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Explosives Classifications Tracking System User Manual

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Introduction

The Explosives Classification Tracking System (ECTS) presents information and data for U.S. Department of Energy (DOE) explosives classifications of interest to EM-561, Transportation Management Division, other DOE facilities, and contractors. It is intended to be useful to the scientist, engineer, and transportation professional, who needs to classify or transport explosives.

This release of the ECTS reflects upgrading of the software which provides the user with an environment that makes comprehensive retrieval of explosives related information quick and easy. Quarterly updates will be provided to the ECTS throughout its development in FY 1993 and thereafter.

The ECTS is a stand alone, single user system that contains unclassified, publicly available information, and administrative information (contractor names, product descriptions, transmittal dates, EX-Numbers, etc.) produced from explosive classification reviews performed by EM-561. It is a tool that provides consolidated information from many sources for non-decisional engineering and shipping activities.

The data are the most up-to-date and accurate available to the knowledge of the system developer. The system is designed to permit easy revision and updating as new information and data become available. Thus, additions and corrections are welcomed by the developer.

The sources of information include the Federal Register; 49 CFR Parts 171 - 180; international regulations; DOE/EV/06194, DOE "Explosives Safety Manual"; letters, and personal communications. References are listed in Section 9. **THE USER IS URGED TO CONSULT THE SOURCE DOCUMENT TO PROPERLY EVALUATE AND INTERPRET THE DATA PROVIDED IN THE ECTS.**

The ECTS consists of four primary modules including

ECTS	explosives classification data for specific explosives filed by the DOE with the DOT
IHC	interim hazard classifications data for specific explosives being examined, classified, and approved for transportation on an interim basis under the authority of DOT-E 10536
Contacts	a compilation explosives contacts including laboratory, contractor, and DOE personnel having defined responsibilities in the area of explosives classification or transportation
Information	general information including hazard communication, packing methods, definitions, emergency response material, and DOE held exemptions

This user manual is intended to help the user install, understand, and operate the system so that the desired information may be readily obtained, reviewed, and reported.

What's Changed...

The data in this revision of the ECTS remains essentially unchanged to the user. Behind the screen, the ECTS has taken advantage of Paradox® enhancements, including the use of memo fields, to greatly enhance the functionality of the overall system and to improve the user interface. Highlights of these changes are as follows:

- ✓ The user will find more information available within each module without the need to change modules to obtain the information as in the past.

- ✓ Additional definitions of terms have been incorporated from the 49 CFR and the DOE/EV/06194, "DOE Explosives Safety Manual."
- ✓ Support for use of a pointing device (mouse) has been added for greater performance when maneuvering in a screen.
- ✓ Expanded reporting capabilities, now allow you to print information to a file for subsequent incorporation into other documentation.
- ✓ The "Help" options have been expanded to provide more information concerning each module, and in addition, more information concerning key usage within Paradox®.

These changes have resulted in a faster, more comprehensive ECTS.

Installation

System Requirements

ECTS runs under Paradox 4.0 Runtime® so the system requirements are the same as those for Paradox®4.0. We have found the following minimum requirements to work reliably:

- An IBM or 100% compatible 386 SX personal computer.
- At least one hard disk drive and one high density floppy disk drive. There must be a minimum of 10 megabytes of available space.
- Have at least 2 MB bytes of RAM (4 MB of extended/expanded memory recommended)
- Use DOS 3.31 or higher.
- An HP LaserJet® or Epson® compatible printer with dip switches set to allow printing of extended characters. Note: the Laserjet should be a model that supports compressed, landscape printing.
- Have a compatible monochrome, color, EGA, or VGA monitor, with adapter. A color VGA monitor is recommended. Color combinations may not be favorable with monochrome or CGA monitors.

Please refer to your computer user manual for information concerning the hardware makeup of your machine. Paradox 4.0 Runtime® does not run reliably on a 286 class machine. Older models often cannot run Paradox 4.0 Runtime® at all because the machine BIOS will not support it. You will find that 286 machines that are able to run Paradox 4.0 Runtime® will do so very slowly.

The installation process

The installation of ECTS happens in two parts. The first part will install Paradox 4.0 Runtime® on your machine. The second part will use Runtime to install the ECTS application.

STEP 1: Installing Paradox 4.0 Runtime®.

Sublicense Agreement:

By completing the installation of Paradox 4.0 Runtime you, the user, are indicating your agreement to the following:

- You acknowledge that Paradox Runtime is a trademark of and owned by Borland International, Inc. and may not be copied.
- You will look solely to the developer of this program (listed in the Technical Support section) and not Borland for all support services.
- Any damages resulting from the use of this system will have recourse to the developer.

Your disk set should include two Paradox 4.0 Runtime® disks. Follow the steps below to install Paradox Runtime®.

- 1) Place the Paradox 4.0 Runtime® Disk #1 into the appropriate drive (either A: or B:).
- 2) From the DOS prompt, change to the installation drive as the default by typing the name of the drive letter.

Example:

C:\> A: <Enter>

Your prompt should change to reflect the new drive, in this case
A:\>

- 3) From the installation drive prompt type the command

INSTALL <Enter>

You should see the following screen.

Example:

You may change the install directory to D:\PDOXRUN or any other valid drive letter (other than A: or B:) but you must leave the directory name as PDOXRUN.

Paradox 4.02 Runtime Installation Utility	
Paradox 4.02 Runtime directory : C:\PDOXRUN	
Country Group	: United States
Sort Order	: ASCII
Description	
Press ENTER to change the directory in which to install Paradox 4.02 Runtime.	
F2-DO-IT! ENTER-Change F1-Help ESC-Previous screen	

Then press <F2> to continue to the next screen.

