

		<b>ADMINISTRATIVE PROCEDURE</b>	Allocation Centre 38A	Reference Number <b>KAR-020</b>	Rev <b>1</b>
NNR: NO No.:	AUTHORISATION OF INSPECTION AND TEST NDT PERSONNEL AND ITS SUB-CONTRACTORS				PAGE 1
<b>KORC</b> NO	<b>ACCESS</b> Nuclear Restricted	<b>IMPORTANCE CATEGORY</b> NSA	<b>NEXT REVIEW DATE</b> 2025-03-30	<b>DATE AUTHORISED</b> 2022-03-30	

COMPILED / REVISED	REVIEWED	AUTHORISED
(Sgd) Z GEORGE	(Sgd) H NEESON	(Sgd) T MTHANDI
Z GEORGE	H NEESON	T MTHANDI
SENIOR TECHNICIAN & NDT LEVEL III INSPECTION AND TEST	NDT LEVEL III CONSULTANT INSPECTION AND TEST	MANAGER INSPECTION AND TEST
<b>DATE</b> 2022-03-28	<b>DATE</b> 2022-03-29	<b>DATE</b> 2022-03-30

**THIS PROCEDURE HAS BEEN SEEN AND ACCEPTED BY:**

A May	Document Custodian
K Moahloli	Inspection & Test
V Mars	Inspection & Test
M Standaar	Inspection & Test
S du Plessis	Technical Training

<b>FCA</b> COMPETENCY	<b>ALARA REVIEW</b> NO	<b>SUPERSEDES</b> KAR-020, Rev 0 dd. 2017-12-20 FULL REVIEW
--------------------------	---------------------------	----------------------------------------------------------------------



<b>CONTENTS</b>		<b>PAGE</b>
1.0	PURPOSE.....	4
2.0	SCOPE.....	4
3.0	DEFINITIONS AND ABBREVIATIONS.....	5
4.0	REFERENCES.....	6
5.0	PREREQUISITES.....	7
6.0	RESPONSIBILITIES.....	8
7.0	PROCEDURE.....	8
8.0	VISION TEST.....	14
9.0	RECORDS.....	15
10.0	ATTACHMENTS.....	16
	Appendix 1 – Theoretical Training and Experience Requirements for Evaluators and Reviewers.....	17
	Appendix 2 – I&T Authorisation Database Guide.....	18
	Appendix 3 – Justification.....	30

## 1.0 PURPOSE

- 1.1 To detail the process for the authorisation of Inspection and Test permanent staff engaged in NDT.
- 1.2 To detail the process whereby NDT contractors are authorised for work undertaken on behalf of Inspection & Test.

## 2.0 SCOPE

- 2.1 The scope of this procedure includes:
- Initial Authorisation of I&T personnel.
  - Continuing Authorisation of I&T personnel.
  - Authorisation of contractor personnel.
- 2.2 This procedure is applicable to Inspection & Test personnel and its contractors engaged in the following Non-Destructive Testing methods:
- Eddy Current Testing (ET)
  - Magnetic Testing (MT)
  - Penetrant Testing (PT)
  - Ultrasonic Testing (UT)
  - Radiographic Testing (RT)
  - Visual Testing (VT)
  - ASME XI: VT1, VT2, VT3
  - Non ASME XI Leak Testing (LT)
  - ASME XI IWL Examinations

**NOTE:** *General Visual and Detailed Visual examination as applicable for ASME XI IWE are regarded as VT 3 and VT 1 respectively.*

### 3.0 DEFINITIONS AND ABBREVIATIONS

#### 3.1 Definitions

3.1.1 **Authorisation** – Status granted by an assessment panel to a learner who has completed all requirements pertaining to a task, or series of tasks, thus allowing that learner to perform the tasks unsupervised.

3.1.2 **Authorisation Panel** – A committee convened to verify that all the requirements for authorisation have been met. The Authorisation Panel shall consist of no less than the following persons:

- Training Representative;
- Section Head and/or Subject Matter Expert; **and**
- I&T Manager or appointed delegate (in writing the duties of chairperson) as chairperson.

3.1.3 **Certification** – Written testimony that an individual has met the applicable requirements of the standard.

3.1.4 **Examination** – Written examination consisting of a series of questions which require answer to multiple choices, short and long descriptive answer.

3.1.5 **Inspection and Test Permanent Staff** – Personnel employed by, and receiving wages or salary from Eskom.

3.1.6 **Inspection and Test Contractor Staff** – Company/personnel providing a service to Eskom.

3.1.7 **Source Handler** – An individual authorised to handle and move radioactive sources.

3.1.8 **Subject Matter Expert (SME)** – An individual who is recognised within his/her discipline as possessing detailed knowledge of, and having mastered practical ability in that method. (SMEs are appointed by the Inspection and Test Group Manager)

3.1.9 **Vision Test** – A test to assess natural or corrected near distance acuity in at least one eye as well as differentiating colour contrast, according to specified criteria.

#### 3.2 Abbreviations

3.2.1 **ASME** – American Society for Mechanical Engineers

3.2.2 **ISI** – In-Service Inspection

3.2.3 **I&T** – Inspection and Test

- 3.2.4 **ISIPRM** – In Service Inspection Programme Requirements Manual
- 3.2.5 **ISTPRM** – In Service Testing Programme Requirements Manual
- 3.2.6 **NDT** – Non Destructive Testing
- 3.2.7 **OH&SA** – Occupational Health and Safety Act
- 3.2.8 **QA** – Quality Assurance
- 3.2.9 **SME** – Subject Matter Expert

## **4.0 REFERENCES**

### **4.1 Referenced Documents**

- 4.1.1 240-123597661, Rev 1: Non-Destructive Testing – Personnel Certification Requirements
- 4.1.2 335-2, Rev 5: Koeberg Nuclear Power Station Management Manual
- 4.1.3 KAA-500, Rev 13: The Process for Controlled Documents
- 4.1.4 KSA-011, Rev 14: The Requirements for Controlled Documents
- 4.1.5 OH&S Act No. 85: Occupational Health and Safety Act No.85 of 1993

