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1.0 PURPOSE

1.1 To serve as the governing administrative document for the Radiation Protection Department Training Programme. The intent of the programme guide is to:

- Identify the regulatory bases (Koeberg and external) and instructional design bases governing the programme's goals, content, and structure.
- Provide appropriate Power Station, Nuclear Governance, Radiation Protection Training and Radiation Protection personnel, with an integrated view of the programme's related initial and requalification training components and requirements.
- Identify the specific roles and responsibilities of individuals and groups involved with the programme.
- Provide requirements and guidelines to achieve consistent implementation and administration of the programme.

2.0 SCOPE

2.1 Applicable to the Radiation Protection personnel, instructors and management involved in the programme or the administration of the programme.

2.2 The Radiation Protection Department Training requirements for all designations are listed in the authorised task to training matrix.

2.3 Chemistry Training and RP OPS Radwaste training are not included in this programme.

3.0 DEFINITIONS AND ABBREVIATIONS

3.1 Definitions

3.1.1 **Assessment** – The process whereby a learner's competence is assessed using set criteria

3.1.2 **Assessment Panel** – A committee set up to assess the status of a learner's competence against set criteria.

3.1.3 **Assessment Tool** – Any of a variety of methods of assessing learner progress or attainment of objectives. Examples include tests, written examinations, simulator examinations, oral panels, job performance assessments and qualification checklists.

- 3.1.4 **Assessor** – An individual trained to conduct assessments. Assessors are knowledgeable about the relevant subject matter to be assessed.
- 3.1.5 **Authorisation** – Status granted to an individual who has completed all requirements pertaining to a task, or series of tasks, thus allowing that learner to perform the tasks unsupervised.
- 3.1.6 **Certification** – The process of acquiring certificates from an Accredited Authorised Provider after both theoretical and practical training is completed successfully.
- 3.1.7 **Competent** – Having the necessary ability, knowledge, or skill to do something successfully.
- 3.1.8 **Continuing Training** – Training as a result of change, which may include changed work conditions, lessons learned, operating experience, requalification training, plant modifications, changed legislation and/or procedural requirements.
- 3.1.9 **Continuing Training Co-Ordinator** – A Senior instructor tasked with the responsibility to co-ordinate continuing training.
- 3.1.10 **Course** – An orderly presentation of lessons, topics and the related measurement and evaluation of the student knowledge and/or skills in general areas of training. Satisfactory course completion is normally documented by passing written assessment.
- 3.1.11 **Credential Review** – A review to ensure that training requirements specified in KSH-010 are met for a job position.
- 3.1.12 **Curriculum** – A plan that provides an overview of the learning components for each training programme.
- 3.1.13 **Curriculum Review Committee** – A group of Line and Training representatives steered by line to assure the effectiveness of current and proposed training activities at department and programme level.
- 3.1.14 **Education Training and Development Practitioner (ETDP)** – A person who is authorised, has the knowledge, skill, attitude and ability to effectively conduct training in a classroom, on-job or simulated environment. This ability includes the evaluation of student and the necessary administration tasks and meets the requirements as specified in KGT-070.
- 3.1.15 **Examining Committee** – A committee that evaluates Senior Authorised Persons and/or performs a competence evaluation on candidates who do not meet all the KSH-010 requirements during a credential review. The objective is to determine if the credentials of such a candidate meets the required credentials for the position. This committee will consist of the Senior Consultant (NSA) or deputy, the applicable Line Manager as the PSM's deputy and another SAP (RP).

- 3.1.16 **Exemption** – An exemption from the requirement for attending training or performing TPAs granted by RP manager.
- 3.1.17 **Graded Approach to Training (GAT)** – The rigour with which the SAT methodology, administration and documentation is applied to a training programme. The extent of application is based on the importance of the training to personnel and nuclear safety, critical skills assessment, equipment reliability, radiation exposure, production loss, financial loss, and the complexity of training.
- 3.1.18 **Implementation** – The culmination of systematic planning and development which puts a performance-based training programme into operation to produce competent learners.
- 3.1.19 **Just-In-Time Training (JITT)** – Training conducted in response to an immediate need, often conducted on shift or in the workshop, as part of shift handover meeting, or as part of a pre-evolution briefing.
- 3.1.20 **Learner-directed Training/Self-study** – Training that is completed independently by learners and is provided by means of computer based training or self-directed study packages.
- 3.1.21 **Lesson Plan/Guide** – An ETDP's training document that outlines ETDP and student activities and the resources necessary for the training.
- 3.1.22 **Moderator** – A registered individual to ensure consistency of the assessment process within a discipline area.
- 3.1.23 **On-job Training** – Performance based training designed to instruct learners in job-related skills and knowledge in a work or simulated environment.
- 3.1.24 **On-job Training Assessment** – A process whereby an assessor or ILF assesses the competence of a learner to perform a task that has been taught to him/her.
- 3.1.25 **Post-Training Evaluation** – The acquisition and analysis of data from outside the formal training environment for the purpose of evaluating the training effectiveness in the actual working environment.
- 3.1.26 **Qualified** – Officially recognised as being trained to perform a particular job. Competent in both theory and on-job training and authorised to perform the required functions for the position.
- 3.1.27 **Radiation Protection (RP) coach/ILF** – An individual appointed as a coach or individual learning facilitator within Radiation Protection.
- 3.1.28 **Radiation Protection Instructor** – An individual appointed as a Senior Instructor or Instructor within the Technical Training Group (Radiation Protection Training Section) and meets the credentials as per KSH-010.

