

2.0 Approval Process for Health Facilities

2.1 Introduction

2.1.1 *Purpose*

SHCC visualize the healthcare city as a self-sustainable, business-friendly free zone. The objective of the Approval Process for Health Facilities is to ensure all health facilities within the Sharjah Healthcare City are designed and constructed to a minimum acceptable standard. This will maintain public confidence in the quality of health facilities approved, inspected and licensed by SHCC.

2.1.2 *References within Part A of the Guidelines*

Where "<u>underlined script</u>" is used, the applicant should refer to the section "Appendices – Standard Documents, Templates and Samples" in Part A. Where "*italic script*" is used, the applicant should refer to the applicable section within Part A.

2.2 Approval Process

The Approval Process consists of the following six steps, as illustrated below:

- Step 1 Project Registration
- Step 2 Schematic Submission
- Step 3 Detailed Submission
- Step 4 Inspection at Foundation Completion
- Step 5 Inspection at 90% Completion
- Step 6 Inspection at 100% Completion.

2.3 Step 1 – Project Registration

2.3.1 *Purpose*

The SHCC provides the plot/facility to the owners or investors of the registered companies to operate health facilities in Sharjah Healthcare City. Each service provider shall follow the Health Facility Guidelines to establish the facility.

Project registration is the first step to obtain a license. This process identifies the type and size of the facility and the type(s) of health services provided with an approximate construction cost.

2.3.2 *Process*

- The owner/investor shall register the health facility by lodging the <u>Health Facility Registration</u> <u>Form</u> (Appendix 01). The Registration Form shall be printed, signed by the owner/investor and a hard copy lodged by hand to the SHCC office
- If approved, the Approval in Principle Registration (AIP-R, Appendix 02) remains valid for twelve (12) months, during which the Step 2 of the Approval Process can be initiated
- If required, the validity of the Registration Approval shall be extended for a further twelve (12) months, by a special application prior to the expiry of the twelve (12) month period
- If the application was not approved, the Registration shall be re-lodged within twelve (12) months.



2.3.3 *Practically*

- Should the owner or investor let the Registration Approval expire, the registration process shall be re-initiated
- The registration shall be submitted as per the requirements of SHCC.

2.3.4 *Deliverables*

- Health Facility Registration Form (Appendix 01) shall be lodged online
- Signed copy of the Health Facility Registration Form (Appendix 01) shall be lodged at the SHCC office.

2.4 Step 2 – Schematic Submission

2.4.1 *Purpose*

After the owner or investor obtains the Company Registration, they shall appoint the consultant to design the architectural designs for SHCC approval. Based on the SHCC Health Facility Guidelines and land information, the drawings will be developed; SHCC shall review and approve the schematic submission.

2.4.2 *Process*

- The <u>Schematic Submission Application Form</u> (Appendix 03) shall be lodged by the owner/investor online. The same document shall be printed and signed by the owner/investor and submitted in hard copy to SHCC
- The owner/investor shall lodge the Architectural Submission as described in <u>Deliverables for</u> <u>Schematic Submission</u> (Appendix 08) in compliance with the SHCC HFG. The documents shall be submitted in soft and hard copy at the SHCC office
- The submission shall be reviewed by SHCC authorities; incomplete and non-complying submissions shall be rejected
- If SHCC approved the application, the "Approval in Principal Schematic" (AIP-S) shall be granted along with the "<u>Assessment Report</u>" (Appendix 14) stating all non-compliances to be rectified. The AIP-S shall remain valid for twelve (12) months, during which Step 2 shall be continued for the Building Permit process
- The validity of AIP-S shall be extended by a further twelve (12) months by a special application submission before the expiry date
- If the Schematic Submission has not been approved, it can be resubmitted to SHCC within three (3) months.

2.4.3 *Practically*

- Should the owner/investor let the AIP-S expire, the Schematic Submission process is to be reinitiated
- The registration shall be submitted as per the requirements of SHCC
- For Standards and Guidelines to adhere to, refer to *Standards and Guidelines* on pages 14 and 15.

2.4.4 *Deliverables*

- Applications must include drawings and other documents to represent the proposed design. These documents must be in compliance with the Deliverables for Design Approval Process to simplify and speed up the process of evaluation
- Incomplete submissions or submissions that do not follow the prescribed format may be rejected



- Deliver:
 - Schematic Submission Application Form (Appendix 03) to be lodged online
 - Signed copy of <u>Schematic Submission Application Form (Appendix 03)</u>
 - Signed copy of <u>Deliverables for Schematic Submission</u> (Appendix 08)
 - Architectural Design drawings and reports as indicated on the Deliverables for Design Approval.

