

SOUTHERN AFRICAN INSTITUTE FOR OCCUPATIONAL HYGIENE (SAIOH)

Southern African Scheme

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SUMMARY OF THE SAIOH CERTIFICATION PROCESS

1. INTRODUCTION

The Southern African Institute for Occupational Hygiene (SAIOH) has its' origins in the Occupational Hygiene Association of SA (OHASA) and in the Institute for Occupational Hygienists of SA (IOHSA).

OHASA was established in 1983 to promote an awareness of Occupational Hygiene (OH) as a discipline and anybody interested in OH could join.

IOHSA was established in 1993 to register Occupational Hygienists who met appropriate standards of knowledge and practical experience, e.g. the professional.

These two bodies merged in March 2000 to form the present Institute, i.e. SAIOH. An independent Sub-committee, the SAIOH Certification Board was formed to ensure that the professionalism of the members is promoted and the Board is charged with the Certification process.

This also means that SAIOH was 25 years old in 2008.

SAIOH Membership:

SAIOH currently has 479 members in total as follows:

Certified members:

- Occupational Hygienists: 139
- OH Technologists: 92
- OH Assistants: 234
- OH Fellows: 02
- Honorary Member 01
- Non-certified members: 12

[General Reference: SAIOH Information brochure attached](#)

2. GOALS AND OBJECTIVES

The objectives of SAIOH can be summarised as follows:

- To promote and develop the discipline of Occupational Hygiene throughout Southern Africa;
- To promote the study of, education and in-service training in Occupational Hygiene and to monitor and maintain the its standards;
- To encourage the further development of Occupational Hygiene at a professional level;
- To exchange Occupational Hygiene information amongst members and other related professions /organisations, etc.
- To promote and maintain a high standard of ethical Occupational Hygiene practice.

3. OVERVIEW OF THE CERTIFICATION SCHEME

3.1 Membership category structure – currently four (4) categories, e.g.

- Assistant:** Education – National Qualifications Framework Level 2 (e.g. Certificate in Occupational Health and Safety) or end of School Grade 12 with technical/scientific academic background.
- Experience – No prior experience required.
- Typical functions – working under the mentorship/supervision of a certified Occupational Hygienist or engaged in suitable study, e.g. monitoring function (measurement of stressors).
- Technologist:** Education – M(end of School Grade 12) + 3 years tertiary studies/qualification (2 years relevant experience can be substituted for each year of formal educational qualification required re SA's RPL system).
- Experience – 2 years relevant Occupational Hygiene experience.
- Typical functions – Planning of monitoring, evaluation including interpretation), advising an appropriate control procedures and writing reports on micro environmental exposure factors.
- Hygienist:** Education – M(end of School Grade 12) + 4 years Tertiary studies/qualifications (again 2 years relevant experience can be substituted for each year of formal educational qualification required).
- Experience – 5 years relevant Occupational Hygiene experience (Note: for candidates holding a relevant M(Grade 12) + 5 years Tertiary studies/ qualification, i.e. MSc or PhD (OH or related fields), the experience requirement for the Hygienist level only will be reduced to 4 years).
- Typical functions – design, implementation, evaluation, control and management of Occupational Hygiene programmes. Management, training and research may also be encompassed.
- Fellow:** This is purely a status position and is based on peer acceptance.
- A candidate for admission as an Occupational Hygiene fellow shall be required.
1. To have been certified by SAIOH as an Occupational Hygienist for at least 5 years; and
 2. To have worked in Occupational Hygiene or one of its specialists branches for more than 15 years; and
 3. To have made a distinguished contribution to the advancement of the profession of Occupational Hygiene; and
 4. To be nominated and seconded by two certified Occupational Hygienists

3.2 Educational and Experience pre-requirements -

All the educational requirements as indicated above refer to actual curricula and developed Occupational Hygiene training models and recognised to comply to the set standards by the SAIOH Certification Board and the SA National Qualifications Framework (NQF), and/or recognised Degrees and Diplomas in a Science or Engineering field (OH related preferably) and recognised by the Certification Board. Please note that the maximum entry level is Occupational Hygiene Technologist. If the applicant does not achieve Occupational Hygiene Technologist level at application he/she will enter at Occupational Hygiene Assistant level, etc.

3.3. Certification Examinations:

Examinations at Occupational Hygiene Technologist and Occupational Hygienist levels consist of two phases:

A three hour written examination that has to be passed before an one hour Oral examination, taken by a panel of examiners.

All written exams take place simultaneously in the main five SAIOH examination centres of South Africa, e.g. Gauteng (Centurion), Western Cape (Cape Town), KwaZulu Natal (Durban), Eastern Province (Port Elizabeth) and Free State (Bloemfontein). Exams take place at least every quarter.

Written Examination papers are couriered to an Exam co-ordinator at each of these centres.

