NEW ENVIRONMENT, INC.

EMERGENCY RESPONSE TECHNICIAN HAZARDOUS WASTE WORKER CERTIFICATION COURSE OUTLINE

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SUBJECT: INTRODUCTION TO COURSE AND HISTORY OF THE LAWS

TRAINING AIDS: STUDENT WORKBOOK

TIME OF LESSON: 45 Minutes

OBJECTIVES: To explain the training approach of the 40-hour course to the

students and what is to be accomplished. To give students an

understanding of the laws which shape the environmental industry.

EX: COMPLETING THE PREREQUISITE TEST, COMPLETING THE

REQUIRED DOCUMENTATION, DISCUSSING OSHA

REGULATION CLEAN AIR ACT, CLEAN WATER ACT, RCRA,

CERCLA, AND 29CFR 1910.120(e)(q).

SUBJECT: POISONS VIDEO EXERCISE

TRAINING AIDS: STUDENT WORKBOOK, VI DEO

TIME OF LESSON: 60 Minutes

OBJECTIVES: To give students an understanding of what poisons are and the

hazards that they cause.

EX: STUDENTS WILL ANSWER QUESTIONS WHILE WATCHING

THE VIDEO.

SUBJECT: CHEMICAL EXPOSURES

TRAINING AIDS: STUDENT WORKBOOK

TIME OF LESSON: 20 Minutes

OBJECTIVES: Explain various hazards associated with working around chemicals.

I dentify exposure routes into the body, general protection used to safeguard those routes, and the different categories of exposure.

EX: INHALATION, SKIN ABSORPTION, INGESTION, AND

INJECTION.

SUBJECT: HAZARD ASSESSMENT

TRAINING AIDS: STUDENT WORKBOOK

TIME OF LESSON: 30 Minutes

OBJECTIVES: Review terminology and information found on documents associated

with hazardous substances and its application.

EX: PERMISSIBLE EXPOSURE LIMIT, THRESHOLD LIMIT VALUE,

RECOMMENDED EXPOSURE LIMIT, AND ODOR THRESHOLD.

SUBJECT: FIRE AND EXPLOSION

TRAINING AIDS: STUDENT WORKBOOK

TIME OF LESSON: 25 Minutes

OBJECTIVES: To make students aware of how fires and explosions can occur, to

introduce methods of measurements, fire classes, and ignition

sources.

EX: LOWER EXPLOSION LIMIT, UPPER EXPLOSION LIMIT,

NFPA 704 MARKING SYSTEM.

SUBJECT: REFERENCE MATERIAL OVERVIEW/EXERCISE

TRAINING AIDS: STUDENT WORKBOOK, SDS, NAERGB, NI OSH POCKET GUI DE

TIME OF LESSON: 70 Minutes

OBJECTIVES: To give students a better understanding of available reference

sources that may be utilized to locate information on different

chemicals.

EX: ANSWER TWENTY QUESTIONS USING THE REFERENCE

SOURCES: WHAT IS THE LEL? WHAT RESPIRATOR WOULD

BE USED?

SUBJECT: OXIDIZER VIDEO EXERCISE

TRAINING AIDS: STUDENT WORKBOOK

TIME OF LESSON: 55 Minutes

OBJECTIVES: To give students an understanding of what oxidizers are and the

hazards that they present.

EX: STUDENTS WILL ANSWER QUESTIONS WHILE WATCHING

THE VIDEO.

SUBJECT: OXYGEN DEFICIENCY AND VIDEO

TRAINING AIDS: STUDENT WORKBOOK

TIME OF LESSON: 15 Minutes and 25 Minutes

OBJECTIVES: To aid students in understanding oxygen deficiency as an atmospheric

hazard and in the identification of signs and symptoms associated

with exposure.

EX: COMPONENTS OF BREATHING AIR. CAUSES OF OXYGEN

DEFICIENCY, SIGNS AND SYMPTOMS.

SUBJECT: IONIZING RADIATION

TRAINING AIDS: STUDENT WORKBOOK

TIME OF LESSON: 10 Minutes

OBJECTIVES: To familiarize students with the three types of ionizing radiation,

monitoring, and measurement methods.

EX: ALPHA PARTICLES, BETA PARTICLES, AND GAMMA

RADIATION.

SUBJECT: POTENTIAL SITE HAZARDS AND VIDEO

TRAINING AIDS: STUDENT WORKBOOK

TIME OF LESSON: 20 Minutes and 25 Minutes

OBJECTIVES: To familiarize students with the different types of hazards they

could come in contact with on a site.

EX: BIOLOGICAL HAZARDS, SAFETY HAZARDS, AND

ELECTRICAL HAZARDS.