### **4.2 Applicable Documents**

- 4.2.1 10 CFR 50.55a: USNRC Regulations: Title 10, Code of Federal Regulations Part 50, Codes and Standards
- 4.2.2 240-119362012: Fourth Interval In-Service Inspection Programme Requirements Manual (ISIPRM) for Koeberg Nuclear Power Station
- 4.2.3 240-123588530: Non-Destructive Testing – Qualification of NDT Systems
- 4.2.4 ANSI/ASNT CP-189-1995: ASNT Standard for Qualification and Certification of Non-Destructive Testing Personnel
- 4.2.5 ASME Section XI, 2007 Edition up to and including 2008 addenda
- 4.2.6 ASNT SNT-TC-1A-2011 Edition: Personnel Qualification and Certification in Non-destructive Testing
- 4.2.7 ISO-9712-2012: Non-Destructive Testing Qualification and Certification of Personnel

- 4.2.8 KAR-240: The Qualification and Certification of Inspection and Test NDT Personnel and its Sub-Contractors
- 4.2.9 KFR-IP-091: Authorisation Form
- 4.2.10 KFR-IP-092: Authorisation Listing Report Form
- 4.2.11 KGT-047: Training Programme Guide for Inspection & Test
- 4.2.12 KSA-038: Requirements for Quality Records
- 4.2.13 KSA-049: Koeberg Training Standard
- 4.2.14 KSA-119: Management and Control of Supplemental Workers Koeberg Nuclear Power Station

## **5.0 PREREQUISITES**

- 5.1 All personnel requiring authorisation shall be in possession of a valid identification card (Security Access Permit) and have completed the following Fitness for Duty requirements as a minimum:
  - Security Screening
  - Substance Abuse Testing
  - Plant Induction Training
  - Medical Examination
- 5.2 The Section Heads shall determine which additional requirements are applicable for the scope of authorisation, e.g.:
  - I&T Discipline Induction Training
  - Technical Assessment (see KSA-119)
  - Radiation Worker Training
  - Confined Space Training
  - Materials Handling Training
  - Working at Heights Training
  - Foreign Material Exclusion Training
  - Heat Stress Worker Qualification

- Self-Contained Breathing Apparatus (SCBA) Qualification
- Plant Systems Training
- Responsible Person - Plant Safety Regulations Authorisation
- Radioactive Source Handler Training

5.3 All personnel applying for authorisation shall be certified in accordance with KAR-240, 'The Qualification and Certification of Inspection and Test NDT Personnel and its Sub-Contractors'.

## 6.0 RESPONSIBILITIES

- 6.1 The Manager of Inspection and Test is responsible for implementing this procedure.
- 6.2 The Section Heads are responsible for ensuring that all personnel are authorised to perform work.
- 6.3 The Authorisation (assessment) Panel shall assess the learner's competence against set criteria relating to the applicable scope of work, see KSA-049, 'Koeberg Training Standard'.
- 6.4 Individuals are responsible for maintaining their authorisation records.

## 7.0 PROCEDURE

### 7.1 Authorisation Requirements

- 7.1.1 Qualified and certified individuals (I&T staff and I&T Contractors) shall be authorised <sup>(1)</sup> in writing to undertake NDT on behalf of I&T at Koeberg Nuclear Power Station.

**NOTE:** <sup>(1)</sup>Authorisation attests to an individual having received appropriate and sufficient training and examinations and having gained sufficient requisite experience to carry out defined NDT tasks. This is denoted as "Operating Authorisation" in ISO 9712.

- 7.1.2 The applicable section head shall review the personnel certification files and verify the adequacy for specific work scopes.

7.1.3 In order for individuals to be considered for authorisation, personnel shall submit the following to the Authorisation Panel:

- Valid Certification
- Training Records
- Work Experience Records
- Valid Vision Acuity Certificate
- Examination Results

7.1.4 I&T authorisation shall be with regard to the scope of work to be undertaken.

7.1.5 Qualified and certified NDT personnel meeting the requirements of this procedure may only perform work when in possession of a valid Certificate of Authorisation, see KFR-IP-091.

## **7.2 Levels of Authorisation**

7.2.1 Inspection & Test recognises five categories of NDT authorisations to perform work on the plant, i.e.:

- NDT Level I
- NDT Level II
- NDT Level III
- NDT Evaluator
- NDT Reviewer

7.2.2 NDT Level I<sup>(2)</sup> may be authorised to:

- a) Set up NDT equipment.
- b) Perform the tests according to written instructions and under the supervision of Level II or Level III personnel.
- c) Record all data and indications according to written criteria.
- d) Report the results.

**NOTE:** <sup>(2)</sup>Level I certified personnel shall neither be responsible for the choice of test method or technique to be used, nor for the evaluation of test results.

7.2.3 NDT Level II may be authorised to:

- a) Perform the duties of a Level I.
- b) Select the NDT technique for the testing method to be used.
- c) Define the limitations of application of the testing method.
- d) Translate NDT codes, standards, specifications, and procedures into NDT instructions adapted to the actual working conditions.
- e) Compile written instructions and working procedures
- f) Set up and verify equipment settings.
- g) Carry out and supervise all tasks at or below Level II.
- h) Provide guidance for personnel at or below Level II.
- i) Report the results of NDT.
- j) Interpret and evaluate results according to applicable standards, codes, specifications or procedures.

7.2.4 NDT Level III may be authorised to:

- a) Provide guidance at all levels.
- b) Assume full responsibility for a test facility and the staff.
- c) Develop, review and validate NDT written instructions, techniques and procedures.
- d) Interpret procedures, standards, codes, and specifications.
- e) Evaluate and interpret results in terms of existing standards, codes, and specifications.
- f) Assist in establishing acceptance criteria where none is available.
- g) Assign the particular test methods, procedures, work instructions and techniques to be used.
- h) Qualify and certify NDT personnel (ASME XI, SNT-TC-1A and CP-189 only).