Exam papers are set by the Head Examiner / Vice-Chairperson of SAOH Certification Board. The databanks used contain several questions and model answers. Multiple choice questions, short descriptions questions, evaluations, scenarios / case studies, calculations and long essay questions. Developed by the Tertiary Institution Sub-committee and updated continuously.

Note: Knowledge of the Mine Health and Safety Act (Act No 29 of 1996) and the Occupational Health and Safety Act (Act No 85 of 1993) and all the Regulations, Guidelines, Codes of practices, etc. are essential.

Applicants holding international professional qualifications in Occupational Hygiene equivalent to the SAIOH category applied for, may at the discretion of the Certification Board, be exempted from the written examination only. Examples of such professional qualifications may include:

- The British Institute of Occupational Hygienists' (BIOH, now the BOHS): Certificate of Operational Competence in Comprehensive Occupational Hygiene (at Technologist level); and
- The BIOH/BOHS Diploma of Professional Competence in Occupational Hygiene (at OH level); or
- The American Board of Industrial Hygiene Certified Industrial Hygienist or CIH (at Hygienist level).

3.4. Examiners:

All examiners were originally invited to join the Examination Board (of IOHSA), later becoming the Certification Board of SAIOH.

They were selected from the ranks of SAIOH's Certified Occupational Hygienists and had to have peer recognition, been involved in practicing Occupational Hygiene for a substantial period of time and have at least an Honors Degree or better (BOHS Diploma, or the like).

Subsequent examiners are co-opted and vouched for by a current Examiner on the Certification Board. and undergo a trial period of at least three certification exams/days as observers, attend a Workshop on SAIOH's Certification Scheme (Procedures, etc.) and have to pass a written examination to be accredited as a Lead Examiner for the Oral Examinations.

3.5. Examinations:

<u>Category:</u>	Assistant
<u>Written examination:</u>	Multiple-choice questions on basic principles of Occupational Hygiene and basic principles ("must have") of micro environmental exposure factors. Time approximately one hour.
<u>Pass mark:</u>	A minimum of 50% must be obtained for the written examination.
<u>Category:</u>	Technologist
<u>Written examination:</u>	Multiple-choice questions on all environmental exposure factors. Essay type of questions on calculations and quality assurance. Data will be presented to the candidate, which need to be compiled in a rough report format. Case studies will be presented and the candidate will be required to propose a strategy to solve each problem. A report with mistakes will also be presented in which the candidate will have to indicate, motivate and propose corrections to the mistakes.
	Maximum time allowed for the written examination is three hours.
<u>Oral examination:</u>	As per set standard format (time allowed 1 hour) with emphasis on the required scope for OH Technologist certification.
<u>Pass mark:</u>	A minimum of 60% must be obtained for each of the written and oral examinations with an average of 65% for the written and oral examinations combined.

<u>Category:</u>	Occupational Hygienist
<u>Written examination:</u>	<p>Essay type questions on calculations, statistics quality assurance systems and technical and practical applications of Occupational Hygiene principles. A choice of several case studies will be presented and the candidate will be required to propose a strategy to solve each problem. A report with mistakes will also be presented in which the candidate will have to indicate, motivate and propose corrections to the mistakes, as well as an executive summary will be required.</p> <p>Issues that will be emphasised include Occupational Hygiene management, strategic and costing issues, relevant legislation, controls and the integration of SH & E.</p> <p>Maximum time allowed for the written examination is three hours.</p>
<u>Oral examination:</u>	As per the set standard format (time allowed 1 hour) with emphasis on the required scope for Occupational Hygienist certification.
<u>Pass mark:</u>	A minimum of 60% must be obtained for both the written and oral examination with an average of 70% for the written and oral papers combined.

3.6. Maintenance of Professional status – The Continued Professional Development (CPD) system:

The cornerstone of SAIOH's Continuous Professional Development System (CPD) is based on the process of continually increasing the skills and knowledge base of Occupational Hygiene Practitioners. The System would also ensure that Practitioners keep up to date with technological advancements as well as new developments in Occupational Hygiene.

The CPD is based on the American Institute of Industrial Hygienist's (AIHA) system.

The proposed system is an "honour" system that means that each person is responsible for keeping his/her own records. All members **are obliged to submit their CPD schedule before the end of March of each year**. A certain percentage of returns are sampled at random, and their points audited each year, although the cycle period is five years.

Officially the CPD came into affect in January 2003.

The most importance advantages of the CPD are that it will ensure:

- The ongoing competence of Occupational Hygiene Practitioners
- A stimulus for growth in the Profession
- That lower trained Practitioners and Practitioners with different qualifications and backgrounds are encouraged to upgrade their skills

By applying the CPD system SAIOH strives to fulfil its mission and ultimately its vision.

Each certified member, irrespective of category must submit a SAIOH Points Maintenance Schedule annually.

The processing of his/her annual re-certification applications depend on receiving their annual certification/membership fees and this CPD record.