8) Paradox® may display a message indicating that your CONFIG.SYS file may not have allocated enough FILES and BUFFER space. On the following screen you may choose whether or not to allow the install utility to modify your CONFIG.SYS or to skip to the next step. If you let the install utility make the modifications for you, you will need to reboot your computer after the installation process is complete for the changes to take affect. If you choose not to make the modifications, be aware the Paradox 4.0 Runtime® may not be able to run on your computer and you may have to make the modifications by hand at a later time.

Paradox 4.02 Runtime Installation Utility	
Paradox 4.02 Runtime directory : C:\PDOXRUN	
Country Sort Ord	<p>The CONFIG.SYS file in the root directory of your C drive does not have an adequate FILES= or BUFFERS= specification.</p> <p>In order to run, Paradox Runtime requires FILES=40 (or more) and BUFFERS=40 (or more).</p> <p>The next menu will ask you if INSTALL should edit CONFIG.SYS for you.</p> <p>Press any key to continue</p>
Press ENTER Runtime.	4.02

Any Key-Continue

Press any key to continue to the next screen and answer the CONFIG.SYS modification question accordingly.

9) Now you should see that Paradox 4.0 Runtime® is copying and decompressing files to your workstation. After a minute or two you will be prompted to insert the second installation disk. Remove the first disk from the installation drive, insert the second installation disk and press the <Enter> key to continue. The installation program should soon be complete.

10) You may get a note regarding the status of your CONFIG.SYS file. If you made changes to the file then reboot your computer and continue with STEP 2. If you let the program exit without rebooting your computer, you should be back at a DOS prompt indicating your installation drive letter.

Example: A:\>

11) Change the default drive to the drive you installed Paradox 4.0 Runtime®.

Example:

A:\> D: <Enter>

if you installed Runtime on the D: drive.

STEP 2: Installing the ECTS Application.

Once you have successfully installed Paradox 4.0 Runtime® you are ready to install the ECTS application. To do this, change to the drive you installed Paradox Runtime® on (if you are not already there), then change to the PDOXRUN directory. Insert the ECTS 4.0 Installation, Disk 1 into the installation drive (i.e., A:\>). In the PDOXRUN directory type

D:\PDOXRUN> PDOXRUN A:INSTALL

The installation program should handle everything from this point on. There are a few things that need to be done to make the installation successful. **You must install ECTS on the same drive that you installed Paradox 4.0 Runtime®!** ECTS will not run if Runtime and ECTS are not installed on the same drive.

What happens if the installation program finds an EXISTING ECTS application?

If the installation program detects that a prior version of ECTS is installed on the same drive, two things can happen:

- 1) If the existing ECTS version is an older version (i.e. ECTS 3.5, which uses Paradox 3.5 Runtime) it will remove the application from the drive and then continue installing the 4.0 version.
- 2) If the existing ECTS version matches the version about to be installed, the installation will update the existing system with newer files.

Getting started

Acronyms and Notation Used in This Manual

ECTS - Explosives Classification Tracking System. This is used to refer to this system. It is also the name of one of the internal modules

IHC - Interim Hazard Classification.

Module This refers to a functional part of ECTS. The modules contained in this system are ECTS, IHC, CONTACTS, TRANSPORTATION, EMERGENCY RESPONSE, EXEMPTIONS, and DEFINITIONS.

Starting ECTS

The installation procedure created a batch file, ECTS.BAT, in the ECTS directory on the drive you selected to install to. The steps below give an example of how to start ECTS. The examples assume that ECTS is installed on the D: drive and the current drive is C:.

- From DOS, change to the drive where ECTS is installed

Example: C:\> D:

Your DOS prompt should change to indicate that the D: drive is now the current drive.

- Change to the ECTS directory

Example: D:\> CD\ECTS

Your prompt should again change to reflect the new directory.

- Run the ECTS batch file

Example: D:\ECTS> ECTS

Paradox 4.0 Runtime® should now load and the ECTS application should be loaded shortly afterward.

Two pages of disclaimer information will slide onto the screen. As each one appears, be sure to read the information at least once. You may press any key or click the mouse button to make the screen(s) slide away.

The Basics

Navigating Screens

The ECTS system displays fields of information on the screen. Most of the time, having the cursor in one particular field will yield no additional information or strategic advantage. There are essentially two ways to navigate or move around the screen of information: using the keyboard and using the mouse.

Using the keyboard is very similar to other DOS based applications. You may use the arrow keys to move to another field in any direction. You will move to the *closest* field in that direction and will not be traversing the fields in any particular order. Using the <Tab> and <Shift> <Tab> keys will move you to the next and previous fields in order. In order means that movement from field to field happens from left to right and top to bottom just as though you were reading a page.

Using the mouse is easy. Just place the mouse cursor over the field that you want to move to and click the left mouse button once. If the spot where you clicked is a valid field then the cursor will become active in that field. If there is no valid field where you clicked, the current field will remain current.

Making menu selections

Every module has a pull-down menu located across the top of the screen to execute different program functions. This menu can be accessed through the keyboard or the mouse.

To activate the menu with the keyboard, press the <F10> key. The left most menu option will be highlighted. Use the arrow keys to select the desired menu option and press <Enter>. If there is a lower menu level it will be displayed and you can use the arrow keys to make further selections.

To activate the menu with the mouse, simply place the mouse cursor over the desired menu selection and click the left mouse button. If there is a lower menu level it will be displayed and you can place the mouse cursor on the desired selection and again click the left mouse button.

Finding your way around dialog boxes

Dialog boxes, like the one shown below, are very useful tools for ECTS to display and retrieve information from you, the user. Dialog boxes are bordered windows that appear on the screen and usually contain an "Okay", "Accept", or "Cancel" button somewhere toward the bottom of the window.