- 7.2.5 Level III personnel is not authorised to perform physical inspections, evaluate or review results, if:
- The Level III examination did not include practical examination using the specific methods, techniques and applicable equipment.
  - The Level III is not in possession of a current Level II NDT certificate related to the specific methods, techniques and applicable equipment.
- 7.2.6 An individual authorised as NDT Evaluator:
- a) Shall be certified as NDT LII or NDT LIII.
  - b) Evaluate the inspection data using the criteria referenced in the work package or working procedure.
- 7.2.7 An individual authorised as NDT Reviewer:
- a) May be certified as NDT LII or NDT LIII.
  - b) May be an appointed SME in a particular scope of work.
  - c) Verify the evaluator's findings.
  - d) Verify if corrective actions have been initiated.
  - e) Verify if the required engineering work requests have been initiated.
  - f) Verify if all documentation is contained in the data package.

### **7.3 Authorisation Process**

- 7.3.1 When the NDT certification is given in categories, product or industrial sectors the authorisation shall correspond with the category, product or industrial sector.
- 7.3.2 The authorisation may not exceed the limitations imposed by the certification scheme.
- 7.3.3 For the NDT activities detailed in 240-119362012, Fourth Interval In-Service Inspection Programme Requirements Manual (ISIPRM) for Koeberg Nuclear Power Station, authorisation shall impose conditions commensurate with the regulation prescribed in USNRC 10CFR50.55a, USNRC Regulations: Title 10, Code of Federal Regulations Part 50, Codes and Standards.
- 7.3.4 For the NDT activities detailed in 240-119362012, Fourth Interval In-Service Inspection Programme Requirements Manual (ISIPRM) for Koeberg Nuclear Power Station, authorisation shall impose conditions commensurate with the regulation prescribed in 240-123588530, Non-Destructive Testing – Qualification of NDT Systems.

- 7.3.5 I&T will perform periodic audits/assessments of individuals and annual reviews of files of individuals to confirm suitability for continued authorisation.
- 7.3.6 Authorisation may be withdrawn where irregularities or non-conformances are observed.
- 7.3.7 The scope of the authorisation shall be documented and I&T may authorise NDT personnel at a lower level than their qualification certification.
- 7.3.8 The section head shall arrange for the convening of the Authorisation Panel.
- 7.3.9 All documentary evidence (e.g. certification records, plant specific training records, etc.) shall be supplied to the Authorisation Panel by the relevant Section Head. If the documents are not complete, the panel shall be terminated.
- 7.3.10 The Authorisation Panel shall recommend initial authorisation if they are satisfied that the applicant has met all the relevant requirements for authorisation.
- 7.3.11 The scope of the authorisation shall be detailed on the Certificate of Authorisation Form.
- 7.3.12 Initial authorisations shall be valid for a period of three years.
- 7.3.13 Where initial authorisation validity is granted for a period less than three years, for example due to the expiry date of the certification, this shall be recorded on the Certificate of Authorisation Form.
- 7.3.14 Personnel certified in accordance with SNT-TC-1A, Personnel Qualification and Certification in Non-destructive Testing, shall not be authorized to perform work on ISIPRM, ISTPRM or ASME XI activities.
- 7.3.15 Consideration shall be given to additional requirements that are applicable for the scope of work that authorisation is granted for e.g. ASME XI, OH&SA, etc.

#### **7.4 Continuing Authorisation**

- 7.4.1 Continuing Authorisation shall be granted by the authorisation panel on providing evidence of:
- Current valid authorisation; and
  - Continued satisfactory work activity without significant interruption<sup>(3)</sup>; and
  - Continued training or technical job observation obtained during the period of authorisation validity, as described in KGT-047, Training Programme Guide for Inspection & Test.

**NOTE:** <sup>(3)</sup>A significant interruption means an absence or a change of activity which prevents the authorised individual from practising the duties corresponding to his/her authorisation for a continuous period.

- 7.4.2 If an individual's authorisation has lapsed, a Condition Report shall be generated and the authorisation shall only be obtained by complying with all the requirements for initial authorisation.
- 7.4.3 The section head shall arrange for the convening of the Authorisation Panel.
- 7.4.4 All documentary evidence shall be supplied to the Authorisation Panel by the relevant Section Head. If documents are not complete, the panel shall be terminated.
- 7.4.5 When the NDT certification is given in categories, product or industrial sectors the authorisation shall correspond with the category, product or industrial sector.
- 7.4.6 The Authorisation Panel shall recommend continuing authorisation if they are satisfied that the applicant has met all the relevant requirements.
- 7.4.7 Continuing authorisations shall be valid for a period of three years.
- 7.4.8 Where continuing authorisation validity is granted for a period less than three years, for example due to the expiry date of the certification, this shall be recorded on the Certificate of Authorisation Form.
- 7.4.9 Personnel certified in accordance with SNT-TC-1A, Personnel Qualification and Certification in Non-destructive Testing, shall not be authorized to perform work on ISIPRM, ISTPRM or ASME XI activities.
- 7.4.10 Consideration shall be given to additional requirements that are applicable for the scope of work that authorisation is granted for e.g. ASME XI, OH&SA, etc.
- 7.5 Assessments for Authorisation of Evaluators and Reviewers**
- 7.5.1 Persons shall meet the minimum experience and training hours as specified in Appendix 1.
- 7.5.2 The Section Head shall arrange for the convening of the Authorisation Panel.
- 7.5.3 When the panel is satisfied that the applicant has met all the relevant skill, knowledge and attitude requirements, they shall recommend that the individual be authorised by the I&T Manager.
- 7.5.4 Qualified and certified testing evaluators and reviewers meeting the requirements of this procedure may only perform work when in possession of a valid Certificate of Authorisation, see KFR-IP-091.

## **7.6 Withdrawal of Authorisation**

7.6.1 Authorisation status may be withdrawn under, but not limited to, the following conditions:

- If the authorisation expiry date is reached.
- When an individual fails to comply with procedures and work instructions.
- Where wilful negligence is observed.
- Where evidence exists that the individual displays a lack of competence or deterioration in competence.
- Where an individual formally requests a withdrawal and this is accompanied with sufficient justification.
- Where an individual is no longer required to perform the tasks for which he/she is authorised.
- When valid psychological and physical reasons deem a person unfit to perform his/her duties in a safe, efficient and appropriate manner.

7.6.2 When authorisation is withdrawn the individual concerned shall be notified in writing.

7.6.3 Authorisation withdrawal shall be recorded electronically and the hardcopy securely stored in the ISI Vault.

7.6.4 Following authorisation withdrawal, an individual shall obtain authorisation again after:

- Corrective training followed by an assessment.
- Meeting the requirements for initial authorisation.