- 3.1.29 **Recognition of Prior Learning** – A process to support and assist the learner with regard to prior learning experience recognition and documentation.
- 3.1.30 **Remediation** – A programme of study designed to remedy an unacceptable level of performance on a written or performance assessment.
- 3.1.31 **Subject Matter Expert (SME)**
- **SME (Line)** – An individual who is qualified, experienced and recognised for a high level of technical competence. Line SMEs who present training are required to comply with SME presenter requirements in accordance with KGT-070.
 - **SME (Training)** – An individual who is qualified, experienced and recognised for a high level of technical competence and possesses the relevant education and training qualifications in accordance with KGT-070.
- 3.1.32 **Supplemental RPM** – Radiation Protection Monitors who are contracted for short periods of time to supplement the existing RPM e.g. outages.
- 3.1.33 **Task Performance Assessment** – A standard for assessing a learner's ability to perform a specific task safely and reliably before being assigned this task independently.
- 3.1.34 **Task to Training Matrix** – Grid list which all tasks per designation are referenced against the training interventions/materials available to train each task.
- 3.1.35 **Theoretical Training** – Knowledge-based training may be provided in a classroom environment.
- 3.1.36 **Training Change Request** – An electronic or paper document used to initiate changes and track the completion of training material.
- 3.1.37 **Training Curricula** – Matrices that list all the training requirements for specific job designations.
- 3.1.38 **Training Programme** – A sequence of training courses, specific assignments and OJT, where applicable, when successfully completed, provide the programme participants with the necessary knowledge and skills to perform competently in a given job.
- 3.1.39 **Training Programme Guide** – A document describing the scope, content, facilities, instructional, student and assessment requirements for a specific training intervention that consists of more than a single training course or training session.
- 3.1.40 **Vision** – A software database designed to maintain station training materials using the SAT methodology.

3.1.41 **Waiver** – A temporary deviation from the requirements stipulated in training procedures where the intent or requirements of the procedure is not achievable. This deviation must be documented on KFT-090 and approved by the Plant Training Manager.

3.2 Abbreviations

3.2.1 **CRC** – Curriculum Review Committee

3.2.2 **DIF** – Difficulty, Importance and Frequency

3.2.3 **ETDP** – Education, Training and Development Practitioner

3.2.4 **FFD** – Fit For Duty

3.2.5 **GLF** – Group Learning Facilitator

3.2.6 **HP** – Human Performance

3.2.7 **ILF** – Individual Learning Facilitator

3.2.8 **JFG** – Job Familiarisation Guide

3.2.9 **JITT** – Just in time Training

3.2.10 **KIS** – Koeberg Indexing System

3.2.11 **NQF** – National Qualification Framework

3.2.12 **NSA** – Nuclear Safety Awareness

3.2.13 **OE** – Operating Experience

3.2.14 **OJT** – On-job Training

3.2.15 **PSM** – Power Station Manager

3.2.16 **PSR** – Plant Safety Regulation

3.2.34 **QCTO** – Quality Council for Trades and Occupations

3.2.17 **RADPRO** – Radiation Protection Computerised Database

3.2.18 **RP** – Radiation Protection

3.2.19 **RPA** – Radiation Protection Assistant

3.2.20 **RPL** – Recognition of Prior Learning

3.2.21 **RPM** – Radiation Protection Monitor

- 3.2.22 **SAP** – Senior Authorised Person
- 3.2.23 **SAQA** – South African Qualifications Authority
- 3.2.24 **SAT** – Systematic Approach to Training
- 3.2.25 **SME** – Subject Matter Expert
- 3.2.26 **SRPA** – Senior Radiation Protection Assistant
- 3.2.27 **TCR** – Training Change Request
- 3.2.28 **TD & RM** – Technical Documentation and Records Management
- 3.2.29 **TMG** – Training Material Group
- 3.2.30 **TPA** – Task Performance Assessment
- 3.2.31 **TPG** – Training Programme Guide
- 3.2.32 **TTG** – Technical Training Group
- 3.2.33 **TTM** – Task to Training Matrix

4.0 REFERENCES

4.1 Referenced Documents

- 4.1.1 335-2, Rev 5: Koeberg Nuclear Power Station Management Manual
- 4.1.2 36-243, Rev 5: Training Delivery Requirements
- 4.1.7 ACAD 21-001: Systematic Approach to Training
- 4.1.3 ACAD 93-008, Rev 2: Guidelines for Training and Qualification of Radiological Protection Technicians
- 4.1.4 KAA-500, Rev 13: The Process for Controlled Documents
- 4.1.5 KSA-011, Rev 14: The Requirement for Controlled Documents
- 4.1.6 KSA-038, Rev 5: Requirements for Quality Records

4.2 Applicable Documents and forms

- 4.2.1 335-68: Fitness for Duty Process for Contractors who are required to Perform Work Inside the Owner Controlled Area of Koeberg Nuclear Power Station

- 4.2.2 KFT-002: Training Record Form
- 4.2.3 KFT-037: Training Department Post Training Evaluation Form Manager/
Supervisor Evaluation of Training)
- 4.2.4 KFT-061: Record of Assessment Sampling Form
- 4.2.5 KFT-074: Technical Training Authorisation Form
- 4.2.6 KFT-085: Remediation, Re-assessment or Appeal Process Record
- 4.2.7 KFT-090: Training Programme Requirements Waiver
- 4.2.8 KGT-006: Graded Approach to Training
- 4.2.9 KGT-070: Education, Training and Development Practitioner Training
Programme
- 4.2.15 KGT-088: Guidelines for OJT and TPA
- 4.2.16 KGT-089: Systematic approach to training process implementation
- 4.2.10 KSA-049: Koeberg Training Standard
- 4.2.11 KSA-119: Management and Control of Supplemental Workers Koeberg
Nuclear Power Station
- 4.2.12 KSA-137: Training Requirements and Competence Criteria for Supplemental
Personnel Requiring Access to Koeberg
- 4.2.13 KSH-010: Functional Responsibilities for Radiation Protection at Koeberg
Operating Unit
- 4.2.17 Training-Admin-WI-013: Guidelines for Conducting Task List Reviews and
TTM Items
- 4.2.14 TTG-WI-001: Selection of continuing Training Topics for Koeberg Technical
Training Programmes
- 4.2.18 TTG-WI-RP-002: Guide to Performing Coaching and Assessment in the
Radiation Protection Department

