

14 August 2019

Alan Hoban
President Stormwater Australia
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Dear Mr Hoban

Thank you for the opportunity to review and provide comments on SQIDEP V1.2.

The review has been undertaken by the Stormwater NSW Committee and our recommendations, suggestions and comments moderated by Andrew Thomas.

The committee has concerns with the technical document, the release of this protocol without an adequate verification program and concerns regarding potential conflicts of interest.

Until Stormwater NSW's concerns have been addressed, Stormwater NSW will not be in a position to endorse the SQIDEP protocol and will advise to our members accordingly.

We have also provided a separate file providing suggested language/criteria for establishing maintenance cycle during protocol monitoring.

The key recommended changes are as follows:

1. Reduce the number of required qualifying events from fifteen (15) to twelve (12), but with an introduced requirement for sequential storms.
 - a. This is necessary to remove selective inclusion of data. For example, in its current form, SQIDEP allows a company to collect 30 storms from one site and pick their best 15, which is inappropriate. Seeking to address this issue in a flow chart is inadequate.
2. Allow multiple sites but need a minimum of seven (7) storms from a single site
 - a. If SQIDEP remains silent on the number of sites allowed, a company could multiple sites to get the necessary number of qualifying events.
 - b. If the claimant has to move to another test site due to technical reasons, then the data collected from the first site could be used to help reduce unnecessary additional cost and time compared with scrapping a site and data all together.
3. Include a statement requiring events sampled to be sequential excluding equipment failure and low/high influent concentrations. The rules around the process for the for the exclusion of an event need to be documented and these rules should not allow exclusion after an unfavorable lab result.
4. The SQIDEP should place more emphasis on the selection and reporting on sample locations
 - a. For example, pollutant reductions could be obtained by simply facing the inlet sample suction line upstream to capture a high load, and then face the effluent sample line downstream to pass as much load as possible.
5. Added 25-40% DIN requirement for TN
 - a. This is consistent with the current requirements of a number of councils in NSW and Queensland.

6. Increase the concentration limit for the minimum influent concentrations required for compliance.
 - a. In its current form, SQIDEP has sets the minimum concentration at the limit of detection (i.e. the minimum concentration a lab can detect). We suggest an appropriate value would be the mean concentration minus one standard deviation for all land uses. You can could suggest a lower value than this but suggesting 2.5mg/l to 5mg/L which is the TSS limit of detection for most NATA labs means zero or meaningless percent reductions are likely to be recorded. A matter simply resolved by increasing the minimum concentration limit.
7. Reduced the number and ordering of performance metrics i.e. ER first then Median CRE second and SOL.
 - a. If ER and median CRE differ by more than 10% then average ER and median CRE.
 - b. Establish a hierarchy thereby preventing arbitrary proprietor choice of the method that gives their device the best result.
8. Add minimum of 50% hydrograph coverage.
 - a. Having no minimums means results are not representative.
9. Added minimum of 8 aliquots per storm.
 - a. Having no minimums means results are not representative.
10. Add requirements to document and report on maintenance (separate attachment) providing users of the SQIDEP with important information to assist them with device selection.

In addition to the recommended changes, Stormwater NSW is seeking full transparency regarding the potential conflicts of interest for all members of the SQIDEP committee members. We understand SQIDEP committee largely comprised representative of major manufacturers and the interests of each of these parties was clear through their current employment, thereby effectively identifying their interests. However, some members of the committee were consultants and their interest were not clearly identified. Stormwater NSW is seeking full disclosure of the interests of the members of the SQIDEP committee identifying as consultants. These disclosures should include a register of SQIDs used in the consultant's designs, and details of professional services or advice provided to any SQID manufacturer, when and the nature of that advice.

We also provide the following additional comments relevant to SQIDEP and/or the proposed governance process:

1. The SQIDEP does not by itself, provide the solution needed by consumers of proprietary stormwater devices. It requires a range of supporting processes and administration to ensure it meets the industry's needs.
 - a. First and foremost, it will need to be supported by strong administration that is unequivocally independent of any proprietor of stormwater treatment devices. Without this it will be impossible to gain acceptance by key regulators and users of the results around the country. Steps will need to be taken to ensure that all conflicts of interest, real or perceived, are eliminated.
2. The verification process and certification of results need to be carried out by acknowledged scientific experts in the stormwater field.
 - a. Again, these experts will need to be independent of proprietors. The testing will need to be carried out by at least two experts, with these reviews being prepared independently. The independent reviewers can then be brought together to compared opinions and seek to reach a consensus. We understand that Stormwater Australia has appointed of a range of independent experts to carry out assessments. However, the selection process of which peer reviewers are to be used for an assessment remain unclear and therefore inadequate.



3. Stormwater Australia will need to provide proprietors with a trusted logo or mark that enables them to market their devices with the agreed level of certification achieved.
 - a. This certification will need to be easily understandable and transparent to customers using the products marketed.
 - b. In addition, key information on the results of testing on tested devices, and key commentary by the technical experts, needs to be easily accessible by users in the form that is most conducive to their consumption.
 - c. Whilst we understand a database has been developed, it is not currently available for general use in a form that is easily accessible by customers.
4. It is vital that the SQIDEP becomes the industry standard for the testing of proprietary devices, and is accepted by customers, proprietors and regulators alike. Stormwater NSW believes that a substantial consultation and marketing program will be required to achieve this goal. At a minimum Stormwater Australia should circulate the SQIDEP to all councils Australia wide, all state-based regulators, key consumers of proprietary devices and all key manufacturers. The accompanying letter would invite review of the protocol with comments to be provided to Stormwater Australia by the review date. It would invite recipients to view explanatory material available on the Stormwater Australia web-site. It would also ask recipients to consider adoption of the SQIDEP as an accepted standard for use by their stakeholders. In addition, it would be ideal if Stormwater Australia maintained a register of parties that have adopted the SQIDEP.
5. Commercially, Stormwater NSW is concerned about small start-up companies and companies that build custom SQIDs.
 - a. Regarding start-up companies there is potential for the SQIDEP to become a market entry barrier where the proposed costs (\$22-44k for new technologies) for assessment well exceed the costs of undertaking the field study data collection.
 - b. Regarding companies that construct custom SQIDs, they may inadvertently be excluded from the market place if councils decide only to run with off-the-shelf units that have been subject to the testing under the SQID Protocol. This is something will need to be closely monitored if the protocol is taken up by councils and other relevant entities.
6. A periodical review of the SQIDEP needs to be scheduled with clear closing dates for submissions identified for each review period. We suggest the reviews should be completed at least every 2 years for the first decade of the document's life. This will enable any issues and unexpected consequences to be quickly rectified and minimise the risk of an industry backlash.
7. Stormwater Australia acknowledges that "tune-ups" will be required to SQIDEP. There is currently no process for managing verifications between SQIDEP versions which will be potentially misleading for users of the results.
 - a. Local governments and state based organisations in our region have already called for additional criteria for SQIDEP, resulting in misleading verification statements, i.e. a technology can meet SQIDEP but remain unapproved by these regulators.
 - b. For technical changes that significantly affect the technology performance (e.g. see point 5 in the key recommendations), no guidance or time period has been provided that manages verification statements that have become dated by changes to the protocol.



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If you need to seek clarification on any of the comments, please contact me via email (alan.benson@waternewsw.com.au).

I look forward to receiving your response.

Yours sincerely

 23/8/2019.

ALAN BENSON

President Stormwater NSW

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