You can navigate around a dialog box in the same way you do the normal screen (this information is listed in the previous section). To close the dialog, which will result in answering a question or continuing with the current operation, such as printing, you must press one of the push buttons. To press a push button either click the left mouse button when the cursor is on the push button or use the <Tab> key to highlight the push button and press <Enter>. For some dialog boxes, pressing the <Enter> key at any point will accept the dialog box by automatically pressing the "Okay" button. Dialogs that have a "Cancel" button can usually be canceled by pressing the <Esc> key.

Some push buttons on the dialog box may have a letter highlighted. The "P" on the "Print Report" push button above is an example of this. This highlighted letter indicates that you can push that button by holding down the <Alt> key and pressing that letter. So, pressing <Alt> <P> on the above dialog box will result in the pushing of the "Print Report" button.

Paradox® key features

The keystrokes listed in the box below indicate some of the features that are available through Paradox. These features are not specifically built in to ECTS but are a part of Paradox.

Keystrokes	Resulting Function/Operation
Arrows ← → ↑ ↓	Within the form, moves the cursor to the next field in direction specified. If the cursor is in the last field on the form, the next record is displayed. If the cursor is on the first field of the form, the previous record is displayed. If there is no valid field to move to (i.e. no next or previous record) then a beep will sound.

<Tab>	Moves the cursor to the next field on the form following a standard reading flow-- left to right, top to bottom.
<Shift> - <Tab>*	Moves the cursor to the previous field on the form following a standard reading flow-- left to right, top to bottom.
<PgUp> , <PgDn>	PgUp moves to the previous record and the cursor is placed in the last field on the form. PgDn moves to the next record and the cursor is placed in the first field on the form. If there is no previous or next record a beep will sound. In some cases, PgUp and PgDn will move to another page of the form. These cases are clearly identified on the screen.
<Ctrl> - <PgUp>* , <Ctrl> - <PgDn>*	Functions the same as PgUp and PgDn but the cursor is left in the same field.
Home	Moves to the FIRST record in the selection of records being viewed.
End	Moves to the LAST record in the selection of records being viewed.
F2	This will end the viewing session and return you to the previous menu selection.
Ctrl-F	Field View - Pressing Ctrl-F will change you cursor to a block character (█) and allow you to move the cursor within the field. This is handy when changing or entering contact information as it allows you to move within the field so you do not have to retype the entire field to make the change.
F7	FORMVIEW - This will toggle the display of the information between FORM and TABLE view.
Ctrl-Z*	ZOOM - If you wish to search for a specific value in a specific field while you are viewing selected records, you may use this function. <i>See section following for a more detailed description of the use of this feature.</i>
Alt-Z*	ZOOM NEXT - Finds the next occurrence of the string specified in the most recent ZOOM. <i>See previous explanation of Ctrl-Z.</i>
* These keystrokes are executed by pressing the Ctrl, Alt, or Shift in conjunction with (at the same time as) the key following the dash ("-").	

Ctrl-Z – The ZOOM Feature

The ZOOM feature is used when you want to search for something that the Search option in the module does not provide for.

If you are *browsing* through the explosive classification information and you wanted to find a record in which the old Proper Shipping Name (PSN) contained the word "Fuze" you would do the following: (Note that the PSN (old) is used here because the Search menu has an option for searching for PSN under HM-181 classification)

- 1) Using the arrow keys, move the cursor to the field labelled "PSN (old) : ".
- 2) Press Ctrl-Z to execute the ZOOM function. You will see the ZOOM dialog box appear on the screen. You can type in the value you wish to search for and press <Enter> or use the

mouse and click the "OK" button. Press <Esc> or the "Cancel" button to cancel the operation

- 3) Type "..Fuze.." (not including the quotes) and press the <Enter> key

Paradox® will now search through the records from the current record until it reaches the last record or it finds a match. If a match is found, the record will be displayed, the field will blink a few times, and you can continue viewing as normal. If no match was found, a message will be displayed that says

Match not found

Pressing <Alt>-<Z> (ZOOM NEXT) will continue the search for the next record that matches the value or pattern entered.

Using Wildcards (.. and @) in Search Specifications

The example above used a *pattern* in the search specification. Patterns are made up of characters and *wildcard operators* and allow you to base a search on an incomplete description (or pattern) of what you are looking for. There are two wildcard operators that Paradox® will use in a pattern search specification. They are the .. and @ operators.

The .. operator stands for any series of characters, including no characters at all and the space character. So, for the example shown above, the pattern ..Fuze.. specifies that the string must contain the word "Fuze" in it somewhere but the rest of the string can be anything or nothing. Thus, the string "Detonating Fuze, Class C Explosive" would match as would "Detonating Fuze, Class A Explosives" and "Fuze" alone.

As another example, say you were searching for the last name "Moriarty" but you were not sure if it is spelled "Morierty" or "Moriarty", but you do know that it ends with a "y". You could enter the pattern M..y and any last name beginning with an "M" and ending with a "y" will be a match.

The @ operator works much like the .. operator except that it only stands for a *single character* whereas the .. operator can stand for a series of characters.

ECTS

"ECTS" provides classification status, shipping, packaging, and emergency response information for a specific classification. "ECTS" should be used when information specific to an explosives classification is being sought. Several features are provided to help you locate the classification information you desire.

Search Find Next Reports View More View Status Info Help Return

Explosives Classification Information

Ops Office: Contractor: EX-8109045A
 Product Desc: C3376
 IDN: C3376 HN-181 PSN: Fuze Deionating
 Special Provisions: 116
 Packaging Exceptions: 38
 Packing Methods: E-137
 Class/Div: F-5 Pkg Group: 116
 Label: EXPLOSIVE-1-5
 IATA Pkg: 155 (155) ICAO Pkg: 155 (155) IN Pkg: E137
 Notes:
 PSN (old): Deionating Fuze Class C Explosive
 Class: Class C Explosives Type
 Pkg Ref: 173 113
 CAA: 11
 Emergency Response Guide No: 50
 Needs resolution of description, type, serial

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Help F7 Table Ctrl-PgUp Prev Ctrl-PgDn Next Alt-F9 CoEdit Main

Search

You can search for specific information within the ECTS module. The search criteria is specified in one of two ways-- the first is a selection list and the second is by allowing you to enter the search criteria yourself. The list below shows what fields can be searched from the Search menu and the related method each uses for specifying the criteria.