The member can and will also forfeit their classification if they fail to submit their CPD schedule or do not keep record of the points or do not accumulate enough points.

This means they will have to re-apply and go through the entire Certification process again.

To maintain their registration as an Occupational Hygienist (Occ Hyg), Occ Hyg Technologist and Occ Hyg Assistant they have to accumulate 60, 50 and 40 points respectively over a five year period, with a maximum of 5 points per category (except categories 1 and 2) and 15, 12 and 8 points respectively per year.

The various categories, activities, points and specific remarks can be viewed on the SAIOH Website.

3.7. Code of Ethics, Code of Conduct and the Disciplinary Process:

The objective of the Code of Ethics is to enunciate standards of Professional and Ethical conduct, as described in the formal document. This will ensure that all certified SAIOH members act professionally and with integrity in the practice of Occupational Hygiene. to the benefit of workers, the public, employers, clients and the environment in Southern Africa.

It describes the Professional Conduct, Duties and Responsibilities to all stake holders in a Code of Conduct and a Code of Ethics that each member signs and displays to declare his/her obligation and commitment to their professional conduct.

The mechanism to administer the Code of Ethics and Disciplinary process is fully described in the SAIOH Disciplinary Process documents. (available on the SAIOH Website).

3.8. Inputs of External parties -

“Cross Pollination” takes place via continuous outside contact and input.

SAIOH have nominated Certification Board. members that serve on / participate in:

- The Editorial Board of the Occupational Health Southern African journal, which also serves as SAIOH's official Journal and newsletter.
- SAIOH Certification Board. members also lecture at the tertiary education institutions providing Occupational Hygiene education and training in Southern Africa, assist in setting exam papers and moderating these: this to improve the standard of Occupational Hygiene education and training to improve the competencies of the learners and educators, alike;
- SAIOH Certification Board maintains quarterly liaison with the SA Departments of Labour (DoL), Minerals and Energy (DME) and Health (DoH): this to understand and give input into Legislation development and enforcement;
- It also participates in the SA Qualifications Authority (SAQA) and the National Qualifications Framework developing curricula and Occupational Hygiene standards;

- SAIOH has, in partnership with the SA Institute of Safety Management (IoSM) established The Board of Registration for Occupational Hygiene, Safety and Associated Professionals (OHSAP). This Board is currently seeking accreditation in terms of ISO 17024, as a body accredited to certify persons (as competent to practise in their respective fields);
- SAIOH and its' members also maintain frequent contact with other SHEQ related organisations / bodies, such as the SA Society of Occupational Medicine (SASOM), the SA Society of Occupational Health Nursing Practitioners (SASOHN), the aforementioned Institute of Occupational Safety (IoSM), the Mine Ventilation Society (MVSSA), the National Institute for Occupational Health in SA (NIOH), the Ergonomics Society of SA (ESSA), etc., to ensure common ground, understanding and "cross-pollination".

3.9. Statutory Recognition

SAIOH has legal recognition by both the Government Agencies promulgating Occupational Hygiene legislation in SA, e.g. Department of Labour (for Industry) and Department of Minerals and Energy (for Mining).

Both the DOL and DME have guidelines specifically referring to Approved Inspection Authorities (AIA) for Occupational Hygiene monitoring, etc. and Accredited Authority (AA) to allow a concern to appoint a person as the Occupational Hygienist on site. These AIA/AA and their guidelines are referred to in the Occupational Health and Safety Act, (Act 85 of 1993) as well as the Mine Health and Safety Act, Act 29 of 1996 and also in their respective Regulations as well as the South African Bureau of Standards (SABS) National Standards (SANS Codes of Practice).

The guidelines specifically refer to the Occupational Hygiene Registration categories and the SAIOH Certification of competent persons to conduct Occupational Hygiene work. It is not possible to get accreditation with these two Government Departments to do Occupational Hygiene work in SA, if the persons are not certified by SAIOH.

GENERAL REFERENCE: All procedures and more detailed documents regarding the SAIOH certification scheme can be viewed on SAIOH's website: www.saioh.co.za

4. CONCLUSION

The Southern African Institute for Occupational Hygiene Certification Board sets the minimum learning standards and qualifications for the recognition of competency in Occupational Hygiene practice. In order to receive recognition of their professional status candidates are obliged to apply to be certified by the SAIOH Certification Board. SAIOH CB also has a role to play in regulating the professional and ethical standards pertaining to persons practising Occupational Hygiene in South Africa.

In September 2006 SAIOH received formal recognition of their Certification Process from IOHA's National Accreditation Recognition Committee (NARC).

DEON JANSEN VAN VUUREN

**SAIOH REPRESENTATIVE: IOHA NAR COMMITTEE
PAST PRESIDENT SAIOH & MEMBER OF THE SAIOH CERTIFICATION BOARD, LEAD
EXAMINER (and a Certified Occupational Hygienist, SAIOH)**

2009/05/19