5.0 DESCRIPTION

5.1 Individual Responsibilities

5.1.1 The Radiation Protection Manager is responsible for:

- Owning the Radiation Protection Training Programme.
- Reviewing and approving the training programme.
- Providing the necessary resources from line to ensure training effectiveness.
- Ensuring that the OJT phase of this programme is implemented in accordance with this programme.
- Ensuring that there is a sufficient number of authorised staff for required competencies within the department.
- Ensuring that staff do not perform tasks unsupervised when authorisations are required.
- Ensuring that specific Business Plan training actions are addressed.
- Ensuring that there are sufficient SMEs available to present Continuing Training.
- Ensuring that there are sufficient Line trainers to coach RP trainees and supplemental RP personnel.
- Conducting management observations of all related training activities.
- Conducting job observations (individual and paired) to ensure that individuals work the way they have been trained and that they are trained according to the way they work
- Approving any advanced placement into, and exemptions from, the programme based on the recommendations of an examining committee.
- Providing periodic customer feedback to the Technical Training Group.
- Scheduling CRCs as required.
- Chairing the RP CRC.

5.1.2 The Technical Training Manager is responsible for:

- Ensuring appointed Radiation Protection Training personnel are qualified and meet prerequisites for positions as per KSH-010.
- Ensuring, on an on-going basis, that the resources, facilities and budgetary needs are available to meet the Radiation Protection Training requirements.
- Providing a sufficient number of authorised ETDPs and assessors for the conduct of training and assessments in terms of this guide.
- Ensuring that a training schedule exists pertaining to the programme.
- Ensuring that the classroom and simulator-driven phase of the programme is implemented in accordance with this guide.
- Conducting management observations in various training settings to ensure that training is used to improve plant performance.
- Conducting job observations (individual and paired) to ensure that individuals work the way they have been trained and that they are trained according to the way they work

5.1.3 The RP Line managers are responsible for:

- Ensuring line Personnel support the training programme
- Reviewing and approving any training requests that are submitted for inclusion into the programme e.g. plant modifications, procedural changes, operating experiences, etc.
- Conducting management observations in various training settings.
- Conducting management observations in various training settings to ensure that training is used to improve plant performance.
- Conducting job observations (individual and paired) to ensure that individuals work the way they have been trained and that they are trained according to the way they work
- Ensuring that a sufficient number of qualified and authorised line ILFs and assessors are available to carry out all training and related assessments pertaining to the on job training portion of the programme.
- Review applicable training documentation to ensure alignment to Plant performance
- Provide feedback to technical training group.
- Monitor and evaluate implementation of the training programme.

5.1.3 The Radiation Protection Senior Supervisors are responsible for:

- Ensuring that the on-job training programme is conducted in accordance with this guide.
- Providing sufficient time, resources and opportunities for the learners to complete their OJT and assessments as required by the programme.
- Reviewing and approving any training requests that are submitted for inclusion into the programme e.g. plant modifications, procedural changes, operating experiences, etc.
- Ensuring that a sufficient number of qualified and authorised line ILFs and assessors are available to carry out all training and related assessments pertaining to the on job training portion of the programme.
- Ensuring the release of Line SMEs for preparation and presentation of selected Continuing Training, if SMEs are available.
- Monitoring the quality of on job training received by the learners.
- Liaising with RP Training for the inclusion of independent assessors to perform quality control of training and related assessments.
- Completing all necessary documentation pertaining to the programme.
- Conducting management observations in various training settings.
- Conducting job observations (individual and paired) to ensure that individuals work the way they have been trained and that they are trained according to the way they work
- Setting up assessment panels where learners can be declared competent.
- Monitoring and providing routine feedback to the RP Manager on the progress of each learner. The intent of this requirement can be met through the RP CRC.
- Ensuring training assessment records are received by RP Training for storage.
- Ensuring staff are authorised for assigned tasks by regular confirmation using the Authorisation Database.
- Attending or having a representative attend the RP CRC.

5.1.4 The RP Training Senior supervisor is responsible for:

- Implementing, administering and managing the RP Department training programme.
- Providing assistance to the RP Training ETDPs and RP Line Staff on training related matters.
- Ensuring the coordination of the RP Monitor's Initial programme.
- Ensuring the coordination of the RP Continuing training programme.
- Reviewing documentation pertaining to the programme.
- Ensuring the compilation, reviewing and approval of all RP Training courses.
- Confirming training and qualification of Radiation Protection personnel correspond to their job descriptions.
- Liaising with Radiation Protection Senior Supervisors for the inclusion of independent assessors to perform quality control of assessments.
- Resolving of any learner appeals against RP related assessments results.
- Ensuring that the RP Training Business Plan is available up and actions are monitored and addressed issues addressed.
- Conducting management observations in various training settings.
- Conducting job observations (individual and paired) to ensure that individuals work the way they have been trained and that they are trained according to the way they work
- Ensuring moderation of RP related training documentation.
- Carrying out periodic evaluations of the programme and the performance of the ETDPs.
- Reviewing, summarising, reporting and acting on all training feedback.
- Maintaining training and qualification records of personnel in the RP Department.
- Maintaining authorisation records for personnel in the RP Department.
- Reviewing the training records of RP personnel annually.
- Ensuring that line coaches are subject to a comprehensive evaluation every two years.