7.6.5 Where vision testing has expired, reinstatement of vision testing reinstates authorisation.

## **8.0 VISION TEST**

8.1 Vision test shall be conducted annually for near distance, far distance and colour vision acuity, see KAR-240.

## 9.0 RECORDS

- 9.1 All authorisation documents shall be generated on the I&T Authorisation Database located on the G Drive at the following location:
- G:\Nuclear Engineering\Insp&Test\Process Management Section\I&TDbases
- 9.2 The guide for generating authorisation forms from the I&T Authorisation Database is detailed in Appendix 1.
- 9.3 An Authorisation Listing Report shall be generated with a summary of the individual's authorisations, see KFR-IP-092.
- 9.4 An authorisation file shall be maintained as an Inspection and Test QA Record for all NDT personnel. This file shall contain, as a minimum the following:
- name of authorised individual
  - level of certification and NDT method
  - educational background and updated relevant experience records
  - evidence of satisfactory completion of training
  - vision examination results
  - evidence of successful completion of examinations
  - evidence of satisfactory qualifications if used in lieu of the prescribed examinations (see SNT-TC-1A)
  - evidence of examination grades
  - name and signature of NDT Level III that verified the qualifications for certification (see SNT-TC-1A)
  - certifications obtained dates
  - certification expiry dates
  - name and signature of certifying authority, e.g. SAIW Examination Manager, I&T or contractor's Manager
- 9.5 Inspection reports are permanent records and are controlled in accordance with procedure KSA-038, 'Requirements for Quality Records'.

## 10.0 ATTACHMENTS

Appendix 1 – Theoretical Training and Experience Requirements for Evaluators and Reviewers

Appendix 2 – I&T Authorisation Database Guide

Appendix 3 – Justification

## APPENDIX 1

THEORETICAL TRAINING AND EXPERIENCE REQUIREMENTS FOR  
EVALUATORS AND REVIEWERS

TESTING ACTIVITY	THEORETICAL TRAINING HOURS FOR EVALUATORS AND REVIEWERS	EXPERIENCE HOURS FOR EVALUATORS AND REVIEWERS
Eddy Current Testing - BOP	16	120
Eddy Current Testing - ISI	16	200
Magnetic Testing - BOP	8	120
Magnetic Testing - ISI	8	200
Penetrant Testing - BOP	8	120
Penetrant Testing - ISI	8	200
Ultrasonic Testing – WT only	16	120
Ultrasonic Testing - Welds	16	200
Radiographic Testing - BOP	16	120
Radiographic Testing - ISI	16	200
Visual Testing (VT)	8	200
ASME XI: VT1, VT2, VT3	16	200
Non ASME XI Leak Testing (LT)	8	120

**APPENDIX 2**

**I&T AUTHORISATION DATABASE GUIDE**

**Prerequisites**

In order to open the database, Micro Soft Access version 2002(XP) or higher is required to be installed on your PC and to have “write” access to the directory where the database is located.

**Authorisation Database**

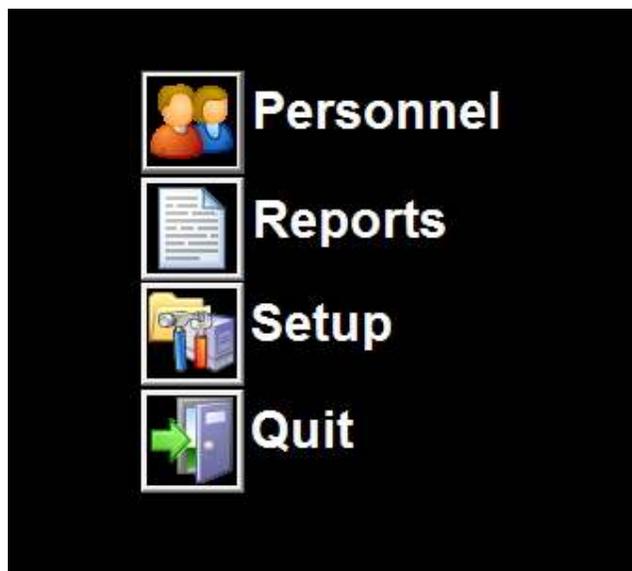
The Authorisation database is located on the “G” drive in the following directory:

G:\Nuclear Engineering\Insp&Test\Process Management Section\I&TDbases\Authorisation

The file is named “**Authorisations2010.mdb**”.

When opening the database you will be presented with the main menu. The main menu consists of four options.

<b>Personnel</b>	Personnel authorisation and certification are captured and/or managed.
<b>Reports</b>	<ul style="list-style-type: none"> <li>• Authorisation and certification reports are generated as per section.</li> <li>• Reports per method/discipline (authorisation and certification).</li> <li>• Vision test that are expiring or close to expiring.</li> </ul>
<b>Setup</b>	To add or modify methods and work sections
<b>Quit</b>	Exits the database



APPENDIX 2 (continued)

I&T AUTHORISATION DATABASE GUIDE

Personnel listing



Click on the Personnel icon  to open the personnel listing screen. Initially all personnel, active and inactive will be listed.

Personnel Listing

**I&T Personnel Listing** Name  Work Section  Active    Aut  Cert

\* Double click on name to open

Active	Unique ID	Name	Eskom	Work section	Staff Section	Office No.	FaxNo.	PagerNo
<input type="checkbox"/>	P00162649	ABUALGASIM SIDDIG, A	<input type="checkbox"/>	Contract	Contract			
<input checked="" type="checkbox"/>	1226898	ACHMAD MANIE, A	<input checked="" type="checkbox"/>	TIWM	TIWM	5149	0866625947	N/A
<input type="checkbox"/>	6208165054084	ACKER, C	<input type="checkbox"/>					
<input type="checkbox"/>	6708175197021	ADAMS, A	<input type="checkbox"/>					
<input checked="" type="checkbox"/>	7308225179084	ADRIAAN STOLTZ, A	<input type="checkbox"/>	Contract	Contract			
<input type="checkbox"/>	5709295148085	AGOSTINHO, D	<input type="checkbox"/>					
<input type="checkbox"/>	8012246451086	AHREND, E	<input type="checkbox"/>					
<input type="checkbox"/>	6512205101080	AKRAM, H	<input type="checkbox"/>	TISI	TISI			
<input checked="" type="checkbox"/>	0431444	ALBERT GRUNDMANN, A	<input checked="" type="checkbox"/>	TIBP	TIBP	5076	0866659219	N/A
<input type="checkbox"/>	9008165731088	ALEXANDER BOTHA, A	<input type="checkbox"/>	Contract	Contract			
<input checked="" type="checkbox"/>	C0KGHTJ5K	ALFRED GIROD, A	<input type="checkbox"/>	Contract	Contract			
<input checked="" type="checkbox"/>	4018706	ALTHEA JORDAN, A	<input checked="" type="checkbox"/>	TIST	TIST	5137	0866629414	N/A