2.5 Step 3 – Detailed Submission

2.5.1 *Purpose*

The owner/investor shall lodge the detailed submission to SHCC for review and approval. SHCC shall identify the detailed design errors and advice for modification.

2.5.2 *Process*

- After the Schematic Approval, the owner/investor shall develop the detailed Architectural Design and MEP Design for SHCC approval
- The owner/investor shall submit the <u>Detailed Submission Application Form</u> (Appendix 05) online. The Application Form is then to be printed, signed by the owner/investor and a hard copy shall be submitted to SHCC. SHCC shall advise through email regarding the date of submission at SHCC for review
- The owner/investor shall prepare the detailed Architectural, Structural and Drainage Documents and submit the same described on the <u>Deliverables for Detailed Submission</u> (Appendix 09). All the documents along with the signed Application Form shall be submitted in both hard and soft copies at the SHCC office
- The submission is checked for completeness by the receiving official; incomplete or noncompliant submissions shall be rejected
- The submission shall be reviewed for SHCC HFG compliance and <u>Assessment Report</u> (Appendix 14) of the AIP-S
- If SHCC does not approve the detailed submission and the number of non-compliances are considered acceptable (at the sole discretion of SHCC), an Assessment Report listing all noncompliances shall be issued to the owner/investor, who should rectify the issues under the following process:
 - Re-lodge only those portions of the submission that require redesign, within three (3) months
 - Provide answers/solutions to all unresolved non-compliances in the Assessment Report
- If SHCC approves the Detailed Submission, the "Design Approval" shall be issued along with an Assessment Report (Appendix 14) for rectifying the non-compliance list. The Design Approval shall be valid for six (6) months. If required, the validity of the Design Approval shall be extended for another six (6) months
- If the re-lodgment is still not approved, the Assessment Report (Appendix 14) listing all the noncompliances along with the request letter has to be re-submitted within six (6) months, to reinitiate Step 4. Only three such detailed submissions shall be allowed by SHCC for the same project or the registration shall be revoked
- If required, the validity of the Design Approval shall be extended for another twelve (12) months
 or longer (as the SHCC decision depends upon the size of the project) with a special application
 submitted before the completion of twelve (12) months period, allowing the owner/investor to
 proceed up to the 90% of construction completion



- The design documentation (electrical supply, water supply, and firefighting system and telecommunication services) shall be developed by the owner/investor to submit them along with the approved Architectural and MEP documents to the concerned authorities. Sharjah Electricity and Water Authority (SEWA), Department of Civil Defence and Department of Telecommunication (Etisalat) shall review the submission. The authorities shall approve the design and issue the non-compliance report (if any) to the owner/investor. The fire-fighting system drawings shall be submitted by the Licensed 3rd Party Consultant to the Department of Civil Defence, Sharjah for approval
- The owner/investor shall obtain the No Objection Certificate (NoC) for the related work from SEWA, Etisalat and Drainage section (Municipality)
- The owner/investor shall submit the authority approved designs and the NoC to SHCC
- After the Design Approval, the owner/investor shall award the contract and request SHCC for a Building Permit. SHCC shall provide the Building Permit, which shall be valid for 12 months.

2.5.3 *Practically*

- Should the owner/investor let the Building Permit expire, the detailed submission process is to be re-initiated
- The detailed submission shall be lodged as per the requirements of SHCC
- For Standards and Guidelines to adhere to, refer to Standards and Guidelines on pages 14 and 15.

2.5.4 *Deliverables*

- Detailed Submission Applications should include all drawings and other documents to represent the proposed design. These documents must be in compliance with the <u>Deliverables for Detailed</u> <u>Submission</u> (Appendix 09) to simplify and speed up the process of evaluation
- Incomplete submissions or submissions that do not follow the prescribed format may be rejected
 Deliver:
 - Detailed Submission Application Form (Appendix 05) to be lodged online
 - Signed copy of Detailed Submission Application Form (Appendix 05)
 - Signed copy of Deliverables for Detailed Submission (Appendix 09)
 - Detailed Design drawings and reports as indicated on the Deliverables for Detailed Submission (Appendix 09).

