification.

In general, once testing is complete, the test data can be submitted for verification. In the past, the General Verification Protocol was followed for verification. ISO 14034 will be an internationally recognized standard for verification. Given the well-known reputation of ISO, it is anticipated that organizations offering verification services will use ISO 14034 going forward. The cost of verification will be determined by the verifier.

ISO 14034 does not stipulate a renewal clause. However, at their discretion, municipalities/regulators/etc. requiring ISO 14034 may opt to administer a defined lifetime to ensure that verifications remain valid (i.e. no changes have been made to the technology that would impact its performance).

Q. What improvements can be made to the current ETV process?

The development of ISO 14034 was initiated in February 2013. Since then, experts from all over the world have been working in collaboration through the ISO process to draft the standard based on best practices from each country. The technical requirements of ISO 14034 are very similar to the General Verification Protocol used in Canada but the new standard will require the verifiers to meet another standard, ISO 17020. This standard will ensure that all verifiers will have the necessary expertise and use the same internal process while performing ISO 14034. This requirement alone is a major improvement in our current process and will facilitate national and international recognition of verifications.

Under the former Canadian ETV program, verifications were managed by a single delivery agent who oversaw a consortium of technical organizations. Once ISO 14034 is published and adopted in Canada, the standard can be used by any organization, with the understanding that they would follow the mandatory ISO 17020 which provides the conformity requirements of bodies doing inspection (verification). To ensure that ETV and the required standards are well understood and duly applied by verifiers, guidelines and guidance documentation will be made available. It is anticipated that accreditation of verifiers will eventually be implemented to ensure consistency of the ETV process nationally and internationally.

Q. Would you see other types of products that could go through this process?

ETV (and the related ISO 14034) is a generic process that could be applied to any environmental technology. ISO 14034 defines an environmental technology as a “technology that either results in an environmental added value or measures parameters that indicate an environmental impact”.

Validity of current verification for the future

Q. For the benefit of those participants joining the webinar who are current ETV licence holders (under the Canadian ETV Program), would you be able to speak briefly to any potential questions relating to the transition between the current Program and the future ISO/ETV Standard 14034? Will products that already have ETV be grandfathered into the new ISO standard?

The General Verification Protocol stipulates that the verification is valid for 3 years. Upon expiry, the applicant may request that the verification organization review the technology following ISO 14034. ISO 14034 is very similar to the ETV process already used in Canada, thus previous verifications are likely to already meet the requirements of ISO 14034. Once complete, the new verification would be recognized as ISO 14034 compliant.

ISO 14034 does not stipulate a renewal clause. It is important to note, however, that a verifier may opt to administer a defined lifetime to ensure that verifications remain valid (i.e. no changes have been made to the technology that would impact its performance).

Q. We currently hold Canadian ETV for one product and US EPA ETV for two products; how will those be impacted? Can some or all of the testing used for those verifications be used to obtain the new ISO? We also have BNQ Certification for 3 products, is there any collaborative effort between BNQ and ISO?

Once implemented globally, ISO 14034 will facilitate mutual recognition of verifications, so that a technology verified in one country would be recognized in others. The process to implement ISO 14034 in the United States will be similar to what is being done in Canada. For verifications that were done in the United States, it is suggested to contact the US organizations involved to learn which steps need to be done related to ISO 14034.

The ISO standard refers to the verification process; ISO 14034 does however require that testing be done as per ISO 17025 or equivalent which is consistent with the former Canadian ETV program. ISO 14034 is very similar to the ETV process already used in Canada, thus previous verifications are likely to already meet the requirements of ISO 14034. Therefore, previous testing could still be valid, but the decision to accept previous test data will be made by the verifier as indicated in ISO 14034. Any changes made to a technology that was previously tested might however invalidate the previous testing results.

While Environment and Climate Change Canada has collaborated with BNQ over the years, the decision to adopt and use ISO 14034 in BNQ's processes will be at the discretion of BNQ.

Q. If we send our completed ETV Application now, will it be recognized as ISO 14034 or will we receive ISO 14001?

It is expected that the standard will be published in the summer of 2016. The publication will be followed by the national adoption of the standard in Canada in the fall of 2016. Until then, a verifier could not offer verification services using ISO 14034. However, to ensure a smooth transition, ongoing verifications could follow the draft standard in anticipation of the publication later this year.

ISO 14001 is not a standard used for verifications. Although this standard is within the same suite of standards (14000 series are standards in environmental management), ISO 14001 is one of the key management system standards which specifies the requirements for the formulation and maintenance of an Environmental Management System in a business. The standard helps to control a business' environmental aspects, reduce impacts and ensure legal compliance.

Conformity assessment issues and accreditation

Q. Right now there are specific verifiers who are very knowledgeable. Will that stay the same?

It is anticipated that an Accreditation Program will be implemented by the Standards Council of Canada (SCC) for ISO 14034; the accreditation will be phased-in over the coming years to allow the market to adjust to implementing the new standard. This means that organizations offering verification services will not be inspected to the level of ISO accreditation right away, but will still be expected to follow the necessary requirements indicated in ISO 14034. The objective of the accreditation is to ensure that all verifiers in Canada would apply ISO 14034 in the same way with the same level of expertise. As the ISO member body in Canada, SCC is responsible for the accreditation; this structure also brings worldwide credibility on the results of the verification.

Q. ISO 14034 requires that ISO 17020 be followed. Why ISO 17020 instead of ISO 17065?

During the international drafting process of ISO 14034 (which lasted approximately three years), experts evaluated all options for the conformity assessment standard to be used by verifiers while performing ISO 14034. ISO 17020, *Requirements for the operation of various types of bodies performing inspections*, was selected due to its flexibility in its application which is in line with the ETV process described in ISO 14034.

Role of Environment and Climate Change Canada

Q. The Federal Government has reduced funding for ETV. Is the government willing to commit resources to promote the ETV brand so manufacturers receive the full benefit of the ETV mark for sales and marketing?

In March 2015, the federal government discontinued financial support for an ETV delivery agent. This was done in order to level the playing field in anticipation of the publication of ISO 14034 in 2016. The publication of the standard will be a milestone for ETV, signalling that ETV has progressed from a government-sponsored concept to an internationally recognized process.

Environment and Climate Change Canada is committed to supporting the development of ISO 14034 through to publication. The department is committed to undertaking outreach activities, such as this webinar, to increase awareness of ETV and ISO 14034.

In the next few months, Environment and Climate Change Canada will be addressing the issue of the ETV logo for the future. Although we appreciate the importance of the Canadian ETV logo, ISO is well recognized across international markets.

Q. Several provincial and city agencies are looking for assistance in the storm water space regarding performance verification for additional technology platforms beyond the OGS. Is Environment Canada pursuing this or will they soon be in a position to fund a universal field verification protocol for all storm water technologies to support the environment and Provinces looking for this assistance?

Through the former Canadian ETV Program, Environment and Climate Change Canada (ECCC) provided funds to help develop the Oil-Grit Separator testing protocol. Given the current role of ECCC in supporting ISO 14034, funding to support testing protocol development is now outside of ECCC's mandate. If there is a need and/or interest by stakeholders to develop other specific testing protocols, a consultation process should be established between the interested parties to choose the best funding options.