Record: 1 of 392

To search personnel, type there name or last name in the “Name” text box and click the



search icon . By default the “Active” checkbox is checked and the search will return only active personnel.

To list personnel by work section, select the section from the “Work Section” pull-down menu. Selecting a section will automatically filter the list and can be used in conjunction with the “Name” textbox and “Active” checkbox fields to filter the list further.



The reset icon  clears the “Name” textbox and “Work Section” pull-down menu and checks “Active” checkbox and resets the list to its initial state.

APPENDIX 2 (continued)

I&T AUTHORISATION DATABASE GUIDE

Personnel details

Double click in the Unique ID or Name column to view, edit, delete and print the personnel details, authorisations records, certification records and support info.

The screenshot shows the 'I&T Personnel Listing' application. At the top, there is a search bar for Name and Work Section (set to TIST), and an Active checkbox. Below this is a table with columns: Active, Unique ID, Name, Eskom, Work section, Staff Section, Office No., FaxNo., and PagerNo. Two rows are visible: one for ALTHEA JORDAN, A (Unique ID 4018706) and one for AMANDA FALENI, A (Unique ID 4125116). A red circle highlights the Unique ID and Name columns, with an arrow pointing to the 'Personnel Detail' window below. This window shows the details for ALTHEA JORDAN, A, with tabs for Personnel Details, Athorisations, Certifications, and Support Info. The Personnel Details tab is active, showing fields for Unique ID, First Name, Surname, Initials, Eskom Employee, Active, Nationality, Work Type, Work section, Staff section, Home list details (Office No., Home No., Mobile No., FaxNo., PagerNo., PermitNo., Occupation, ID No.), and a Comments field.

Active	Unique ID	Name	Eskom	Work section	Staff Section	Office No.	FaxNo.	PagerNo
<input checked="" type="checkbox"/>	4018706	ALTHEA JORDAN, A	<input checked="" type="checkbox"/>	TIST	TIST	5137	0866629414	N/A
<input checked="" type="checkbox"/>	4125116	AMANDA FALENI, A	<input checked="" type="checkbox"/>	TIST	TIST	5449	0866003365	N/A

<b>Unique ID:</b> 4018706 <b>First Name:</b> ALTHEA <b>Surname:</b> JORDAN <b>Initials:</b> A <b>Eskom Employee:</b> <input checked="" type="checkbox"/> <b>Active:</b> <input checked="" type="checkbox"/> <b>Nationality:</b> <input type="text"/> <b>Work Type:</b> <input type="text"/> <b>Work section:</b> TIST <b>Staff section:</b> TIST	<b>Home list details</b> <b>Office No.:</b> 5137 <b>Home No.:</b> N/A <b>Mobile No.:</b> <input type="text"/> <b>FaxNo.:</b> <input type="text"/> <b>PagerNo:</b> <input type="text"/> <b>PermitNo:</b> <input type="text"/> <b>Occupation:</b> TECHNICIAN ENGINEERING <b>ID No.:</b> <input type="text"/>
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Comments:**

**APPENDIX 2 (continued)**

**I&T AUTHORISATION DATABASE GUIDE**

There are four tabs on the personnel details screen namely “Personnel Details”, “Authorisation”, “Certifications” and “Support Info”.

Tabs	
Personnel Details	Add, edit and delete personnel details e.g. changing the work section
Authorisation	Add, edit, delete and print authorisation records
Certifications	Add, edit ,delete and print certification records
Support Info	Add, edit and view authorisation support info e.g. “Vision Test” expiry date or “Medical” expiry date.

**Personnel Details tab.**

This tab contains personal information about the individual and also a comments field where we would note changes to authorisation and certifications or if the individual’s last name has changed.

## APPENDIX 2 (continued)

### I&T AUTHORISATION DATABASE GUIDE

#### Authorisation Listing.



To print the authorisation listing report click the “Authorisation Listing” icon . This report lists the current/valid authorisation records. This list is printed when new authorisation are added. This listing is required to be signed by the SME/ Section head, Technical training assessor, Chairman of the authorisation panel and the Candidate.

#### Certification Listing.



To print the Certification listing report click the “Certification Listing” icon . This report lists the current/valid certification records. This list is printed when new certifications are added.

## APPENDIX 2 (continued)

## I&amp;T AUTHORISATION DATABASE GUIDE

**Authorisations tab.**

The authorisations tab lists the authorisation records of the individual.

Print	Auth No	Signed	Method	Level	Authorisation Category	Authorisation Info	Expiry Date
<a href="#">Print</a>	6240	<input checked="" type="checkbox"/>	RADIOGRAPHIC TESTING	II	OPERATE / EVALUATE / REVIEW	Welds Only	08-Oct-17
<a href="#">Print</a>	6262	<input checked="" type="checkbox"/>	RADIOGRAPHIC TESTING	II	OPERATE / EVALUATE / REVIEW	Check valve plunger position	08-Oct-17

By default the authorisations list is filtered on “Show Current”, which shows all authorisations that have not expired yet. Selecting the “Show All” radio button, lists all authorisation records.