Field	Criteria specification
Contractor	selection list
Ops Office	selection list
EX-Number	user entered
PSN	selection list
Description	user entered

The figures below give an example of each selection criteria method.

Find Next

You can use this menu selection to repeat the previous Search command and find the next match. You must have selected a Search criteria prior to using this function.

Reports

Current Summary Report

The "Current Summary Report" outputs the contents of the ECTS screen to printer or file, as selected by the user.

Current Detail Report

The "Current Detailed Report" outputs the contents of the ECTS screen including the text of special provisions, packaging exceptions, packing methods, and comments.

User Specified Report

The User Specified Report allows you to set the report selection criteria. In other words, you can determine which records you would like included in the report. For example, you may wish to print a report for only one contractor, or for only one proper shipping name or description. You may also want to print several records at one time by specifying all of the EX Numbers at once, saving you the time of printing them each individually.

When you select to print a User Specified Report the dialog box shown below appears. This dialog box allows you to enter the selection criteria.

Specifying the Selection Criteria**EX-Number**

You can specify one or more EX-numbers to include in the report. You must type the complete number for the report to run correctly. If you want to print multiple EX-numbers, separate the EX-numbers with the word "OR". For example, if you wanted the report to include EX-9002649 and EX-8109045A, you would enter

EX-9002649 OR EX-8109045A

in the selection box labeled "Ex-number(s)". Note that if you place criteria in the EX-Number selection box, all other criteria will be ignored. This happens because the EX-Number uniquely identifies each record so the rest of the selection criteria is irrelevant.

Ops Office

Click the "Select" button just to the right of the selection box labeled "Ops Office:" to see a list of available Operations Offices. Only those records with the indicated Operations Office will be selected for the report.

Contractor

Click the "Select" button just to the right of the selection box labeled "Contractor:" to see a list of available Contractor to report on. Only those records with the indicated contractor name will be selected for the report. Note that you can combine this selection box with any or all of the other selection boxes (except EX-Number) to specify more detailed selection criteria.

Proper Shipping Name (PSN)

Click the "Select" button just to the right of the selection box labeled "PSN:" to see a list of available PSNs. Only those records with a matching PSN value will be selected for the report. Note that you can combine this selection box with any or all of the other selection boxes (except EX-Number) to specify more detailed selection criteria.

Description

Enter all or part of the description for the records you want included in the report. This is a "contains" type of selection. In other words, if any of the records in the database *contains* what you enter in this selection box anywhere in the product description, it will be included in the report.

Selecting the report type

You can select either a Summary or Detail report. Just click the mouse cursor on the desired selection. If you are using a keyboard press the <Tab> key until the report type section is highlighted. Then use the left and right arrow keys to make the selection.

View More

The ECTS main screen, shown at the beginning of this section has some fields on it that are colored yellow. The yellow color indicates that additional detailed information can be viewed for that item. For example, the field labeled "Special Provisions" on the screen is yellow. If you select "Special Provisions" from the "View More" menu, the text related to the listed Special Provisions is displayed on the screen (see the example shown below). If you are a mouse user, you can simply double-click the mouse cursor on the yellow field and the additional information will be displayed.

The screenshot shows the ECTS main screen with a menu bar at the top: Find, Next, Reports, View More, View Status Info, Help, Return. Below the menu bar, the following fields are displayed:

- Fld Office: Contractor
- Product Desc: MC9346
- ID#: UN0367
- HM: 1.1
- PSN: Fuzes
- Detonating
- Special Provisions: 116
- Packaging Exceptions: 38
- Packing Methods: E-197
- Class/Div: 1.1
- St. Pkg Group: 1.1

A window titled "Special Provisions: 116 for UN0367" is open, displaying the following text:

Special Provision No: 116

Fuzes, detonating may be classed in Division 1.4 if the fuzes do not contain more than 25 g of explosive per fuze and are made and packaged so that they will not cause functioning of other fuzes, explosives or other explosive devices if one of the fuzes detonates in a shipping package or in adjacent packages.

At the bottom of the window, a message reads: "Press F2 or <Esc> or click mouse outside of window to close."

To close the window containing the extra information simply press <Esc> or click the mouse cursor anywhere outside of the window (except for in the pull-down menu area). The list below shows the fields that contain additional information that can be viewed in this manner.

- Special Provision(s)
- Packaging Exception(s)
- Packing Method(s)
- Emergency Response Guide
- Comments/Notes
- Problem Classifications

View Status Info / View Classification Info

Select this option to view status information about the current classification if you are currently viewing the classification information. This menu option toggles depending on which screen you are viewing. The status screen (shown below) contains information about the date the classification was received for review, when the review was completed, and more. There is also a comments field that may contain useful information about the status of the classification.

Explosives Classification Information	
Ops Office:	Contractor
Product:	Dest:
STRT: U.S.	
Initiated Contractor:	Initiated Ops Office:
Review Rec'd Date:	Review Completed Date:
TMD to DOT Date:	DOT Approval Date:
TMD Informs Ops Office:	Turnaround Ops to Ops:
Comments:	

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Help F7 Table Ctrl-PgUp Prev Ctrl-PgDn Next Alt-F9 CoEdit Main

Help

This option allows you to get help on the current module or to view help on the Paradox® keys that are functional.

Return

Selecting this menu option will return you to the previous menu.