SUBJECT: HEAT STRESS

TRAINING AIDS: STUDENT WORKBOOK

TIME OF LESSON: 30 Minutes

OBJECTIVES: To alert students to they're susceptibility to heat stress when

wearing personal protective clothing. Present methods to control

potential exposure.

EX: FOUR FORMS OF HEAT STRESS, MONITORING,

ACCLIMATIZATION

SUBJECT: COLD AND NOISE EXPOSURE

TRAINING AIDS: STUDENT WORKBOOK

TIME OF LESSON: 20 Minutes

OBJECTIVES: To identify the effects of cold and noise exposure and show

safeguards to protect against them.

EX: FROSTBITE, SAFETY EQUIPMENT LIMITATIONS, AND

HEARING LOSS

SUBJECT: OSHA STANDARD 1910.146 AND VIDEO

TRAINING AIDS: STUDENT WORKBOOK

TIME OF LESSON: 20 Minutes and 30 Minutes

OBJECTIVES: General review of confined space identification and entry procedures

and cover requirements.

EX: REQUIREMENTS, EXAMPLES: PIPELINES, SEWERS, ETC.

SUBJECT: PLANNING AND ORGANIZING AND VIDEO

TRAINING AIDS: STUDENT WORKBOOK

TIME OF LESSON: 30 Minutes and 32 Minutes

OBJECTIVES: To explain the four aspects of planning and organizing a hazardous

waste site. Familiarize students with the information found in a

Health and Safety Plan.

EX: ORGANIZATIONAL STRUCTURE, WORK PLAN, SAFETY

MEETINGS AND INSPECTIONS.

SUBJECT: COLLECTING HAZARD AND RESPONSE INFORMATION

TRAINING AIDS: STUDENT WORKBOOK and NAERGB

TIME OF LESSON: 50 Minutes

OBJECTIVES: To give students an understanding of how to use reference sources to

find information in a timely manner.

EX: ANSWER SEVENTEEN QUESTIONS SUCH AS: WHAT ARE

THE FIRE HAZARDS FOR A MATERIAL PLACARD

CORROSIVE?

SUBJECT: TRAINING

TRAINING AIDS: STUDENT WORKBOOK

TIME OF LESSON: 10 Minutes

OBJECTIVES: To ensure students recognize and understand the importance of

training, and its role in avoiding potential hazards to health and

safety associated with hazardous waste sites.

EX: TRAINING OBJECTIVES, RECORDING TRAINING

SUBJECT: MEDICAL MONITORING

TRAINING AIDS: STUDENT WORKBOOK

TIME OF LESSON: 20 Minutes

OBJECTIVES: Familiarize students with the purpose and importance of having a

medical program while working with or around hazardous materials.

EX: PRE-EMPLOYMENT SCREENING, PERIODIC MEDICAL EXAM,

SIGN AND SYMPTOMS.

SUBJECT: SITE CHARACTERIZATION AND VIDEO

TRAINING AIDS: STUDENT WORKBOOK

TIME OF LESSON: 20 Minutes and 30 Minutes

OBJECTIVES: To familiarize students with the procedures taken when a new

hazardous waste site is discovered.

EX: OFF-SITE, ON-SITE CHARACTERIZATION,

DOCUMENTATION.

SUBJECT: AIR MONITORING AND VIDEO

TRAINING AIDS: STUDENT WORKBOOK and EQUIPMENT

TIME OF LESSON: 30 Minutes and 25 Minutes

OBJECTIVES: To explain the purpose of air monitoring and familiarize students with

air Monitoring devices.

EX: QUANTITATIVE SURVEY INSTRUMENTS, QUALITATIVE

SURVEY INSTRUMENTS.

SUBJECT: SELF-CONTAINED BREATHING APPARATUS

TRAINING AIDS: STUDENT WORKBOOK and SCBA EQUIPMENT

TIME OF LESSON: 20 Minutes

OBJECTIVES: To explain the types, parts, uses, limitations, and selection of a

Self-Contained Breathing Apparatus (SCBA).

EX: ADVANTAGES, DISADVANTAGES, AND QUESTIONS TO

CONSIDER BEFORE USE.

SUBJECT: SUPPLIED-AIR RESPIRATOR AND VIDEO

TRAINING AIDS: STUDENT WORKBOOK and SAR EQUIPMENT

TIME OF LESSON: 20 Minutes and 25 Minutes

OBJECTIVES: To explain the types, parts, uses, limitations, and selection of a

Supplied-Air Respirator (SAR).

EX: ADVANTAGES, DISADVANTAGES, AND QUESTIONS TO

CONSIDER BEFORE USE.