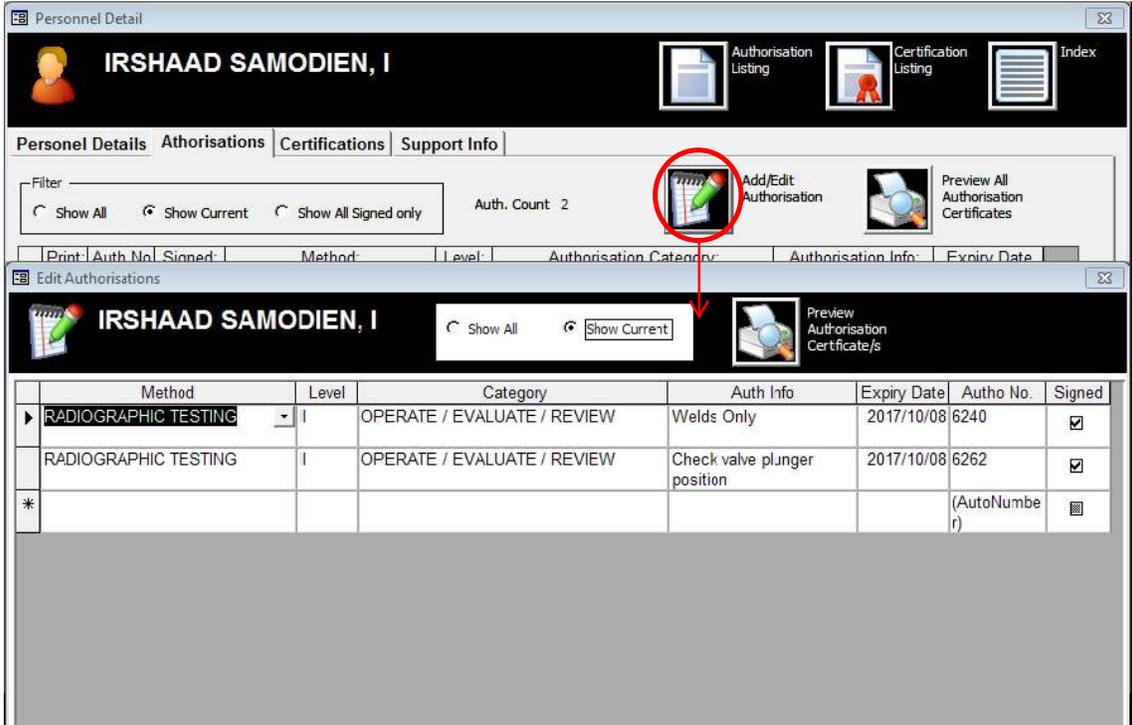
Only the “Signed” and “Authorisation info” columns can be edited. The “Signed” column is only ticked once the authorisation certificate is signed by the chairman of the authorisation panel. The “Authorisation info” column is used as additional info (e.g. to specify the restrictions or limitations) for the authorisation of the individual for a specific method/discipline and is displayed on the authorisation certificate.

To print the authorisation certificate, click the “Print” link in the “Print” column of the authorisation record you wish to print. A print preview of the authorisation certificate will be displayed. Click the print icon  on the toolbar to print the certificate.

## APPENDIX 2 (continued)

## I&amp;T AUTHORISATION DATABASE GUIDE

To add or edit authorisations, click the “Add/Edit Authorisation” icon  under the authorisations tab to open the “Edit Authorisation” form.



The screenshot displays the 'Personnel Detail' window for IRSHAAD SAMODIEN, I. The 'Authorisations' tab is active. A red circle highlights the 'Add/Edit Authorisation' icon (a notepad with a pencil) in the top right area of the tab. Below the icon are radio buttons for 'Show All' and 'Show Current', with 'Show Current' selected. The main area shows a table of authorisations.

Method	Level	Category	Auth Info	Expiry Date	Autho No.	Signed
RADIOGRAPHIC TESTING	I	OPERATE / EVALUATE / REVIEW	Welds Only	2017/10/08	6240	<input checked="" type="checkbox"/>
RADIOGRAPHIC TESTING	I	OPERATE / EVALUATE / REVIEW	Check valve plunger position	2017/10/08	6262	<input checked="" type="checkbox"/>
*					(AutoNumber)	<input type="checkbox"/>

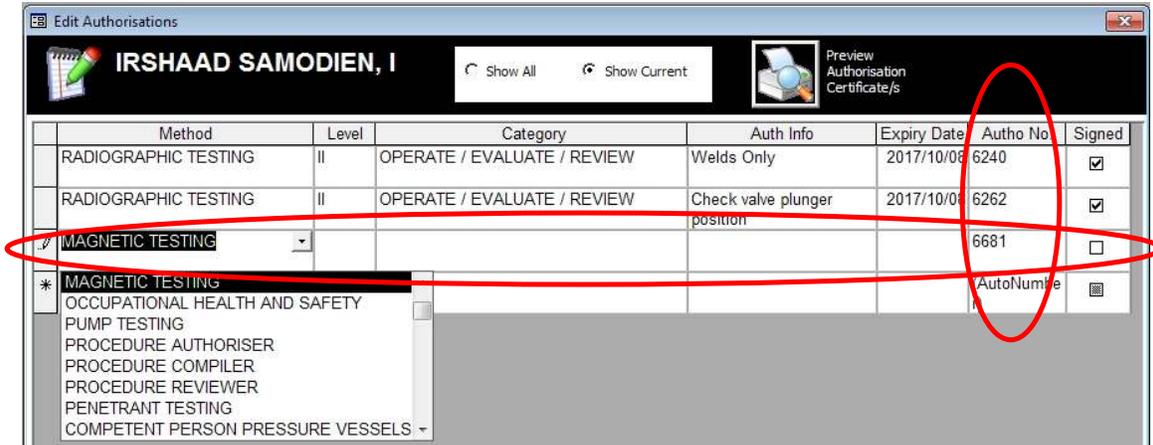
By default the “Show All” radio button is selected. Selecting the “Show Current” radio button shows all current/valid authorisation.

To add authorisation, start in the blank/new line at the bottom of the list by selecting a method and then completing the rest of the fields by selecting or typing the required details.

**Note:** The “Auth No.” is automatically and sequentially generated as soon and a new record is started. The Authorisation number cannot be altered and will appear on the authorisation certificate.