2.5.5 *Changes to Design after Issue of Building Permit*

The owner/investor is responsible to update SHCC regarding any changes advised by the authorities representing water supply, electrical supply, and firefighting or telecommunication systems after issuing the Building Permit. The owner/investor should be aware that failing to inform SHCC regarding any significant changes advised by the above mentioned authorities shall lead to penalties such as denial of "license to operate Certificate" after the construction completion.

2.6 Step 4 – Inspection at Foundation Completion

2.6.1 *Purpose*

SHCC conducts an initial inspection of the foundation immediately after its completion to ensure that the foundation is constructed in accordance with the Step 3 approval, conforming to SHCC requirements.



2.6.2 *Process*

- The owner/investor shall conduct the soil investigation and submit the soil test report and rebar test report to SHCC
- The owner/investor shall start the construction activities and excavate the plot as per the approved design with Compaction, Plain Cement Concrete (PCC) and Foundation. After the Foundation work has been done, the owner/investor requests SHCC for an initial inspection onsite. Inspection appointments should be arranged at least ten (10) working days prior to the expected completion of works onsite
- The owner/investor submits the <u>Inspection Request Form</u> (Appendix 07) along with the answer solutions status progress at site for the listed outstanding non-compliances from Step 3 using the <u>Assessment Report</u> (Appendix 14) and submits them along with the <u>Inspection Request Form</u> (Appendix 07) to the SHCC Inspection Team. The request form shall be printed, signed by the owner/investor and a hard copy submitted at SHCC
- SHCC shall review the progress report and provides the inspection schedule to the owner/investor
- SHCC inspects the site and advises of modifications/corrections, if necessary, on the <u>Assessment Report (Appendix14)</u>. The Contractor shall continue for concrete or shall modify the foundation as instructed by the SHCC Inspection Team
 - SHCC conducts the site inspection and inspects the following parameters:
 - Approval of PCC foundation
 - Approval of fencing, excavation, compaction
 - Approval of slabs at first floor
 - Approval of the compound wall (tie beam).

2.6.3 *Deliverables*

- Inspection Request Form (Appendix 07) to be lodged online
- Signed copy of the <u>Inspection Request Form</u> (Appendix 07) to be lodged to the SHCC office, together with the Progress Report.

2.7 Step 5 – Inspection at 90% Completion

2.7.1 *Purpose*

After the construction is completed (excluding electrical, water and gas connections), SHCC shall be requested to conduct an inspection. SHCC shall identify the construction anomalies or faults after the construction and advise the owner/investor to rectify the same.

2.7.2 *Process*

- The owner/investor shall request SHCC for inspection by lodging the <u>Inspection Request Form</u> (Appendix 07) along with the corrections onsite for the listed outstanding non-compliances in the previous <u>Assessment Report</u> (Appendix 14) of Step 4 online at least four (4) weeks prior. The request form shall be printed, signed by the owner/investor and the hard copy has to be submitted at SHCC office. SHCC shall provide the inspection schedule to the owner/investor
- SHCC inspects all the applicable parameters indicated in the HFG, including radiation safety
 protection and instructs the owner/investor of modifications to the Assessment Report (Appendix
 14), if required
- The owner/investor shall follow the suggestions and rectify the non-compliance issues in order to achieve full compliance as per the SHCC Health Facility Guidelines
- Simultaneously, the owner/investor shall invite other authorities to conduct site inspections



- The building shall be inspected by the concerned authorities regarding electricity, water and gas system installations (Sharjah Electricity and Water Authority) and telecommunication system installations (Etisalat). The Directorate of Civil Defence shall inspect the building regarding firefighting and fire safety systems. If any modification is required, the authorities shall issue a report to the owner/investor to be rectified as per the instructions of the authorities in order to comply with the standards
- After ensuring compliance by the concerned authorities, the owner/investor shall request SEWA to provide the electrical, water and gas connections to the facility. Simultaneously, the owner/investor requests Etisalat to provide telecommunication connection to the facility, to be provided by the respective authorities
- After obtaining the service connections from the relevant authorities (SEWA and Etisalat), the owner/investor ensures that the medical equipment is installed and testing and commissioning activities have been completed. The Hospital Operational Team shall be recruited for the commencement of operations
- The owner/investor shall request final inspection from SHCC.