IHC

"IHC" provides information on DOE interim hazard classifications granted by the Albuquerque and San Francisco Operations Offices to contractors. Interim hazard classification authority is provided by DOT exemption, DOT-E 10536.

DOT-E 10536 is maintained by the DOE, Transportation Management Division, EM-561, to provide safe, effective, and timely shipments of developmental explosives. This exemption authorizes the DOE to examine, classify, and issue interim hazard classifications on explosives under specific terms and conditions. The exemption was issued November 1, 1991, and the current expiration date is September 30, 1994. The exemption will be kept in timely renewal.

You can search for specific information within the IHC module. The search criteria is specified in one of two ways-- the first is a selection list and the second is by allowing you to enter the search criteria yourself. The list below shows what fields can be searched from the Search menu and the related each uses for specifying the criteria.

<u>Field</u>	<u>Criteria specification</u>
Approval Number	user entered
Contractor	selection list
Ops Office	selection list
PSN	selection list
Description	user entered

Find Next

Reports

The IHC Report is a compilation of the existing interim hazard classifications and can be used to reference expiration dates, shipping information, and approval documentation.

The IHC main screen, shown at the beginning of the this section has some fields on it that are colored yellow. The yellow color indicates that additional detailed information can be viewed for that item. For example, the field labeled "Packing Methods" on the screen is yellow. If you select "Packing Method(s)" from the "View More" menu, the text related to the listed

Packing Methods is displayed on the screen as shown below. If you are a mouse user, you can simply double-click the mouse cursor on the yellow field and the additional information will be displayed.

Find Next Reports View More Help Return

Operations Office: Contractor:

Description: 187/100 Assembly Mod 201A

Drawing/Part No: 250527, 250529

Proper Shipping Name: E-137 Detonating with protective features

UN/NA Number: UN0410

Special Provisions: 116

Packaging Exceptions: 38

Packing Methods: E-137

Packing Methods: E-137 for UN0410

Packing Method No: E-137

Inner Packagings

Receptacles: Fiberglass lined metal drums

Note: Dividing packagings are not allowed for inner packagings

Outer Packagings

Press <F2> or <Esc> or click mouse outside of window to close

To close the window containing the extra information simply press <Esc> or click the mouse cursor anywhere outside of the window (except for in the pull-down menu area). The list below shows the fields that contain additional information that can be viewed in this manner.

Special Provision(s)
 Packaging Exception(s)
 Packing Method(s)
 Comments
 Notes

Help

This option allows you to get help on the current module or to view help on the Paradox® keys that are functional.

Return

Selecting this menu option will return you to the previous menu.

CONTACTS

This module provides telephone numbers and mailing information for persons who have had interest in the classification and transportation of explosives. This table is open to your editing. You may add, delete, and edit the information contained.

Search Edit Mailings Labels Help Return

First Name: Art Last Name: Abbott

Organization: S&D

Contractor: Lawrence Livermore National Laboratory

Street: P.O. Box 808

City: Livermore State: CA ZIP: 94550

Mail Stop:

Operations Office: SAN Area Code:

(Area Code) Prefix-Extension: (510) 486-0000

FAX Extension/Number:

Help F7 Tables Ctrl-P Print Ctrl-PgDn Next Ctrl-PgUp Prev Ctrl-PgUp

Search

The records are sorted according to Last Name but you may use the Search function to quickly locate a name in the table. You will be prompted to enter all or part of the contact's Last Name. If you do not know the exact spelling of the last name you may enter as much of the name as you know and you will be placed in the table as close to a match that can be found.

For example, if you are not sure how to spell "Martinez", just enter "Mart" (or "mart") when asked to enter all or part of the Last name. You will be positioned in the table at the closest match found. So the current record could be "Martain", "Martinez", or something else depending on the entries that exist in your table. Once the search has placed you close to the name you are looking for, simply page up and down to find the exact record.

Edit

This function allows you to add, delete, and modify records as well as undo any inadvertent changes you may have made.

Adding a Record

To add a record to the contacts table simply select "Add" from the "Edit" menu. You will have a blank screen to enter the new information into. Enter all of the information you have and select "Save" from the menu to save the record. Select "Cancel" from the menu to cancel adding this new record.

You may inadvertently add a name and company to the table that already exists. When this happens you will hear a beep and a message stating

Duplicate! Change name or company or Cancel operation

You must change the individual's name or the contractor in some way to make this record unique from all the others in the table. If you do not want to keep this entry select the "Cancel" option from the menu.

Modifying An Existing Record

Occasionally you may need to change the contents of an existing record in the contacts table. To do this, find the record that you want to change. Select "Modify" from the "Edit" menu. Once you have made the desired changes select "Save" from the menu. Select "Cancel" if you wish to cancel the changes you are currently making.

Deleting the Current Record

If you want to remove records from the contacts table, find the record and select "Delete" from the "Edit" menu. You are asked to confirm the delete. If you answer "Yes", the record will be removed from the table.

UNDOing Changes

You can undo that last change you made to the contacts table selecting "Undo" from the "Edit" menu. For example, if you just deleted a record from the table and realized immediately that you deleted the wrong record, "Undo" will bring the record back. Once you exit the contacts module you cannot undo changes made to the table.

Mailing Labels

This function allows you to print mailing labels for selected records in the contacts table. To determine what records are selected for mailing labels refer to the contents of the "Labels" field shown on the form above. If this field is not blank, that record will be included when printing mailing labels.

When you select "Mailing Labels" from the menu you must select to print to a LaserJet®, Epson®, or file. LaserJet® labels are designed to be printed on standard HP92296A labels (30 labels per sheet, 1 x 2 5/8 in. each label). The Epson® labels are intended to be printed on MACTAC paper or some similar type of adhesive paper. The labels will then need to be cut out from the page. Formfeed labels are not supported in this program revision.

