EMERGENCY FIELD KITS FOR NRDAs

APPENDIX F

Table of Contents

F.1 Introduction	F-1
F.2 Standard Emergency Field Kit	F-1
F.3 Optional Equipment for Standard Kits	
F.4 Specialized Survey Kits	
F.4.a Shoreline Survey Kit	
F.4 b Water Sampling Kit	
F.4.c Aquatic Biological Sampling Kit	

F.1 Introduction

Because of the unplanned nature of incidents, it is important that trustees have emergency field kits ready for use at all times. These kits should contain the equipment and supplies needed to implement preassessment activities. The kits should contain the minimum items needed to document effects and implement data collection. There may be different versions of emergency field kits for the different types of natural resources and receiving environments that may be encountered.

F.2 Standard Emergency Field Kit

The standard kit contains the equipment and supplies most likely needed for preassessment activities at most incidents. At the time of an incident, nautical charts, topographic maps, and road maps for the incident site are added.

- 92-quart cooler with side handles (can be used as carrying case for the kit)
- Day pack
- Box-type plastic clipboards
- Waterproof logbooks with numbered pages
- Expanding file folders, containing the following paper/forms
 - Original and copies of field forms to be used
 - Waterproof paper for copying field forms
 - ♦ Chain-of-custody forms
 - ♦ Activities checklist
 - ♦ Organization phone lists
 - ♦ QA protocols for selected sampling methods
 - ♦ Sample tags and labels
 - Field estimator guides for percent cover, grain size, etc.

- Camera: 35-mm, SLR with 50-mm lens, UV and polarizing filters, carrying case
- Film: five rolls each of ASA 64, 100, and 400 slide film; color print film
- Photoscales: 15 cm and 30 cm
- Mechanical pencils with replacement lead and erasers
- Waterproof ink markers
- Color pencil and marker sets
- Pads of paper
- Ruler and dividers
- Large, heavy rubber bands
- Various types of tape: masking, cellophane, strapping, electrical, and duct tape
- Plastic bags: various sizes of Ziploc bags; whirl-pak bags; large trash bags
- Calculator
- Micro-cassette tape recorder, with extra tapes and batteries
- Hand lens
- Tally meter
- Flashlight with extra batteries
- Binoculars
- Compass

- Refractometer
- Thermometer
- Rubber gloves, both surgical and heavy-duty vinyl
- Ear plugs
- Tear-off towelettes
- First-aid kit
- Field pocket knife
- Folding shovel
- Wooden tongue depressors in small packs
- Roll of paper towels
- Disposable plastic scoops and stainless steel spatulas
- Precleaned aluminum foil and extra rolls
- Evidence tape
- Sample jars: precleaned glass jars with teflon lids
 - ♦ 100-ml: box of 24
 - ♦ 500-ml: box of 12
 - ♦ 1,000-ml: box of 12
 - ♦ 1-gallon bottles: box of 4, with shipping containers

- Prepaid overnight carrier shipping forms
- Field guide books (birds, fish, invertebrates, mammals, plants, macroalgae, etc.)

F.3 Optional Equipment for Standard Kits

In addition to the items listed above, there are larger and more expensive pieces of equipment that can be extremely valuable on-scene. It is usually possible to lease these from local vendors at the site of the incident or ship them on-scene once the need arises. These include:

- Pager for each team member, assuming that there is coverage for the discharge site
- Portable cellular phone, assuming that there is coverage for the discharge site
- All-weather video camera, with extra batteries, extra tapes, and cigarette lighter recharger option
- Portable computer with FAX modem and extra disks
- Portable printer
- Global Positioning System (GPS) hand-held unit

F.4 Specialized Survey Kits

In addition to the items listed above, special kits can be developed for different types of surveys.

F.4.a Shoreline Survey Kit

The following materials are recommended for shoreline surveys.

- Profile rod set
- 50-m fiberglass tape measure
- Hand level

- Flagging tape
- Cement trowel for scraping the surface of trenches
- Precleaned aluminum core barrels
- Grain-size estimators
- $0.25 \text{ m}^2 \text{ and } 1.0 \text{ m}^2 \text{ quadrats}$

F.4.b Water Sampling Kit

Water samples need to be kept cold and dark immediately after collection to minimize sample degradation. Samples should be collected directly in the sample jar rather than transferred from the collecting bottle into the sample jar.

- Water-sample holder to collect water samples directly in the sampling jar
- Additional boxes of precleaned glass jars (1,000-ml and 1-gallon)
- Teflon squeeze bottle for rinsing solvents
- Rinsing solvents for cleaning sample holder
- Preserving chemicals, if needed
- Solvent waste container
- Alconox cleaner soap
- Scrubbing brush
- Collapsible containers
- Salinity, temperature, and conductivity meter

F.4.c Aquatic Biological Sampling Kit

If the kit is to be shipped by a commercial carrier, the need for special packages or volume limits for fixatives and preservatives should be determined.

- Small dip net
- Small grab or dredge (e.g., Ponar grab, Ekman dredge)
- Small beach seine
- Kick net
- Small plankton net with several replacement nets and collecting bottles
- Sieve bucket
- Wash bottle and graduated cylinder
- Collapsible plastic containers
- Fish measuring board
- Nalgene sample bottles, various sizes
- Identification keys (e.g., invertebrates, fish)
- Field balance
- Fixatives
- Preservatives
- Sorting pans with white bottoms
- Field forms

- Meter sticks
- Photoscales
- $0.25 \text{ m}^2 \text{ and } 1.0 \text{ m}^2 \text{ quadrats}$
- Sample vials, various sizes
- Sample labels
- Permanent markers
- Random number table
- Magnifier