2.7.3 *Deliverables*

- Inspection Request Form (Appendix 07) to be lodged online
- Signed copy of the <u>Inspection Request Form</u> (Appendix 07) to be lodged to the SHCC office, together with the Site Progress Report.

2.8 Step 6 – Inspection at 100% Completion

2.8.1 *Purpose*

The owner/investor receives Notice of Commencement from various authorities in order to request SHCC to conduct inspection. SHCC inspects the facility, identifies construction anomalies (if any), and verifies the rectified non-compliance list from Step 5 prior to issuing the Health Facility Operating License.

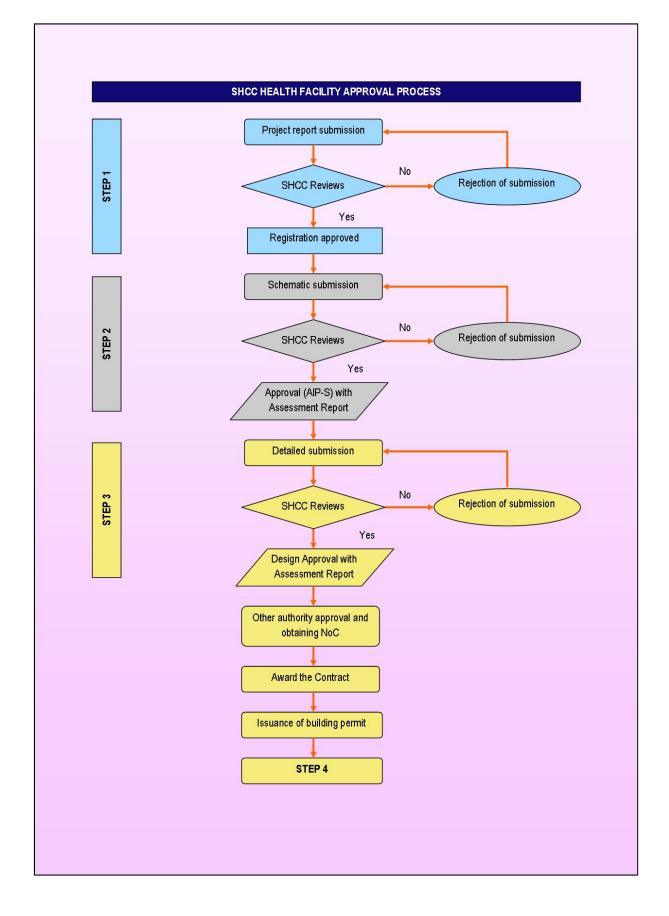
2.8.2 *Process*

- The owner/investor shall submit the <u>Inspection Request Form</u> (Appendix 07) along with the listed outstanding non-compliance list indicated in the previous <u>Assessment Report</u> (Appendix 14) of Step 5 and their solutions, method of rectification to SHCC for review through online submission to conduct the 100% inspection, at least four (4) weeks prior to the inspection. The request form shall be printed, signed by the owner/investor and the hard copy has to be submitted at SHCC office
- SHCC shall review the submitted documents and suggest the inspection schedule to the owner/investor
- SHCC inspects the site and instructs the modifications on the Assessment Report (Appendix 14), if required. The report shall be issued by SHCC to the owner/investor for modification where required
- SHCC may suggest further inspections, if required, until all issues are rectified
- After all the issues have been rectified as per the SHCC suggestions, SHCC shall issue the Health Facility Operating License to the owner/investor
- The owner/investor shall operate the facility.

