# REYNOLDS ELECTRICAL & ENGINEERING CO., INC. POSITION DESCRIPTION

POSITION TITLE:

Radiological Control Technician I

JOB CODE :

DATE PREPARED:

April 29, 1993

051130

Revised: October 27, 1993

#### SUMMARY STATEMENT

The incumbent researches, identifies, and locates sites to inspect, survey, and determine radioactivity levels under close supervision in accordance with all Company and DOE procedures and regulations.

#### DIMENSIONS

The incumbent reports to the Radiological Field Operations Supervisor, receives guidance from lead persons or higher level Radiological Control Technicians, and has no supervisory responsibility.

#### NATURE AND SCOPE

- 1. Researches records of radiological or potential radiological sites to determine whether site is radioactively contaminated, controlled, or retired;
- Identifies and locates sites to be inspected and/or surveyed for radioactivity levels; conducts radiological surveys of sites to determine control requirements;
- 3. Operates mobile decontamination equipment; performs decontamination activities including inspection, high-pressure washing, laundry and cleanup, etc.; performs simple radioactive waste management duties;
- 4. Controls access to radiological sites not under control of LANL, LLNL, or SNL; selects and installs appropriate signs and fencing;
- 5. Maintains records of radiation surveys and other job activities; completes and files appropriate forms and log books as required; completes daily, weekly, monthly, and yearly reports as required;
- 6. May assist in performing fundamental monitoring including radiological health and environmental checks and in performing fundamental radiation exclusion area control, issuing protective clothing and equipment, giving instructions in proper use, and assisting in control of entry and exit requirements;
- 7. Operates motor vehicle under all types of road and weather conditions to reach inspection sites;
- 8. Keeps abreast of all new and revised environment and health documents as required;
- Adheres to all Company EEO, affirmative action, environmental, health, safety, quality assurance, and security programs;
- Performs related work as required.

#### **ESSENTIAL JOB FUNCTIONS**

**Physical** 

Constantly = Over 2/3 of time Frequently = 1/3 - 2/3 of time Occasionally = Less than 1/3 of time

- 1. Frequent standing/walking on all types of terrain and surfaces above and under ground up to four miles per day;
- 2. Occasional sitting while operating motor vehicle between inspection sites or completing paperwork at desk;

# Radiological Control Technician I

- 3. Frequent lifting/carrying 1 to 50 pounds of records, sample boxes, testing equipment, or tools; occasionally up to 100 pounds of heavier equipment with assistance of another person for distances of 1 to 25 feet;
- 4. Occasional pushing/pulling exerting force up to 50 pounds while loading and unloading laundry from industrial washers;
- Occasional-to-frequent climbing stairs, ladders, scaffolding, towers, or drill rigs to reach areas to be inspected at heights up to 50 feet; uses man lift and safety harnesses when appropriate;
- Frequent bending/twisting at waist/knees/neck while monitoring/inspecting work, operating motor vehicle under normal driving activities, and performing decontamination duties;
- 7. May kneel/crouch/crawl while inspecting lower areas, crawl spaces, tunnels, or drill rigs/towers;
- Constant use of both hands/arms in reaching/handling/grasping/fingering while operating motor vehicle, using testing equipment, collecting samples, performing decontamination activities, and completing paperwork;
- 9. Constant use of sight/hearing abilities in conducting research, inspecting sites, and maintaining a safe work environment;
- Frequent use of speech abilities in communication with employees, coworkers, and supervisors while
  inspecting, conducting surveys, and issuing and providing instruction on equipment, both in person and over
  the telephone;
- 11. Must be able to be fitted with and qualify on self-contained breathing apparatus and respirator.