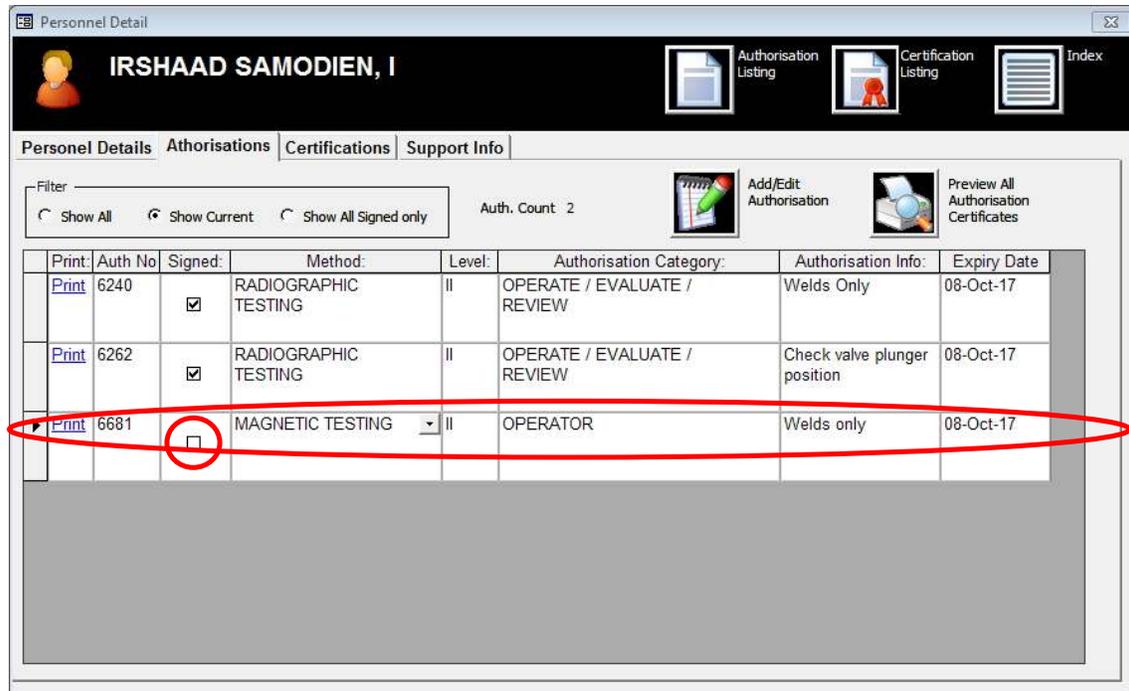
APPENDIX 2 (continued)

I&T AUTHORISATION DATABASE GUIDE



The new authorisation will now appear on the authorisation listing on the “Personnel Detail form” ready to be printed and signed.

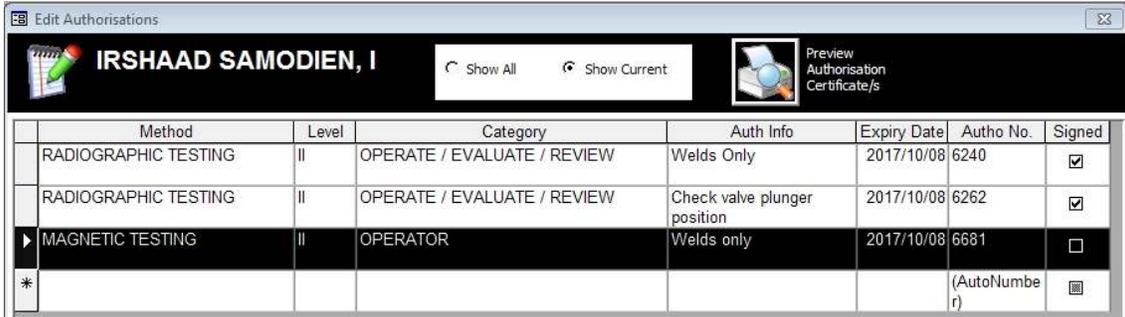
**Note:** The “Signed” checkbox is ticked after the authorisation is signed.



**APPENDIX 2 (continued)**

**I&T AUTHORISATION DATABASE GUIDE**

To delete authorisations, click the “Add/Edit Authorisation” icon  under the authorisations tab to open the “Edit Authorisation” form. Highlight the authorisation record/s and press deleted on the keyboard.



Method	Level	Category	Auth Info	Expiry Date	Autho No.	Signed
RADIOGRAPHIC TESTING	II	OPERATE / EVALUATE / REVIEW	Welds Only	2017/10/08	6240	<input checked="" type="checkbox"/>
RADIOGRAPHIC TESTING	II	OPERATE / EVALUATE / REVIEW	Check valve plunger position	2017/10/08	6262	<input checked="" type="checkbox"/>
MAGNETIC TESTING	II	OPERATOR	Welds only	2017/10/08	6681	<input type="checkbox"/>
*					(AutoNumber)	<input type="checkbox"/>

A confirmation message will appear. Selecting “Yes” will deleted the selected authorisation record/s.



## APPENDIX 2 (continued)

## I&amp;T AUTHORISATION DATABASE GUIDE

**Certifications tab.**

The Certifications tab lists the certifications records of the individual.

Personnel Detail

**CHRIS WYNGAARD, C**

Authorisation Listing Certification Listing Index

Personnel Details Athorisations **Certifications** Support Info

Filter: Show All Show Current All On file Cert. Count 3 Add/Edit Certifications Preview All Certifications

Print	Method	Level	Category	Sub Group	Cert Name	Cert No	Expiry Date	On File	RecID:
<a href="#">Print</a>	LOCAL LEAK RATE TESTING	N/A			ESKOM		12-Feb-20	<input checked="" type="checkbox"/>	1842
<a href="#">Print</a>	PUMP TESTING	N/A			ESKOM		12-Feb-20	<input checked="" type="checkbox"/>	1843
<a href="#">Print</a>	VALVE TESTING	N/A			ESKOM		12-Feb-20	<input checked="" type="checkbox"/>	1844

To print the certificate, click the "Print" link in the "Print" column of the certification record you wish to print. A print preview of the certificate will be displayed. Click the print icon  on the toolbar to print the certificate.