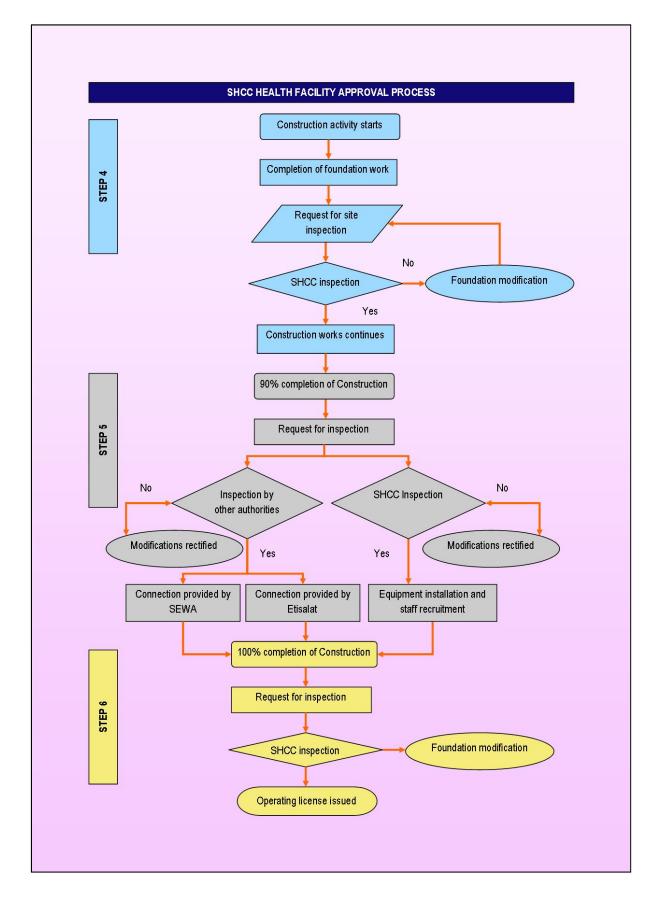
2.8.3 *Deliverables*

- Inspection Request Form (Appendix 07) to be lodged online
- Signed copy of the <u>Inspection Request Form</u> (Appendix 07) to be lodged to the SHCC office, together with the Site Progress Report.











2.9 Standards and Guidelines

All health facilities in the Sharjah Healthcare City shall be designed according to the Standards and Guidelines as listed in the table below. These Standards and Guidelines are segregated into Architectural and MEP Engineering Disciplines. The Consultant and Contractor shall design the plans and execute the same without any fail. Projects lodged with SHCC for review will be tested for compliance against these Standards and Guidelines. The non-compliance of these standards shall lead to "non-approval" or "cancellation of permit or license".

S. NO.	STANDARDS AND GUIDELINES APPLYING TO THE HEALTH FACILITY	Web Link
1	SHCC Health Facility Guidelines – Part B to D	http://www.healthdesign.com.au/shcc.hfg/
2	Americans with Disabilities Act 1994	http://www.access-board.gov/guidelines-and- standards/buildings-and-sites/about-the-ada- standards/ada-standards http://www.access- board.gov/attachments/article/1474/ADAstandards. pdf
3	SHCC Health Facility Guidelines – Part E	http://www.healthdesign.com.au/shcc.hfg/
4	UAE Fire and Life Safety Code of Practice (Issued by Directorate of Civil Defence) 2011 Edition	http://91.74.184.65/videoplayer/UAE_FIRE_AND_LI FE_SAFETY_CODE_OF_PRACTICE.pdf?ich_u_r_i =b3b234ca14efc30e388c4cf755b10d79&ich_s_t_a r_t=0&ich_e_n_d=0&ich_k_e_y=14450489287514 63342447&ich_t_y_p_e=1&ich_d_i_s_k_i_d=10⁣ h_u_n_i_t=1
5	Specification of Buildings in Sharjah (issued by Government of Sharjah) 2007 Edition	http://portal.shjmun.gov.ae/en/Rules/Pages/Home.a spx#
6	ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) – Inc. HVAC Design Handbook	http://www.techstreet.com/ashrae/subgroups/43298 http://www.techstreet.com/ashrae/products/185262 4 http://www.techstreet.com/ashrae/subgroups/43297
7	SMACNA – (Sheet Metal and Air- Conditioning Contractors' National Association) – Design Handbook	http://www.smacna.org/bookstore/index.cfm?fuseac tion=search_results&keyword=Architectural%20She et%20Metal%20Manual,%207th%20Edition
8	DW 144 – Specification for Sheet Metal Ductwork	http://www.pro- ductclean.com/downloads/preview_DW144.pdf
9	DW 171 – Standard for Kitchen Ventilation Systems	http://www.espair.co.in/download/commercial- kitchen-ventilation/DW172.pdf
10	ARI (Air-Conditioning and Refrigeration Institute)	http://www.ari.org/hvacr+industry+guidelines.aspx
11	CIBSE (Chartered Institution of Building Services Engineers)	http://www.cibse.org/knowledge/bsi-data
12	IOP (Institute of Plumbing) – Plumbing Engineering Services Design Guide	http://www.ciphe.org.uk/Professional/Publications/Pl umbing-engineering-Services-Design-Guide/
13	ASPE (American Society of Plumbing Engineers) Design Handbook	https://aspe.org/content/illustrated-plumbing-codes- design-handbook-electronic-download
14	IPC (International Plumbing Code)	https://archive.org/details/gov.law.icc.ipc.2012
15	AWWA (American Water Works Association)	http://www.awwa.org/publications/standards.aspx
16	ASTM (American Society for Testing and Materials)	https://ia600500.us.archive.org/20/items/bookofast mstan1916amer/bookofastmstan1916amer_bw.pdf
17	NFPA (National Fire Protection Association)	http://www.nfpa.org/catalog/category.asp?category _name=Codes+and+Standards&Page=1&cookie_te