- Constant mental alertness, attention to detail, and accuracy required in researching, inspecting, and monitoring radiological sites, performing decontamination duties, and ensuring that all specifications, procedures, and regulations are met;
- 2. Must be able to use judgement and follow oral and written instructions in completion of all duties;
- Must be able to plan/organize work to ensure all assignments are completed efficiently and within required time frame;
- Must possess good memory and thorough knowledge of health and environmental regulations and be able to keep up with changes in same;
- Must possess good oral/written communication and interpersonal skills in order to deal with all types of craftspeople, scientists, engineers, supervisors, and outside agencies in a professional, effective, and clear manner;
- Must possess good reading and mathematical skills through algebra in order to read and understand technical specifications, procedures, and regulations and calculate decay rates;
- 7. Must be able to record data accurately and complete logs, reports, and other written information;
- Must be able to deal with constant pressure from deadlines, frequent interruptions, multiple priorities, responding to emergencies/immediate requests, and working around hazardous/radioactive conditions.

### Radiological Control Technician I

### WORKING CONDITIONS AND EQUIPMENT USED

Work is performed 20 percent indoors and 80 percent outdoors in vehicles, tunnels, mines, on drilling rigs, towers, and in desert, exposed to all types of weather conditions and driving on all types of road conditions.

Tools & Equipment Used: Radiological testing/counting equipment, industrial washers/dryers, high-pressure washing equipment, sledgehammer, post driver, overhead cranes, radios, motor vehicle, personal computer, and telephone. Safety equipment including, but not limited, to safety shoes, hearing protection, safety glasses, decontamination gear, wet gear, safety harness, back support belts, and respirators.

# REQUIRED TRAINING AND WORK EXPERIENCE

High school diploma or equivalent is required.

#### OTHER SPECIAL QUALIFICATIONS

Must successfully pass a job-related examination with a 50 percent or better score. Valid driver's license required. Must be able to obtain "Q" clearance. Basic computer (PC) skills required. Must be able to be fitted with and qualify on respirator.

# Radiological Control Technician II

- 7. Must be able to record data accurately and complete logs, reports, and other written information;
- Must be able to deal with constant pressure from deadlines, frequent interruptions, multiple priorities, responding to emergencies/immediate requests, and working around hazardous/radioactive conditions;
- 9. Must possess good leadership/training skills in order to guide and assist in training RPT Is.

# WORKING CONDITIONS AND EQUIPMENT USED

Work is performed 20 percent indoors and 80 percent outdoors in vehicles, tunnels, mines, on drilling rigs, towers, and in desert, exposed to all types of weather conditions and driving on all types of road conditions.

Tools & Equipment Used: Radiological testing/counting equipment, industrial washers/dryers, high-pressure washing equipment, sledgehammer, post driver, overhead cranes, radios, motor vehicle, personal computer, and telephone. Safety equipment including, but not limited to, safety shoes, hearing protection, safety glasses, decontamination gear, wet gear, safety harness, back support belts, and respirators.

# REQUIRED TRAINING AND WORK EXPERIENCE

High school diploma or equivalent plus any combination of training and experience equivalent to two years of college course work with emphasis on math and science is required. Two years of specialized work experience in radiological monitoring is also required.

### OTHER SPECIAL QUALIFICATIONS

Valid driver's license required. Must be able to obtain "Q" clearance. Basic computer (PC) skills required. Must be able to be fitted with and qualify on respirator.

# REYNOLDS ELECTRICAL & ENGINEERING CO., INC. POSITION DESCRIPTION

POSITION TITLE:

Radiological Control Technician II

JOB CODE :

051230

DATE PREPARED:

April 29, 1993

Revised: October 27, 1993

#### SUMMARY STATEMENT

The incumbent researches, identifies, and locates sites to inspect, survey, and determine radioactivity levels under supervision in accordance with all Company and DOE procedures and regulations.

#### **DIMENSIONS**

The incumbent reports to the Radiological Field Operations Supervisor, receives guidance from lead persons or higher level Radiological Control Technicians (RCTs), and has no supervisory responsibility.