- Acting as secretary to the RP CRC.
- Ensuring compliance with KSH-010.
- Ensure line Corrective action programme is reviewed for analysis of trends for inclusion of topics into the training programme

5.1.5 The Senior Radiation Protection Assistants (SRPA) are responsible for:

- Coaching and assessing of RPAs and RPMs.
- Maintaining all authorisations as per the task to training matrix.
- Reviewing any training requests submitted for inclusion into the programme e.g. plant modifications, procedural changes, operating experiences, etc.
- Observing on job training and providing meaningful feedback to the applicable Snr Supervisor and to the Training Representative/Partner.
- Completing all necessary documentation pertaining to the programme (e.g. TCRs, DIF analysis, etc.).
- Ensuring on job training is consistent and applicable OJTs are signed off, before panel is applied for.
- Providing feedback to the relevant Snr Supervisor on the progress of learners and supplemental RPM.
- Ensuring that only authorised staff performs work when authorisations are required.
- Participating in conducting post training evaluations (KFT-037) and provide feedback at the CRC.
- Reviewing the OJT manual prior to panel assessments.
- Attending the RP CRC as and when required.

5.1.6 The RP Training ETDP's (Education Training and Development Practitioners) are responsible for:

- Assisting the Head of RP Training with the training and qualification of personnel in the RP department.
- Implementing remedial training plans when learner performance standards are deemed "not yet competent"
- Reviewing training material developed by line SMEs to ensure that all material complies with the SAT processes.

- Ensuring that all relevant documentation is administered before and after training interventions e.g. class attendance forms, learner feedback forms and assessment forms, etc.
- Administering learner programmes.
- Ensuring that assigned actions on the RP Training Business Plans are completed.
- Controlling and ensuring safe storage of all training material and assessment tools.
- Providing training effectiveness feedback to the Senior supervisor RP training.
- Supporting and guiding learners in their development.
- Remaining abreast with training processes for the section in accordance with the SAT processes.
- Remaining abreast with technical skills by conducting job observations in RP Department, taking part in line self assessments and benchmarking.
- Ensuring compliance with the RP department training requirements in accordance with KSH-010, KSA-049, KGT-006 and KGT-070.
- Implementing training pertaining to the programme according to planned schedules.
- Indicating pre-requisite course requirements on the advertised training schedule and ensuring that learners meet pre-requisites.
- Administering the authorisation database and co-ordinating assessment panels.
- Attending continuing training, maintaining authorisations and ensuring plant knowledge is current.
- Reviewing authorisation indices and providing the necessary support to line to ensure expiries are mitigated/avoided.
- Implementing and co-ordinating the development, review and presentation of group specific courses.
- Implementing the SAT process in accordance with KGT-006.
- Ensuring Human Performance (HP) Tools, fundamentals and relevant OE are embedded in all training and assessments.

- Enforcing that standards and expectations are met during training interventions as well as focussing on learner behaviours and safety.
- Ensuring that assessments are carried out as per KSA-049 and this guide and recorded in the appropriate manner.
- Providing training assistance to line management.
- Performing self assessments, performance analysis and observations as necessary.
- Reviewing, summarising and reporting on all training feedback.
- Forwarding completed training records to the TTG Administration Clerk for processing.
- Attending the RP CRC as and when required.
- Supporting with RPL processing of learners

5.1.7 The Radiation Protection Assistants (RPA) and RP Individual Learning Facilitators (ILF) are responsible for:

- Reviewing any training requests that are submitted for inclusion into the programme e.g. plant modifications, procedural changes, operating experiences, etc.
- Providing on job training, performing direct supervision and coaching of radiation protection monitor trainees and contractor radiation protection monitors
- Completing all necessary documentation pertaining to the programme (e.g. TCRs, DIF analysis, etc.).
- Ensuring all documentation for panels is prepared and completed.
- Training and authorisation of RP Monitors.
- Complying with the Coaching practices as required by KGT-088 and TTG-RP-WI-002. Understanding and applying the programme objectives, content and requirements by reviewing the training programme guide.
- Being knowledgeable on the instructional materials, assessment materials and job tasks as defined by the programme.
- Ensuring that their own authorisations are current for the tasks they are required to train and assess.

- Obtaining required equipment and material and ensuring that required facilities are prepared.
- Ensuring that suitable orientation is given to learners prior to the start of training.
- Preparing and providing the learners with quality learning experiences to enable them to master the learning objectives, as required. .
- Using effective instructional techniques to promote learner mastery of learning objectives and encourage participation.
- Delivering effective and consistent training during the on job training phase of the programme.
- Including relevant OE into training sessions.
- Assessing learner performance during and at the end of training sessions.
- Assessing learners using valid assessment tools.
- Maintaining documentation security with regard to all assessments.
- Implementing remedial training plans when learners are declared “not yet competent”.
- Providing feedback to the Senior supervisors on the learner’s progress.
- Completing the required documentation and sending to RP training for record keeping purposes.
- Documenting proposed enhancements, programme evaluations and feedback any changes by using the Training Change Request (TCR) process.

5.1.8 RP SME is responsible for:

- Presenting selected training topics in the various training settings under the guidance of a qualified ETDP
- Compiling and/or reviewing material (procedures, training material, TPAs) directly related to their SME authorisation.
- Ensuring that all training material is reviewed by a Training Instructor and against the relevant processes.
- Providing technical input during the development of training material including handouts, presentations and assessment tools related to the authorisation for which he/she is appointed as a SME.