If you choose to print the labels to a file to be manipulated by your own word processor, you must specify the name of the file to write to. The figure below show the dialog box where you will specify the name. You can see that the default file name is \ECTS\REPORTS\LABELS.RPT. You may change this name if you wish. Be sure to remember the file name and location so that you can easily retrieve the file with your word processor.

Help

This option allows you to get help on the current module or to view help on the Paradox® keys that are functional.

Return

Selecting this menu option will return you to the previous menu.

INFORMATION

"Information" provides the user with information extracted from Federal and international regulations, DOE orders and manuals, and other reference material related to transportation of explosives. Unlike the "ECTS" module which provides information specific to a classification, "Information" provides

"Transportation" provides shipping and packaging information extracted from 49 CFR and international regulations and consolidates the information on the screen based upon the identification number. Additional information concerning the sources of this material may be found in the appendix.

```

  ID No: NA0006
  Proper Shipping Name: Explosions control devices
  Hazard Class/Division: 1.1B
  Packing Group: 1B
  Hazard Labels: 1.1B, 1.1B
  Special Provisions: 109

  PACKAGING INFORMATION

  Packing Methods: US005
  Packaging Exceptions: 13
  Notes:

  IATA Pkg: Forbidden
  ICAO Pkg: Forbidden
  UN Pkg: Forbidden

```

You can use "Search" to locate specific records in the table. You locate these records based on the UN ID. When you select "Search" you are prompted to enter all or part of the UN ID. Enter as much as you know and the search will locate the closest match. You can the page through to find your specific record of interest.

You can use this menu selection to repeat the previous Search command and find the next match. You must have selected a Search criteria prior to using this function.

The "Transportation Report" outputs to printer or file information associated with the selected identification number in detail including the text of special provisions, packaging exceptions, packing methods, and notes.

View More

The Transportation main screen, shown at the beginning of this section has some fields on it that are colored yellow. The yellow color indicates that additional detailed information can be viewed for that item. For example, the field labeled "Packing Methods" on the screen is yellow. If you select "Packing Method(s)" from the "View More" menu, the text related to the listed Packing Methods is displayed on the screen as shown below. If you are a mouse user, you can simply double-click the mouse cursor on the yellow field and the additional information will be displayed.

Search Find Next Reports View More Help Return

SHIPPING INFORMATION

ID No: NA0006

Proper Shipping Name: Explosive pest control devices

Hazard Class/Div: 1.1E Packing Group: II

Hazard Labels: EXPLOSIVE 1.1E

Special Provisions: 189

Packing Methods: US005 for NA0006

Packing Method No: US005

Inner Packagings

Boxes: Fiberboard boxes, plastic, wood, metal, metal drums or shipping partitions in the outer packaging can be used in place of inner packagings.

Outer Packagings

Press <F2> or <Esc> or click mouse outside of window to close

To close the window containing the extra information simply press <Esc> or click the mouse cursor anywhere outside of the window (except for the pull-down menu area). The list below shows the fields that contain additional information that can be viewed in this manner.

Special Provision(s)
 Packaging Exception(s)
 Packing Method(s)
 Notes

Help

This option allows you to get help on the current module or to view help on the Paradox® keys that are functional.

Return

Selecting this menu option will return you to the previous menu.

EMERGENCY RESPONSE

The 2-digit Emergency Response Guidebook guide number indicates emergency responder information, including fire and explosion hazards, health hazards, emergency action, fire, spill or leak, and first aid instructions.

Back Index Next Guide Print Help Return
Emergency Response Guide 32
<p>FIRE OR EXPLOSION</p> <p>Flammable/combustible material; may be ignited by heat, sparks or flames. May burn rapidly with flame becoming violent.</p> <p>HEALTH HAZARDS</p> <p>Fire may produce irritation or inflammation through contact with burning material to skin and eyes. Runoff from fire control or dilution water may cause pollution.</p> <p>EMERGENCY ACTION</p> <p>Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind; keep out of low areas. Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide limited protection. CALL CHEMTREC AT 1-800-424-9300 FOR EMERGENCY ASSISTANCE. If water pollution occurs, notify the appropriate authorities.</p>
Print Pollute Previous Guide Ctrl-PgDn Next Guide

Use the arrow keys and <PgUp> and <PgDn> to move around in the Emergency Response Guide text.

Prev Guide

Select this function to move the previous guide record in the table. You may also <Ctrl> <PgUp> to move to the previous guide.

Next Guide

Select this function to move the next guide record in the table. You may also <Ctrl> <PgDn> to move to the next guide.

Print

The "Emergency Response Guide Report" prints the current or all emergency response guide selections. This information may be used for attachment to shipping papers.

Help

This option allows you to get help on the current module or to view help on the Paradox® keys that are functional.

Return

Selecting this menu option will return you to the previous menu.

EXEMPTIONS

"Exemptions" provides information that is extracted from the DOT Hazardous Materials Information System. This data includes an exemption summary, authorized modes of transportation, regulations affected, exemption users, renewal status, expiration date, shipping name, hazard class, hazardous material, container type, and container specification. All contents of the HMIS data for an exemption is copied to the record's memo field. The exemption number, status, status date, expiration date, and

type, are all entered into separated record fields for queries. This data is updated prior to each quarterly update.

Search	Previous	Next	Print	Help	Return	Quit
10536	Granted	11/01/91				
3/01/93		Renewal				

Regulation affected: 179.B

Modes: NV RI CV CA

SUMMARY

To ship various kinds of explosive substances and devices with an order in hazard classification to be classified. For no third party conditional, see exemption.

SHIPPING NAME (S)

explosive materials and explosive devices

HAZARDOUS MATERIAL

explosive materials and explosive devices

Class: Explosive A, B, C

DATA: PgUp: Previous PgDn: Next

Use the arrow keys and <PgUp> and <PgDn> to move around in the Emergency Response Guide text.