#### NATURE AND SCOPE

- 1. Researches records of radiological or potential radiological sites to determine whether site is radioactively contaminated, controlled, or retired;
- Identifies and locates sites to be inspected and/or surveyed for radioactivity levels; conducts radiological surveys of sites to determine control requirements; controls access to radiological sites not under control of LANL, LLNL, or SNL; selects and installs appropriate signs and fencing;
- Installs, distributes, operates, and maintains air sampling stations ensuring equipment is calibrated and operating properly; exchanges samples and returns to laboratory on established schedule;
- 4. Operates mobile decontamination equipment; performs decontamination activities including inspection, high-pressure washing, laundry and cleanup, etc.; performs simple radioactive waste management duties;
- Maintains records of sampling activities, radiation surveys and other job activities; completes and files appropriate forms and log books as required; completes daily, weekly, monthly, and yearly reports as required;
- Assists in performing fundamental monitoring including radiological health and environmental checks and in
  performing fundamental radiation exclusion area control, issuing protective clothing and equipment, giving
  instructions in proper use, and assisting in control of entry and exit requirements; performs inventory of
  various supplies and orders materials when required;
- 7. Participates in classroom instruction and preparation of course materials if required;
- 8. Operates motor vehicle under all types of road and weather conditions to reach inspection sites;
- 9. Keeps abreast of all new and revised environment and health documents as required;
- Adheres to all Company EEO, affirmative action, environmental, health, safety, quality assurance, and security programs;
- 11. Performs related work as required.

# Radiological Control Technician II

## **ESSENTIAL JOB FUNCTIONS**

#### **Physical**

Constantly = Over 2/3 of time Frequently = 1/3 - 2/3 of time Occasionally = Less than 1/3 of time

- 1. Frequent standing/walking on all types of terrain and surfaces above and under ground up to four miles per day;
- 2. Occasional sitting while operating motor vehicle between inspection sites or completing paperwork at desk;
- 3. Frequent lifting/carrying 1 to 50 pounds of records, sample boxes, testing equipment, or tools; occasionally up to 100 pounds of heavier equipment with assistance of another person for distances of 1 to 25 feet;
- 4. Occasional pushing/pulling exerting force up to 50 pounds while loading and unloading laundry from industrial washers;
- 5. Occasional-to-frequent climbing stairs, ladders, scaffolding, on towers, or drill rigs to reach areas to be inspected for heights up to 50 feet; uses man lift and safety harnesses when appropriate;
- Frequent bending/twisting at waist/knees/neck while monitoring/inspecting work, operating motor vehicle under normal driving activities, and performing decontamination duties;
- 7. May kneel/crouch/crawl while inspecting lower areas, crawl spaces, tunnels, or drill rigs/towers;
- Constant use of both hands/arms in reaching/handling/grasping/fingering while operating motor vehicle, using testing equipment, collecting samples, performing decontamination activities, and completing paperwork;
- 9. Constant use of sight/hearing abilities in conducting research, inspecting sites, and maintaining a safe work environment;
- Frequent use of speech abilities in communication with employees, coworkers, and supervisors while
  inspecting, conducting surveys, and issuing and providing instruction on equipment, both in person and over
  the telephone;
- 11. Must be able to be fitted with and qualify on self-contained breathing apparatus and respirator.

- Constant mental alertness, attention to detail, and accuracy required in researching, inspecting, and monitoring radiological sites, performing decontamination duties, and ensuring that all specifications, procedures, and regulations are met;
- 2. Must be able to use judgement and follow oral and written instructions in completion of all duties;
- 3. Must be able to plan/organize work to ensure all assignments are completed efficiently and within required time frame;
- Must possess good memory and thorough knowledge of health and environmental regulations and be able to keep up with changes in same;
- Must possess good oral/written communication and interpersonal skills in order to provide effective classroom instruction and deal with all types of craftspeople, scientists, engineers, supervisors, and outside agencies in a professional, effective, and clear manner;
- Must possess good reading and mathematical skills through algebra in order to read and understand technical specifications, procedures, and regulations and calculate decay rates;

# REYNOLDS ELECTRICAL & ENGINEERING CO., INC. POSITION DESCRIPTION

POSITION TITLE:

Radiological Control Technician III

JOB CODE :

051420

DATE PREPARED:

April 29, 1993

Revised: October 27, 1993

#### SUMMARY STATEMENT

The incumbent performs detailed monitoring, inspection, and surveys, determines radioactivity levels, and is responsible for monitoring and disposing of radioactive waste and performing maintenance on electromechanical equipment in accordance with all Company and DOE procedures and regulations.