S. NO.	STANDARDS AND GUIDELINES APPLYING TO THE HEALTH FACILITY	Web Link
		<u>st=1</u>
18	UL (Underwriters' Laboratories, Inc.)	http://www.ul.com/global/documents/offerings/persp ectives/regulators/2011%20Final%20WB%20LINKE D.pdf
19	HTM 02 (Health Technical Memorandum 02) Medical Gas Design Guide – Part 1 and 2	https://www.gov.uk/government/uploads/system/upl oads/attachment_data/file/153575/HTM_02- 01_Part_A.pdf
20	Wiring Regulations for Electrical Installations (IEE 17 th Edition), published by the Institution of Engineering and Technology (BS 7671)	http://electrical.theiet.org/books/index.cfm
21	CIBSE Design Guides A, D, E, F, H, K and L	http://www.cibse.org/knowledge?s=CIBSE%20Desi gn%20Guides%20&#results</td></tr><tr><td>22</td><td>Wiring Regulations for Electrical Installations (IEE 17th Edition), published by the Institution of Engineering and Technology (BS 7671)</td><td>http://electrical.theiet.org/books/regulations/17th- edition-amd1.cfm</td></tr><tr><td>23</td><td>BS 5266 and NFPA 70 – Emergency Lighting</td><td>http://shop.bsigroup.com/en/ProductDetail/?pid=000 00000030263986 http://ebookscode.com/nec-c-30.html</td></tr><tr><td>24</td><td>BS 5839(p8) – Voice Alarm System in Buildings</td><td>http://www.fia.uk.com/en/resources/bsi-affiliation- scheme/bs5839-series.cfm</td></tr><tr><td>25</td><td>BSEN 60849 – Sound Systems for Emergency Purposes</td><td>http://shop.bsigroup.com/ProductDetail/?pid=00000 0000001410560</td></tr><tr><td>26</td><td>BS EN62305:2006 – Protection of Structures Against Lightning</td><td>http://shop.bsigroup.com/ProductDetail/?pid=00000 0000030154845</td></tr><tr><td>27</td><td>BS 7430 and BS7671 – Earthing</td><td>http://shop.bsigroup.com/ProductDetail/?pid=00000 0000030262045 http://www.techstreet.com/products/1804088?produ ct_id=1804088&sid=goog&gclid=COndzP35t74CFf QQtAodSW4APA</td></tr><tr><td>28</td><td>NFPA 72 – National Fire Alarm Code</td><td>http://www.nfpa.org/catalog/product.asp?link_type= buy_box&pid=7213&icid=B484</td></tr><tr><td>29</td><td>NFPA 101 – Life Safety Code</td><td>http://www.nfpa.org/codes-and- standards/document-information- pages?mode=code&code=101</td></tr><tr><td>30</td><td>ICAO Annex 14, Part B (International Civil Aviation Organization) regarding Aerodrome Design and Operations, 2009 Edition</td><td>http://www.orga.nl/pdf/Annex%2014%20Volume%2 0II%20- %20Heliports%203rd%20Edition%20(July%202009)).pdf</td></tr><tr><td>31</td><td>Sharjah Municipality Regulation and Standards, 2007</td><td>http://portal.shjmun.gov.ae/en/Rules/Pages/Home.a spx#</td></tr></tbody></table>

In situations where compliance with the Standards and Guidelines has not been achieved or is impractical, the non-compliance is to be highlighted to SHCC. Reasons for such non-compliance and an alternative solution are to be put forward for consideration. SHCC (at its sole discretion) may accept alternative solutions or compliance with other internationally recognized Standards and Guidelines offered by the applicant.