- Facilitating training and conducting classroom and on-job training assessments related to the authorisation for which he/she is appointed as a SME.
- Sending all related training documentation to Technical Training for processing.
- Being a member of the Assessment panels.
- Reviewing training material and documentation relevant to his/her field of expertise.
- Ensuring, together with Technical Training, that the training programme and schedules are updated in a timeously manner and that they address the respective needs of the business and candidates.
- Ensuring that all training issues related to their field of expertise are taken to the CRC for action and tracking purposes.
- Providing adequate transfer of knowledge to less experienced personnel.

5.1.9 RP Assessors are responsible for:

- Attending assessment panels to ensure consistent application of the process.
- Assessing competence against TPAs, procedures or checklists as appropriate.
- Assessing against unit standards on SAQA's and/ or QCTO NQF when required to do so.
- Ensuring necessary documentation is completed in a timely manner and sent to RP training for any updating, where applicable.

5.1.10 Learners are responsible for:

- Attending scheduled training.
- Taking ownership for own and group learning.
- Ensuring that they meet pre-requisites before attending any training interventions.
- Exhibiting appropriate classroom demeanour in accordance with the Eskom values.

- Actively participating in the learning process by exhibiting a questioning attitude that stimulates discussions and promotes understanding of the training material.
- Sharing plant-specific lessons learned/OE during training discussions.
- Completing their training and qualification requirements within specified time lines.
- Providing meaningful feedback to improve the quality of training.
- Maintaining their authorisations current.
- Ensuring that they do not perform work if not authorised to do so.
- Adhering to the programme administration rules as defined by the course manager/co-ordinator/instructor responsible for the course e.g. timekeeping, breaks, conduct etc.

6.0 PROGRAMME REQUIREMENTS

Any temporary deviation from this guide, i.e. should the intent of the process followed, or requirements of a procedure not be achievable, then a waiver must be applied for. This waiver must be approved and documented on KFT-090 by the Plant Training Manager.

Any changes to the Training Programme w.r.t. training material, curricula, plant modifications, etc. including changes to job positions in line or training, must follow the TCR process in accordance with Train-Admin-WI-11, Guidance for the TCR process. Relevant TCRs be discussed and documented at the RP CRC

6.1 Programme Goal

The goal of the Radiation Protection Training Programme is to promote safe and reliable plant operation by providing Radiation Protection Staff with the skills, knowledge and attitude necessary to perform their assigned duties in a radiologically safe and competent manner.

NOTE 1: *Where a designation is used in procedures e.g. Radiation Protection Monitor, this applies to individuals that have successfully completed the applicable parts of the on-job training and/or Competency Based Assessments, as appropriate.*

6.2 Educational/Training Entry Requirements

- The entry level training requirements for the designations listed in paragraph 2.1 are specified in KSH-010 and the TTM.

- Completed the FFD related requirements.

6.3 Nomination Process

The applicable Line Manager or Supervisor will nominate the candidate to attend formal training courses.

6.4 Advanced Placements and Exemptions

Advanced placement into the RP Training Programme or exemptions to complete specific sections of the programme is permitted. The following conditions apply for advanced placement or exemptions:

- The advanced placement of a candidate is based on a combination of previous education, training and experience; including current outputs
- Individuals with previous experience in Radiation Protection are eligible (at the discretion of the RP Training Senior supervisor) to be exempted from the theoretical part of the training programme. No exemptions will be given where competence needs to be demonstrated/performed.
- All qualified permanently employed RPMs will be exempted from Radworkers requalification Training once his or her credential review has been concluded.
- All training exemptions from this programme must be approved by the Head of RP Training and authorised in writing by the Radiation Protection Manager or his/her delegate.
- All waivers for specific training requirements as required by KSH-010, must be authorised by the plant training manager and reviewed by an examining committee for applicability. These waivers will be recorded on KFT-090 form

6.5 Training Requirements for Supplemental/Temporary Workers

The Line Group is responsible and accountable for the following:

- Ensuring all documentation required as per KSH-010 is available for review prior to enrolling on FFD.
- FFD Compliance:
 - Refer to 335-68, KSA-119 and KSA-137 for specific FFD requirements.
 - Verifying the competence card of each supplemental/temporary worker to ensure that all requirements have been met before work is assigned.
- Ensuring credential reviews/examining committees are arranged and the requirements met for the position.

- Assigning specific task authorisations as per the supplemental worker's function and/or work scope.
- Ensuring authorisations have been reviewed upon their return, if off site longer than 12 months and if still applicable since their last visit to Koeberg.
- Ensuring all authorisations have been loaded and reflect correctly on the Authorisation Database.
- Conducting Group specific safety induction and sharing plant-specific lessons learned/OE during training discussions.

6.6 RP Subject Matter Expert (Line):

For an individual to be recognised as an RP SME, the following criteria should be met:

- 5 years related experience (at the discretion of the RP Manager);
- Comply with RP-WI-002
- authorised on the task for 5 years for which SME status is sought, if SME status is related to an existing task.

OR

For any new task related to process, equipment, components, etc. an SME will be appointed by the RP Manager in writing. The SME will then be authorised for those tasks (dated as per signature on letter).

SME Appointment

- Recommended by the relevant Senior supervisor, endorsed by CRC and authorised by the RP manager.
- For classroom training, completed the TMG SME presentation, unless the individual has been authorised as a GLF.
- The RP Training section will draw up an SME appointment letter which is authorised by the relevant senior supervisor and RP Manager.
- Appointment letters are non-permanent records and should be sent by the RP Training admin clerk to TD&RM for archiving, and a copy (either a copy or the original) is stored in the learner's training file.
- The RP Training section will maintain the master list of registered SMEs.
- The period of validity of SME status is dependent on the period of validity of the tasks for which SME status is sought. A new SME letter is issued thereafter, as endorsed by the CRC.