#### DIMENSIONS

The incumbent reports to the Radiological Field Operations Supervisor, receives guidance from lead persons or higher level Radiological Control Technicians, and has no supervisory responsibility.

#### NATURE AND SCOPE

- Performs detailed monitoring including health and environmental checks and radiation exclusion control; documents radiation and contamination levels associated with daily activities; and completes all required paperwork;
- Controls radioactive waste operations in accordance with Company safety codes; inspects waste packages and containers for structural integrity, proper labeling, and marking; assures proper disposal of radioactive waste containers; and records location of all package placement;
- 3. Installs, distributes, operates, and maintains air sampling stations, ensuring equipment is calibrated and operating properly; collects routine and special samples; and exchanges samples and returns to laboratory on established schedule;
- 4. Maintains electromechanical equipment associated with radiation detectors, gamma calibration range, tritium enrichment, and low-level trace chemistry laboratory;
- Constructs and repairs shielding and vacuum systems for production in the counting room, surface barrier alpha detector systems; converts electromechanical systems to electronically controlled systems;
- 6. Operates and may assign others to operate mobile decontamination equipment; performs decontamination activities including inspection, high-pressure washing, laundry, and cleanup, etc.; performs simple radioactive waste management duties;
- 7. Assists in production and modification of maps in support of Nevada Test Site activities;
- Maintains records of sampling activities, radiation surveys, and other job activities; completes and files
  appropriate forms and log books as required; completes daily, weekly, monthly, and yearly reports as
  required;
- 9. Keeps abreast of all new and revised environment and health documents as required;
- Adheres to all Company EEO, affirmative action, environmental, health, safety, quality assurance, and security programs;
- 11. Performs related work as required.

# Radiological Control Technician III

# ESSENTIAL JOB FUNCTIONS

# Constantly = Over 2/3 of time Frequently = 1/3 - 2/3 of time Occasionally = Less than 1/3 of time

## Physical

- Frequent standing/walking on all types of terrain and surfaces above and under ground up to four miles per day:
- 2. Occasional sitting while operating motor vehicle between inspection sites or completing paperwork at desk;
- Frequent lifting/carrying 1 to 50 pounds of records, sample boxes, testing equipment, or tools; occasionally
  up to 100 pounds of heavier equipment with assistance of another person for distances of 1 to 25 feet;
- 4. Occasional pushing/pulling exerting force up to 50 pounds while loading and unloading laundry from industrial washers;
- Occasional-to-frequent climbing stairs, ladders, scaffolding, on towers, or drill rigs to reach areas to be inspected at heights up to 50 feet; uses man lift and safety harnesses when appropriate;
- Frequent bending/twisting at waist/knees/neck while monitoring/inspecting work, operating motor vehicle under normal driving activities, and performing decontamination duties;
- 7. May kneel/crouch/crawl while inspecting lower areas, crawl spaces, tunnels, or drill rigs/towers;
- Constant use of both hands/arms in reaching/handling/grasping/fingering while operating motor vehicle, using testing equipment, collecting samples, performing decontamination activities, and completing paperwork;
- 9. Constant use of sight/hearing abilities in conducting research, inspecting sites, and maintaining a safe work environment;
- Frequent use of speech abilities in communication with employees, coworkers, and supervisors while
  inspecting, conducting surveys, and issuing and providing instruction on equipment, both in person and over
  the telephone;
- 11. Must be able to be fitted with and qualify on self-contained breathing apparatus and respirator.

- Constant mental alertness, attention to detail, and accuracy required in inspecting, testing, disposing of radioactive waste, monitoring radiological sites, and ensuring that all specifications, procedures, and regulations are met;
- Must be able to work independently without direct supervision, use judgement, follow oral and written procedures, and apply knowledge and experience in completion of all duties;
- 3. Must be able to plan/organize work to ensure all assignments are completed efficiently and within required time frame;
- Must possess good memory and thorough knowledge of health and environmental regulations and be able to keep up with changes in same;
- Must possess good oral/written communication and interpersonal skills in order to deal with all types of craftspeople, scientists, engineers, supervisors, and outside agencies in a professional, effective, and clear manner;