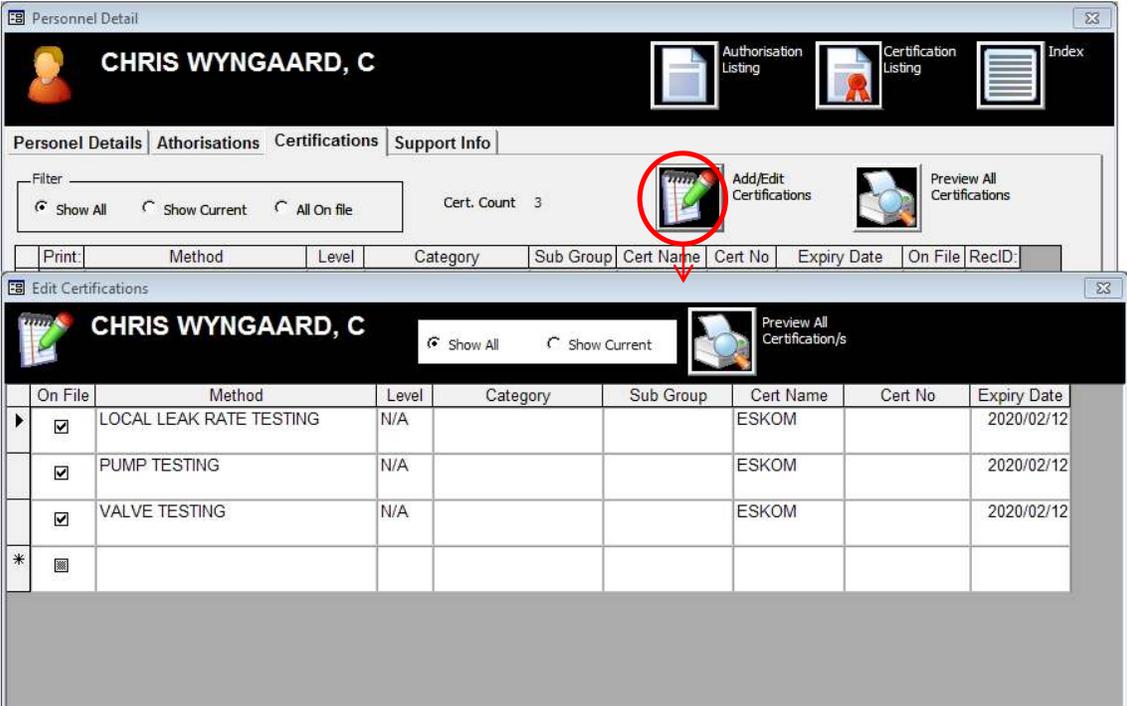
**Note:** The print feature for certifications is used to print certificates generated in-house (TIST disciplines). For external certifications, a record is generated (only) to list the individual's certification records. E.g. NDT certifications from external institutions are recorded in the database and a copy of the certification is filed in the individual's folder.

The "On File" column is used to identify if the certificate (in house) is signed. For external certificates, if the certificate is on file (in the individuals folder).

## APPENDIX 2 (continued)

## I&amp;T AUTHORISATION DATABASE GUIDE

To add or edit certification, click the “Add/Edit Certifications” icon  under the Certifications tab to open the “Edit Certifications” form.



Personnel Detail

**CHRIS WYNGAARD, C**

Authorisation Listing Certification Listing Index

Personnel Details Athorisations Certifications Support Info

Filter:  Show All  Show Current  All On file Cert. Count 3

Print: Method Level Category Sub Group Cert Name Cert No Expiry Date On File RecID:

Edit Certifications

**CHRIS WYNGAARD, C**  Show All  Show Current Preview All Certification/s

On File	Method	Level	Category	Sub Group	Cert Name	Cert No	Expiry Date
<input checked="" type="checkbox"/>	LOCAL LEAK RATE TESTING	N/A			ESKOM		2020/02/12
<input checked="" type="checkbox"/>	PUMP TESTING	N/A			ESKOM		2020/02/12
<input checked="" type="checkbox"/>	VALVE TESTING	N/A			ESKOM		2020/02/12
* <input type="checkbox"/>							

By default the “Show All” radio button is selected. Selecting the “Show Current” radio button shows all current/valid certifications.

To add a certification record, start in the blank/new line at the bottom of the list by selecting or typing the required details.

After closing the “Edit Certifications” form, the new certification record/s will now appear on the Certification listing on the “Personnel Detail form”. Printing of the certificate is required if it is generated in-house.

To delete certifications, click the “Add/Edit Certifications” icon  under the Certifications tab to open the “Edit Certifications” form. Highlight the certification record/s and press deleted on the keyboard. A confirmation message will appear. Selecting “Yes” will deleted the highlighted certification record/s.

APPENDIX 2 (continued)

I&T AUTHORISATION DATABASE GUIDE

Support Info. tab.

Various supporting information can also be tracked e.g. Document Compiler or Medical expiry dates. For the purpose of authorisations and certifications, the vision test expiry date is required. History of the support info is not tracked in the database, only the latest expiry date records are captured. The history can be found in the vault in the individuals folder.

Personnel Detail

**SHANDRE BROWN, S**

Authorisation Listing Certification Listing Index

Personnel Details Athorisations Certifications Support Info

PAT	<input type="text"/>	SCBA	<input type="text"/>
Radiation Worker Training	<input type="text"/>	Diesel Escape Set	<input type="text"/>
Confined Space Training	<input type="text"/>	Ladder Training	<input type="text"/>
Medical	<input type="text"/>	RP - PSR	2017/10/28
Vision Test	2018/05/04	RP - HV	<input type="text"/>
Document Compiler	<input type="text"/>		
Heat Stress	<input type="text"/>		
Whole Body Count	<input type="text"/>		
Primary Systems	<input checked="" type="checkbox"/>		
Secondary Systems	<input type="checkbox"/>		
Auxiliary Systems	<input checked="" type="checkbox"/>		
Hazardous Chemical	<input checked="" type="checkbox"/>		
Procedure Training	<input type="text"/>		
Fire Extinguisher Handling	<input type="text"/>		
Drivers Evaluation	<input type="text"/>		

Preview Authorisation Support

**APPENDIX 3**  
**JUSTIFICATION**

**Revision 0**

1. New procedure for the authorisation of NDT personnel working for, or on behalf of Inspection & Test.

**Revision 1**

1. Full review.
2. Referenced documents updated.