Search

You can use "Search" to locate specific records in the table. You locate these records based on the Exemption Number. When you select "Search" you are prompted to enter all or part of the Exemption Number. Enter as much as you know and the search will locate the closest match. You can the page through to find your specific record of interest.

Previous

Select this function to move the previous record in the table. You may also <Ctrl> <PgUp> to move to the previous record.

Next

Select this function to move the next record in the table. You may also <Ctrl> <PgDn> to move to the next record.

Print

The "Exemption Report" prints the current or all exemption records to printer or file. This report is not a copy of the exemption, but rather a summary of the vital statistics of the exemption.

Help

This option allows you to get help on the current module or to view help on the Paradox® keys that are functional.

Return

Selecting this menu option will return you to the previous menu.

DEFINITIONS**Explosives Definitions**

This definition module contains descriptions of terms for explosives extracted from 49 CFR 173.59. The terms are provided for information only. They must not be used for purposes of classification or to replace proper shipping names prescribed in 172.101 of the Hazardous Material Table.

Search

The terms defined in this module are sorted in alphabetical order. You can use the "Search" function to enter all or part of a term that you wish to see the definition of. Enter as much as you know and the search will locate the closest match. You can the page through to find your specific record of interest.

Find Next

You can use this menu selection to repeat the previous Search command and find the next match. You must have selected a Search criteria prior to using this function.

Previous Def

Select this function to move the previous record in the table. You may also <Ctrl> <PgUp> to move to the previous record.

Next Def

Select this function to move the next record in the table. You may also <Ctrl> <PgDn> to move to the next record.

View More

The definitions given in this module contain an "Includes" and an "Excludes" section. These sections further clarify the definition of the term. These fields along with the "Definition" field may contain more text than what is shown on the screen. To be able to scroll through the text in these fields, place the cursor in the field of interest and select "View More" from the menu. This will open the field into a scrollable window to allow you to see all of the text.

You can also view more of the text fields by double-clicking them with the mouse or pressing <Ctrl> <F> while in the field of interest.

Press <Esc> or click the mouse pointer outside of the scrollable window (except on the pull-down menu area) to close the window.

Help

This option allows you to get help on the current module or to view help on the Paradox® keys that are functional.

Return

Selecting this menu option will return you to the previous menu.

HM-181 Definitions

The definitions contained in this module are extracted from 49 CFR 171.8, "Definitions and abbreviations."

The terms defined in this module are sorted in alphabetical order. You can use the "Search" function to enter all or part of a term that you wish to see the definition of. Enter as much as you know and the search will locate the closest match. You can the page through to find your specific record of interest.

You can use this menu selection to repeat the previous Search command and find the next match. You must have selected a Search criteria prior to using this function.

Select this function to move the previous record in the table. You may also **<Ctrl> <PgUp>** to move to the previous record.

Select this function to move the next record in the table. You may also <Ctrl> <PgDn> to move to the next record.

This option allows you to get help on the current module or to view help on the Paradox® keys that are functional.

Selecting this menu option will return you to the previous menu.

Safety Definitions

The definitions appearing in this definition module are extracted from the DOE/EV/06194, "DOE Explosives Safety Manual." The definitions are provided for information only. Please refer to the previous section, HM-181 Definitions. The Safety Definition module is just the same as HM-181 Definitions.

APPENDIX A - Making Your Own Reports

If the reports that come with ECTS do not contain the information you would like to see on a report you can design your own report. This requires that you have your own copy of Paradox® 4.0 (not the runtime version).

The tables have all been password protected to insure data integrity. You can gain readonly access to the tables by using the password "reader". You must enter the password in all lower case letters. The table listing below shows what general information is contained in each table. To get the exact table structure, use the {Tools} {Info} {Structure} function to view the structure of the tables.

Table Name	Table Information
ects\tables\heclass.db	Explosive classification information found in the ECTS module.
ects\tables\unclass.db	These are the problem classifications found in the ECTS module. These records do not have an EX-number assigned.
ects\tables\explpkg.db	General UN ID information found in the Information/Transportation module.
ects\tables\ihc.db	Interim Hazard Classification Info
ects\lookup\uninfo.db	Compiled UN ID information table. This table is a non-normalized table that compiles Special Provision, Packing Methods, and Packaging Exception information for each UN ID entry in the explpkg.db table. This is done because Paradox® does not directly support a 1:1:M relation. Refer to the ERD at the end of the section to see how this table relates. Whenever you wish to relate the Special Provision, Packing Methods, and Packaging Exception information to the UN ID (ID No) in EXPLPKG, use this table. the next six listed tables are the normalized tables that this table (UNINFO) is created from. You should not need them for anything if you are using the UNINFO table.
ects\tables\spcprov.db	Contains the Special Provision information compiled in the uninfo.db table.
ects\tables\unspcprv.db	Relational table that supports the 1:M relation between explpkg.db and spcprv.db. This is relation number 3 on the ERD at the end of this section.
ects\tables\packmeth.db	Contains the Packaging method information compiled in the uninfo.db table.
ects\tables\unpkg.db	Relational table that supports the 1:M relation between explpkg.db and packmeth.db. This is relation number 4 on the ERD at the end of this section.
ects\tables\reqexcpt.db	Packaging requirements and exceptions information compiled in the uninfo.db table.
ects\tables\unexcpt.db	Relational table that supports the 1:M relation between explpkg.db and reqexcpt.db. This is relation number 3 on the ERD at the end of this section.

ects\tables\emgrsp.db	Emergency Response Information found in the Emergency Response module.
ects\tables\contacts.db	Contacts information found in the Contacts module.
ects\tables\exmpt.db	Exemption information found in the Exemptions module.