### Radiological Control Technician III

- Must possess good reading and mathematical skills through algebra in order to read and understand technical specifications, procedures, and regulations and calculate decay rates;
- 7. Must be able to record data accurately and complete logs, reports, and other written information;
- 8. Must be able to deal with constant pressure from deadlines, frequent interruptions, multiple priorities, responding to emergencies/immediate requests, and working around hazardous/radioactive conditions;
- Must possess good mechanical aptitude and spatial reasoning ability in maintaining equipment and determining best storage configuration when disposing of radioactive waste packages;
- 10. Must possess good interpersonal/leadership skills in order to provide guidance and training to other technicians in an effective, positive, and professional manner.

### WORKING CONDITIONS AND EQUIPMENT USED

Work is performed 20 percent indoors and 80 percent outdoors in vehicles, tunnels, mines, on drilling rigs, towers, and in desert, exposed to all types of weather conditions and driving on all types of road conditions.

Tools & Equipment Used: Radiological testing/counting equipment, industrial washers/dryers, high-pressure washing equipment, sledgehammer, post driver, overhead cranes, radios, motor vehicle, personal computer, and telephone. Safety equipment including, but not limited to, safety shoes, hearing protection, safety glasses, decontamination gear, wet gear, safety harness, back support belts, and respirators.

### REQUIRED TRAINING AND WORK EXPERIENCE

High school diploma or equivalent plus any combination of training and experience equivalent to two years of college course work with emphasis in math and science is required. Four years of work experience in radiological monitoring is also required.

#### OTHER SPECIAL QUALIFICATIONS

Must be actively pursuing certification with the National Registry of Radiological Protection Technologists. Valid driver's license required. Must be able to obtain "Q" clearance. Basic computer (PC) skills required. Must be able to be fitted with and qualify on respirator.

# REYNOLDS ELECTRICAL & ENGINEERING CO., INC. POSITION DESCRIPTION

POSITION TITLE: Radiological Control Technician IV

JOB CODE : 051515

DATE PREPARED: April 29, 1993 Revised: October 27, 1993

#### SUMMARY STATEMENT

The incumbent performs complex radiation exclusion area control by monitoring, inspecting, and surveying and performs maintenance and calibration of sampling equipment in accordance with all Company and DOE procedures and regulations.

#### DIMENSIONS

The incumbent reports to the Radiological Field Operations Supervisor and trains junior Radiological Control Technicians.

#### NATURE AND SCOPE

- Performs complex monitoring including health and environmental checks, industrial hygiene surveys, and radiation surveys; documents radiation and contamination levels associated with daily activities and completes all required paperwork;
- Performs complex radiation exclusion area control including issuing protective clothing and equipment; instructing in proper use; assisting in control of entry and exit requirements; maintaining a proper hot line; and decontaminating personnel exiting radiation exclusion areas;
- Installs, distributes, operates, and maintains air sampling stations ensuring equipment is calibrated and
  operating properly; collects routine and special samples, exchanges samples, and returns to laboratory on
  established schedule;
- 4. Maintains electromechanical equipment associated with radiation detectors, gamma calibration range, tritium enrichment, and low-level trace chemistry laboratory;
- Performs or monitors decontamination of personnel and equipment and the operation of the mobile decontamination unit; performs physical checks and maintains records on the location and operating condition of equipment used by the Health Protection Department;
- 6. Understands, communicates, and establishes complex health physics requirements at radiological work areas; assists with instruction and training of junior Radiation Protection Technicians;
- 7. Assists in production and modification of maps in support of Nevada Test Site activities;
- 8. Maintains records of sampling activities, radiation surveys, and other job activities; completes and files appropriate forms and log books as required; completes daily, weekly, monthly, and yearly reports as required;
- 9. Performs maintenance, repair, and calibration of a variety of air sampling devices; inventories and orders spare parts; and assures that all calibration and test equipment has current certification;
- Adheres to all Company EEO, affirmative action, environmental, health, safety, quality assurance, and security programs;
- 11. Performs related work as required.

