

NEW ENVIRONMENT, INC.

EMERGENCY RESPONSE TECHNICIAN HAZARDOUS WASTE WORKER CERTIFICATION COURSE OUTLINE

© 1999 New Environment, Inc.
All rights reserved

- 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, VIDEO
- 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. Identify 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, MSDS, NAERGB, NI OSH POCKET GUIDE

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: PIPELINS, 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 it's 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 VIDEO

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 VIDEO

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:	Instructors 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.