6.7 Programme Curriculum

- Training is based on the job designations referred to in paragraph 2.1.
- Programme Curricula per job designation are detailed in the TTM.
- The TTM lists all basic tasks and advanced tasks relevant to each designation. It may not be deemed necessary to have all authorisations reflecting as complete on the authorisation matrix, however no job requiring authorisation may be performed by a learner if not authorised.
- The Task to Training Matrix/Task List detail all the tasks required for a position. It also stipulates whether a task is selected for Continuing or Initial training or whether a task is classified as specialised task. The DIF ratings for each task, along with the recommended and actual level are also detailed in the Task to Training Matrix. The recommended level is the level determined by the DIF algorithm based on the DIF ratings for each task. DIF ratings are received from a sample of the population who perform the task. The results are used to provide training requirement recommendations to line management in accordance with the applicable procedures and work instructions. This includes the periodicity of continuing training.
- The learner's supervisor are required to check individual authorisations prior to allocating work involving an authorisation.
- Proposed changes to the TTM must be endorsed by RP CRC. The TTM must be reviewed under any of the following circumstances:
 - Changes to a job description;
 - Identification of omissions;
 - Errors;
 - Identification of new training needs;
 - To satisfy accreditation body requirements.
 - -Routinely
- Tasks are selected for re-authorisation based on DIF criteria in accordance with the SAT process.
- TPAs, procedures and checklists may be used for assessment purposes.
- KSH-010 prescribes the licensing training requirements for positions within the radiation protection organisation. A credential review is conducted to ensure that these requirements have been met.
- The curriculum for specific authorisations or courses will specify the prerequisites, topics, theoretical written and/or oral exams, practical (OJT and/or TPA) and final assessment panel requirements as applicable.

6.8 Programme Duration

The duration of courses within the RP Department Training programme will be at the discretion of the Head of RP Training and the RP Manager.

6.9 Conduct of Training

The following are the types of training addressed in this guide:

6.9.1 Theoretical Training

Theoretical Training is presented in accordance with the approved training material.

6.9.2 On-Job Training

On-job training is a line function, however where the expertise resided in training, support may be sought RP Training is responsible for maintaining completed OJT records and assisting with reviewing of on job training material.

On-Job Training is conducted in accordance with KGT-088 (Title)

- A detailed OJT manual for each designation as identified in the TTM is maintained by the RP Training section.
- The appropriate OJT manual for a particular designation will be issued to the learner by the relevant section supervisor.
- The section supervisor will explain the OJT manual's contents to the learner.
- The OJT manual provides a means of documenting the status of the learner's on-job training.
- During OJT, a qualified OJT Coach (ILF/SME) will demonstrate the correct techniques for performing the relevant tasks to the learner
- The demonstration of the specific task will be performed in an actual working environment or through a simulated exercise.
- The learner will be required to perform various tasks under the supervision of a qualified OJT Coach (ILF/SME).
- TPAs will be used to assess completed on-job training tasks. Where no TPA exists, a procedure or checklist may be used to assess the task.
- OJT manuals must be scanned and forwarded to RP Training periodically as modules are completed. The original is filed in the learner's personal file and stored in the document safe.

6.9.3 Self-Study (Learner directed training)

The learner will be required to independently study the following:

NOTE 2: *While a “full time” instructor is not typically needed to conduct self-study, access to instructors to discuss difficult/ confusing content is essential and available.*

- All relevant Radiation Protection procedures associated with a particular designation.
- All appropriate technical manuals associated with the equipment that the learner would be required to operate and/or maintain.
- Other training material associated with the designation as defined by the immediate supervisor.

6.9.4 Continuing Training

- Continuing Training topics are selected using the Training Work instruction TTG-WI-001.
- Learner attendance and participation is mandatory.
- Only the manager can withdraw an individual from the training where valid reason is established.
- Learners shall comply with any pre-work requirements of the continuing training intervention.
- Continuing Training may be in the form of classroom, on-job or simulator training.
- All learners will be required to prove competence in the task/authorisation that he/she has been required to complete (whenever applicable).
- Continuing training becomes necessary when work conditions change, operating experience and lessons learned need to be conveyed, requalification training is required, plant modifications are implemented, or when legislative and procedural requirements change.
- Training instructors shall implement continuing training.
- Continuing training is designed to maintain workforce expertise and learn from operating experience.
- The Programme consists of fixed and variable components.

- The fixed component is intended to refresh learner's knowledge and skills for a task at a frequency that maintains knowledge and skills at an acceptable level, equal to that demonstrated by the learner when originally qualified for the task.
- The variable component is intended to look at current performance and provide training, where appropriate, to improve current performance.
- Topics and tasks for the variable component of continuing training are identified from various line department performance improvement inputs.
- Continuing Training topics should include, but not be limited to:
 - Task list per designation as per the authorised TTM;
 - Changing work practices;
 - Operating Experience and lessons learned;
 - Plant modifications and equipment changes.

6.9.5 Just-In-Time Training (JITT)

The purpose of Just-In-Time Training is to provide a method by which Line Departments/Groups may provide information to plant personnel in a formal, documented process consistent with SAT guidelines.

- JITT is considered part of an associated accredited training programme.

6.10 Facilities, Equipment and Instructional Aids

- The ETDP, SME's and facilitators will ensure chosen facilities are conducive for learning and suit the desired outcome.
- The ETDP, SME's and facilitators will decide on the most appropriate equipment and instructional aids required for positive learning.

6.11 Assessments

- Applicable OJT sections must be completed prior to being assessed.
- Both knowledge and performance based assessments are administered in terms of the programmes TTM.
- Knowledge based assessments could be in the form of written exams or oral exams as specified in the applicable curriculum.
- Learner results must be communicated to the relevant Head of Section.