# Radiological Control Technician IV

## **ESSENTIAL JOB FUNCTIONS**

Constantly = Over 2/3 of time Frequently = 1/3 - 2/3 of time Occasionally = Less than 1/3 of time

### **Physical**

- Frequent standing/walking on all types of terrain and surfaces above and under ground up to four miles per day;
- 2. Occasional sitting while operating motor vehicle between inspection sites or completing paperwork at desk;
- 3. Frequent lifting/carrying 1 to 50 pounds of records, sample boxes, testing equipment, or tools; occasionally up to 100 pounds of heavier equipment with assistance of another person for distances of 1 to 25 feet;
- 4. Occasional pushing/pulling exerting force up to 50 pounds while loading and unloading laundry from industrial washers;
- Occasional-to-frequent climbing stairs, ladders, scaffolding, on towers, or drill rigs to reach areas to be inspected at heights up to 50 feet; uses man lift and safety harnesses when appropriate;
- 6. Frequent bending/twisting at waist/knees/neck while monitoring/inspecting work, operating motor vehicle under normal driving activities, and performing decontamination duties;
- 7. May kneel/crouch/crawl while inspecting lower areas, crawl spaces, tunnels, or drill rigs/towers;
- Constant use of both hands/arms in reaching/handling/grasping/fingering while operating motor vehicle, using testing equipment, collecting samples, performing decontamination activities, and completing paperwork;
- 9. Constant use of sight/hearing abilities in conducting research, inspecting sites, and maintaining a safe work environment;
- Frequent use of speech abilities in communication with employees, coworkers, and supervisors while
  inspecting, conducting surveys, and issuing and providing instruction on equipment, both in person and over
  the telephone;
- 11. Must be able to be fitted with and qualify on self-contained breathing apparatus and respirator.

- Constant mental alertness, attention to detail, and high degree of accuracy required in inspecting; testing; disposing of radioactive waste; monitoring radiological sites; and ensuring that all specifications, procedures, and regulations are met;
- Must be able to work independently without direct supervision, use judgement, follow oral and written
  procedures, make decisions, and apply problem-solving skills, expertise, and experience in completion of all
  duties;
- 3. Must be able to plan/organize work to ensure all assignments are completed efficiently and within required time frame;
- Must possess good memory and thorough knowledge of health and environmental regulations and be able to keep up with changes in same;
- Must possess good oral/written communication and interpersonal skills in order to deal with all types of craftspeople, scientists, engineers, supervisors, and outside agencies in a professional, effective, and clear manner;

## Radiological Control Technician IV

- Must possess good reading and mathematical skills through algebra in order to read and understand technical specifications, procedures, and regulations and calculate decay rates;
- 7. Must be able to record data accurately and complete logs, reports, and other written information;
- Must be able to deal with constant pressure from deadlines, frequent interruptions, multiple priorities, responding to emergencies/immediate requests, and working around hazardous/radioactive conditions;
- Must possess good mechanical aptitude and spatial reasoning ability in maintaining equipment and determining best storage configuration when disposing of radioactive waste packages;
- 10. Must possess excellent interpersonal/leadership skills in order to provide guidance and training to other technicians in an effective, positive, and professional manner.

# WORKING CONDITIONS AND EQUIPMENT USED

Work is performed 20 percent indoors and 80 percent outdoors in vehicles, tunnels, mines, on drilling rigs, towers, and in desert, exposed to all types of weather conditions and driving on all types of road conditions.

Tools & Equipment Used: Radiological testing/counting equipment, industrial washers/dryers, high-pressure washing equipment, sledgehammer, post driver, overhead cranes, radios, motor vehicle, personal computer, and telephone. Safety equipment including, but not limited to, safety shoes, hearing protection, safety glasses, decontamination gear, wet gear, safety harness, back support belts, and respirators.

## REQUIRED TRAINING AND WORK EXPERIENCE

High school diploma or equivalent and any combination of training and experience equivalent to two years of college course work with an emphasis in math and science is required. Additionally, six years of work experience in radiological monitoring.

### OTHER SPECIAL QUALIFICATIONS

Must possess National Registry of Radiological Technicians certification. Valid driver's license required. Must be able to obtain "Q" clearance. Basic computer (PC) skills required. Must be able to be fitted with and qualify on respirator.