SUBJECT: AIR-PURIFYING RESPIRATOR AND VIDEO

TRAINING AIDS: STUDENT WORKBOOK and APR EQUIPMENT

TIME OF LESSON: 20 Minutes and 25 Minutes

OBJECTIVES: To explain the types, parts, uses, limitations, and selection of an

Air-Purifying Respirator (APR).

EX: ADVANTAGES, DISADVANTAGES, AND QUESTIONS TO

CONSIDER BEFORE USE.

SUBJECT: CHEMICAL PROTECTIVE CLOTHING

TRAINING AIDS: STUDENT WORKBOOK and DIFFERENT TYPES OF CLOTHING

TIME OF LESSON: 35 Minutes

OBJECTIVES: To introduce chemical protective clothing, types, selection, and

ensembles to students.

EX: LEVEL A, LEVEL B, LEVEL C

SUBJECT: SITE CONTROL

TRAINING AIDS: STUDENT WORKBOOK

TIME OF LESSON: 35 Minutes

OBJECTIVES: To introduce students to the basic components of a program to

control the activities and movement of people and equipment at a

hazardous waste site.

EX: PURPOSE, SITE MAP, SITE PREPARATION, AND THE

ESTABLISHMENT OF WORK ZONES.

SUBJECT: DECONTAMINATION

TRAINING AIDS: STUDENT WORKBOOK

TIME OF LESSON: 35 Minutes

OBJECTIVES: To introduce students to the types of contamination that workers may

encounter, the factors that influence the extent of contamination, the methods for preventing or reducing contamination, and the general guidelines for designing and selecting decontamination

procedures.

EX: DECONTAMINATION EQUIPMENT, PHYSICAL REMOVAL, and

CHEMICAL REMOVAL, POSE A DIRECT HEALTH HAZARD.

SUBJECT: DRUMS AND CONTAINERS AND VIDEO

TRAINING AIDS: STUDENT WORKBOOK and VI DEO

TIME OF LESSON: 30 Minutes and 30 Minutes

OBJECTIVES: To familiarize students with the practices and procedures for safe

handling of drums and other hazardous waste containers.

EX: CONFIGURATION OF THE DRUMHEAD, RESPOND TO ANY

OBVIOUS PROBLEMS, OPENING PRECAUTIONS.

SUBJECT: SITE EMERGENCIES AND VIDEO

TRAINING AIDS: STUDENT WORKBOOK and VI DEO

TIME OF LESSON: 30 Minutes and 37 Minutes

OBJECTIVES: To give students an understanding of important factors to consider

when planning for and responding to emergencies.

EX: ELEMENTS OF A CONTINGENCY PLAN: PERSONNEL,

COMMUNICATION.

SUBJECT: HAZARD COMMUNICATION GLOSSARY

TRAINING AIDS: STUDENT WORKBOOK

TIME OF LESSON: 25 Minutes

OBJECTIVES: To give students definitions of some of the most common terms

encountered in the HazMat industry.

EX: CARCINOGEN, EXPOSURE, IRRITANT, REACTIVITY, AND

VOLATILE.

SUBJECT: HOMEWORK REVIEW AND FINAL TEST

TRAINING AIDS: STUDENT HOMEWORK BOOK

TIME OF LESSON: 30 Minutes

OBJECTIVES: To ensure students understanding of material presented and to

provide for a question and answer session. To administer the test

after course review.

EX: HOMEWORK WILL TAKE THE STUDENTS SIX TO EIGHT

HOUR TO COMPLETE. ALSO USED AS DOCUMENTATION FOR

1910.12 (e)(9)

SUBJECT: HANDS ON TRAINING

TRAINING AIDS: EMPLOYER SITE SPECIFIC EQUIPMENT (SCBA-SAR-CLOTHING)

TIME OF LESSON: Instructor's Discretion

OBJECTIVES: To ensure students know how to select and don different levels of

protection and to use different types of equipment.

EX: DRESS OUT IN LEVEL A, B, AND C SUITS, USE AIR

MONITORING EQUIPMENT ETC.

SUBJECT: COURSE REVIEW AND FINAL TEST

TRAINING AIDS: STUDENT WORKBOOK and 50 QUESTION TEST

TIME OF LESSON: 60 Minutes

OBJECTIVES: To ensure students understanding of material presented and to

provide for a question-and-answer session. To administer the test

after course review.

EX: MULTIPLE CHOICE, TRUE/FALSE, FILL IN THE BLANK

UPON COMPLETION OF THE COURSE ALL STUDENTS WILL RECEIVE A CERTIFICATION OF COMPLETION.