- When a course consists of both a theoretical and a task performance assessment, a learner will be declared “not yet competent” when the learner is found “not yet competent” in either the task, theoretical or both assessments.
- A learner who is found “not yet competent” when assessed, should receive remedial training and is allowed a second attempt. Should the learner be found “not yet competent” for a second time, the matter shall be referred to the Head of RP Training, and any further attendance will only be considered after motivation by the candidate’s manager.
- No programme assessment documentation may be distributed, duplicated, or reproduced in any manner by non-authorised personnel. This is accordance with exam security rules.
- If a learner is found to be dishonest during an assessment, the learner will be declared “not yet competent” and will be subject to Eskom disciplinary action.
- When a learner repeatedly does not meet the required level of competence, the candidate could be removed from the programme.
- The learner has the right to appeal against assessment results. If required, the learner must appeal in writing to the Head of RP Training.

6.11.1 Knowledge Based Assessments

- Satisfactory completion of written assessments is defined as competent when achieving at least 80%.
- The maximum length of time allowed for each assessment is detailed on the examination paper.
- When a learner is declared “not yet competent” for the first time, remediation must take place to address the shortcomings. The re-assessment takes place after a period of time negotiated between the learner and ETDP or as stated in the applicable curriculum.
- When a learner is declared “not yet competent” for a second time, the learner will need to attend the course again, if applicable. The matter must be referred to the relevant Section Head for resolution. Further attendance will only be considered after motivation by the candidate’s Head of Section or manager or as stated in the applicable curriculum.
- When the learner is declared “not yet competent” for the third time, the matter must be referred to the relevant Section Head for resolution or addressed as stated in the applicable curriculum.

6.11.2 Task Performance Assessments

- Tasks that have been selected for authorisation are indicated on the TTM as well as on the RP Authorisation Database.
- Competency criteria shall be made clear to the learner prior to assessment.
- Task Performance actions are to include the following where appropriate:
 - Perform – is a method of determining the knowledge and skill level of trainees, during which trainees perform tasks on plant equipment in settings such as a laboratory, simulator, or in the plant while being evaluated against a set of validated performance criteria.
 - Simulate – is a method of determining the knowledge and skill level of trainees, during which trainees step through performance of the task as realistically as possible without actually manipulating plant equipment. This may be conducted in the laboratory, simulator, plant, or other suitable setting while trainees are evaluated against a set of validated performance criteria. Evaluators provide needed cues to ensure all aspects of task performance are covered.
 - Discuss – is a method of determining the knowledge level of trainees, usually used in classroom or OJT, through verbal questioning and exercises such as drawing the system or listing system parameters. This method should be used infrequently during TPE. If used, trainees should perform a thorough talk-through of the task in accordance with the performance standard, including discussion of applicable core work practices.
 - Calculate – an actual calculation is performed.
- TPAs are used to authorise staff to work unsupervised on the plant. Learners may be assessed using authorised TPAs, procedures and/or checklists.
- The outcome of the assessment is documented on the Authorisation Form KFT-074 as an Initial Authorisation.
- When a learner does not perform a critical step correctly, the assessment is immediately halted immediately and the learner is declared “not yet competent”.
- When a learner is found “not yet competent”, re-training is required to address the shortcomings prior to re-assessment.
- When a learner is found “not yet competent” for a second time, the matter is referred to the relevant Section Head for resolution.

6.11.3 Authorisation

- An assessment panel evaluates all the prerequisites and competency assessment evidence to decide if they are satisfied with the evidence provided.
- The task to training matrix specifies the method of assessment.
- The pre-requisites and assessment criteria will be contained in the approved Training Curricula.
- The continuing training frequency of the various authorisations is determined using a DIF decision tree and is specified in the relevant Training Curricula/Task to Training Matrix.
- The authorisation process and panel outcomes are documented using KFT-074.
- The authorisation database is updated accordingly.

6.11.4 Initial Assessment panels

- Competence for relevant task is verified by means of a panel assessment.
- Once competence is verified, the learner will then be authorised for a specific task.
- The assessment panel typically consists of:
 - The learner applying for authorisation;
 - SME/ILF from line;
 - Manager/Line Senior supervisor (Chairperson);
 - A representative from Training.
 - If the ILF/SME who performed the coaching and assessment is not available to attend the verification panel, an alternate ILF/SME may be used. The alternate ILF/SME must ensure that coaching and assessment was done according to KGT-088 and that all paperwork is completed prior panel. The alternative ILF/SME must be authorised on the task.
- Where the SME/ILF for a particular task is an Assessor from Training, only one Training individual is sufficient.
- The Manager/Line Head of Section (Chairperson) may NOT play a dual role in the panel as they are required to remain independent, have sufficient oversight of the process, and be in a position to make finite decisions or overrule other decisions.

- Where Manager/Line Head of Section (Chairperson) is the SME/ILF, the RP Manager should chair the panel.
- The training Representative is responsible to ensure documentation is complete, database updated and filed as required.

6.11.5 Task Re-authorisation

- Re-authorisation takes place at the period specified on the task to training matrix.
- Learners are responsible for maintaining their authorisation status.
- The respective Head of Section for the task(s) in which authorisation is required assesses the tasks as indicated on KFT-074 to determine whether a formal panel assessment is necessary or not.
- If a panel assessment is not required, the re-authorisation section of the Authorisation form, KFT-074 is completed and signed by respective Head of Section.
- If a panel assessment is required, the assessment panel will determine how and to what extent, if at all, the learner needs to be re-assessed.
- The Authorisation form KFT-074, used for re-authorisation, is sent to RP Training.
- The original re-authorisation form is treated as a permanent record and a copy is stored in the learner's training file.
- The RP authorisation database is updated once re-authorisation is achieved.
- When a task changes significantly, reauthorisation could be necessary. The CRC will decide how this change will be addressed.

6.12 Revocation of Authorisations:

- An individual's authorisation may be revoked due to:
 - Poor performance;
 - non-compliance to procedures or management directives;
 - procedure/other (e.g.) PSR violation;
 - no longer being required to perform specific tasks or functions.
 - Any of the pre-requisites expiring for the relevant authorisation.

- The respective Line Manager, when required shall revoke the individual's authorisation formally by issuing a revocation letter.
- The individual must sign the letter acknowledging notification and acceptance of the revocation of authorisation;
- The Line Manager must sign the letter and forward it to the RP Training Section.
- The RP Training section updates the learner's authorisation status on the RP authorisation database and files the letter in the individual's record file.
- All relevant supervisors are to be notified of the individual's authorisation revocation by RP Training.

6.13 Recognition of Prior Learning (RPL)

- In accordance with SAQA and/or QCTO, learners may apply in writing for RPL. The RPL process has four distinct steps which must be followed:
 - Identify the previously acquired knowledge and skill of the learner.
 - Match the identified knowledge and skill of the learner with that of the specific standard of the programme guides, learnerships, course requirements or qualifications for which RPL is applied.
 - Assess the knowledge and skill of the learner against the specific standards determined.
 - Credit the learner for the assessed components.
- Only qualified assessors are allowed to conduct the RPL process.
- The assessment plan shall be adapted and documented for the individual learner's needs at the start of the RPL process.
- Assessors are responsible to ensure that all the required knowledge, skill and behaviour criteria in specific standards are met before recognition and credit is given or to declare a learner competent.
- The same rules and requirements for normal assessment, as indicated in this document, apply to the RPL process.
- RPL decisions and process must be fully documented and recorded.

6.13.1 RPL for Theory Topics

- An application for course/module exemption must be completed by the learner and the relevant evidence attached.

- The evidence is assessed by the RP Training Senior supervisor and the RP Manager.
- If the learner is granted the exemption, the learner is exempted from the required training.
- Where there is insufficient evidence, the learner must attend the required training and assessment.
- The original application for course/module exemption is treated as a permanent record and a copy is stored in the learner's training file.

6.13.2 RPL for Performance Tasks

- The learner must provide the required evidence of previous authorisation.
- If sufficient evidence is provided, the learner must be observed performing the task.
- If task performance is satisfactory, the learner is exempted from re-submitting original training documentation.
- Where there is insufficient evidence, or task performance is unsatisfactory, the learner must attend the required training and assessment.
- The Authorisation form, KFT-074 will be used to record the task performance outcome.

6.14 Moderation

- A minimum of 10% of all learner assessments must be subject to the process of moderation.
- Assessment documentation selected for moderation is documented on the Assessment sampling form, KFT-061.
- A random sample of documentation is moderated and the moderation results are recorded.
- The moderator must ensure that all assessors are consistent in their interpretation of standards.
- Problem areas identified by the moderator are addressed with the relevant SME, ILF, GLF and/or assessor and subsequently corrected.
- Moderation issues are discussed in RP Training meetings and included in the RP Training monthly report.
- The moderator may also seek clarification of the assessment process, collecting of evidence, assessment tools and any training related processes.

- In the event that the assessment outcome has changed, the moderator must ensure that prompt, accurate and constructive feedback is given to both the assessor and the learner(s).

6.15 Appeals Process

The learner has the right to appeal against assessment results. If necessary, the following process must be followed using KFT-085, Training department remediation, re-assessment or appeal process record.

- Learner informs assessor of decision to appeal and discusses the reason for the appeal using KFT-085.
- If no resolution is reached after discussion between learner and assessor, learner appeals to RP Training Senior Supervisor in writing (e-mail is acceptable), and arranges a meeting between learner, assessor, and Line Section Head to resolve. If necessary, the Training Section Head may request the Line Section Head to be present as well.
- If no resolution is reached, meeting to be arranged between Learner, Training Section Head and Technical Training Group Manager.
- If no resolution is reached, meeting to be arranged between Learner, Learner's Line Manager and Technical Training Group Manager.
- If no resolution is reached, the Plant Training Manager is to be informed, and make the final decision.
- Any non-resolution at the end of this process can lead to the commencement of the Eskom grievance procedure.

6.16 Post Training Evaluation

- Post Training evaluations should be conducted three to six months following completion of initial training.
- The ETDP must summarise relevant information and forward this to the Head of RP Training for presentation to the RP CRC.
- Head of RP Training coordinates the post training evaluation process.
- Evaluation feedback is obtained from the relevant supervisors and learners by ETDP.
- Feedback obtained could include new training opportunities, improvements, deficiencies, learner and management observation feedback, etc.
- If areas of improvement are identified, appropriate actions must be recorded in the CRC minutes and tracked until completion.

7.0 RECORDS

- **The following documents are permanent:**
 - KFT-002
 - KFT-074
- **The following documents are non-permanent:**
 - KFT-085
 - KFT-090
 - KFT-061

8.0 ATTACHMENTS

Appendix 1 – Justification

APPENDIX 1

JUSTIFICATION

Revision 1

1. To remove RP training curricula from document and reference the TTM.
2. To change the policy of keeping original records with RP training and forwarding them to TD&RM.
3. To provide clarity as to what action should be taken after a learner is declared “NYC” for the third time.

Revision 2

1. Full review to reflect current practices.

Revision 3

1. Full review to reflect current practices and verify alignment with SAT process and relevant ACAD.

Revision 4

1. Full review.
2. Inclusion of CAP related actions: CR 113807-005 GA, CR 113798-007 GA. SE 37322-002 GA; CR 114293-002 GA.
3. Review to Rev 2 of ACAD 93-008.