(Refer to the Entity Relation Diagram (ERD) at the end of this section for more information about the relation between the above tables.)

It is out of the scope of this manual to instruct on using interactive Paradox® to query tables. It is assumed that you are already familiar with queries and designing reports.

To design your own report you must first query the desired information out of the ECTS tables. When you have the desired answer table, rename it. Now that the table has a different name you can design a report on that table. Retain the table and the report as the template for the next time you need the same report.

The steps listed below will aid you in designing your own reports from the ECTS tables.

Go to the ECTS directory.

After starting Paradox® 4.0 (interactive version, not Runtime) you will need to change to the ECTS working directory. **DO NOT DELETE ANY FILES FROM ANY OF THE ECTS DIRECTORIES.** You can work from the ECTS directory on the installed drive or you can work from the ECTS\TABLES directory. Use the {Tools} {More} {Directory} option to change the current working directory.

Design the query

Work with the Paradox® Query By Example (QBE) form until you have designed the required query. If you intend to use the query again for other reports you will want to save the report with the {Script} {QuerySave} option.

Save the query definition

To save the current query, select {Script} from the main menu. Then select {QuerySave} from the menu and give the script a name.

Rename the answer table

After you have executed the query you will have an ANSWER table on the workspace. Use the {Rename} command under the {Tools} menu to rename the ANSWER table. You will want to do this because the next time you run a query or exit Paradox, the ANSWER table will be deleted. By saving it with another name you can retain the table contents and more importantly, the report that you design. Be sure to rename the table with a meaningful name. It is also recommended that you store the tables you create for your custom reports in a different directory. This will keep your personal tables separate from the ECTS tables.

Design the report on the newly renamed table

Use the Paradox® Report designer to design a report based on your newly renamed table. Once you are satisfied with the report design you may print your report to the screen, the printer, or to a file.

Using the report design more than once

Sometimes you will want to run another report that will have different contents than a previously designed and saved report, but the structure of the resulting ANSWER table will be the same. This could happen simply by specifying different query conditions but with the same

fields checked off to be included in the report. To use the report spec from an existing table for a new ANSWER table you can simply copy the report spec from the existing table to the new ANSWER and then print the desired report from the ANSWER table. For example, say you have a report saved for a tables called TEST.DB. If you have an answer table with the same structure as TEST.DB you can copy the desired report spec from TEST.DB to ANSWER and then print the report from ANSWER. The steps might look something like these (this is a high level of description):

Query for the desired ANSWER table
{Tools} {Copy} {Report} {DifferentTable}
Type in TEST as the source table
Select the desired report
Type in ANSWER as the target table

Then use the {Report} menu to print the report on the ANSWER table.

ECTS high level Entity Relation Diagram (ERD) (extended Merice notation)

Note: other tables exist but are not involved in this relation. All tables are identified earlier in this section in text format.

Relation 2 is a non-normalized relation between EXPLPKG and UNINFO. The attributes of UNINFO are the compiled attributes from relations 3, 4 and 5 (represented in the circled area). This has been done to facilitate faster lookup response in the ECTS program.

APPENDIX B - Information Sources

This appendix identifies and defines the source of the information presented in the various modules of ECTS.

Classification Information (ECTS)

[Home](#) [Next](#) [Reports](#) [View More](#) [View Status](#) [Info](#) [Help](#) [Return](#)
Explosives Classification Information
 Ops Office: [Contractor](#) [EX-8109045A](#) [Review](#)
 Product Desc: [103](#)
 ID#: [00867](#) HM-181 PSN: [1102](#) Detonating
 Special Provisions: [116](#)
 Packaging Exceptions: [38](#)
 Packing Methods: [E-137](#)
 Class/Div: [41-43](#) Pkg Group: [461](#)
 Label: [EXPLOSIVE](#)
 IATA Pkg: [55-155](#) ICAO Pkg: [155F\(155\)](#) UN Pkg: [E137](#)
 Notes:
 PSN (old): [Detonating](#) Class: [C](#) Explosive
 Class: [Class C](#) Explosive Type:
 Pkg Ref: [079-110](#)
 CAA: [115](#)
 Agency Response Guide: [No. 50](#)
 1 of 424
[Home](#) [F7-Table](#) [Ctrl-F](#) [Ctrl-Prev](#) [Ctrl-PgDn](#) [Next](#) [Alt-F9](#) [CoEdit](#) [Main](#)

Field	Source
Ops Office	Indicates one of two (AL or SF) Operations Offices authorized to approve classifications of explosives for the DOE. Reference DOE 1540.2, Chap XI, 2.b.(3)(a)
Contractor	Indicates the contractor originating the request for classification. In some cases this field is intentionally left blank. Reference DOE 1540.2, Chap XI, 2.b.(3)(a)
EX-#	Indicates the EX-number, which is assigned by the Associate Administrator for Hazardous Materials Safety to identify an explosive which has been filed by DOE. All explosives will be required to have an EX-number after October 1, 1993. Approvals or authorizations issued by the Bureau of Explosives are not valid aft October 1, 1993. Reference 49 CFR 173.56
Review #	Indicates the review number assigned by ECTS administrator at the time the classification is received. Early review numbers were issued to document a transmittal package (multiple classifications). This practice was later change to assigning a review number to each substance or article to be classified for better traceability.
Product Desc	Indicates the basic description, model, or other name commonly associated with the explosive.
ID#	Indicates the identification number assigned to each proper shipping name. Those preceded by the letters "UN" are associated with proper shipping names considered appropriate for international transportation as well as domestic transportation. Those preceded by the letters "NA" are associated with proper shipping names not recognized for international transportation, except to and from Canada. Reference 172.101(e)
HM-181 PSN	Indicates the proper shipping name of the hazardous material shown in Roman print (not italics) in the 49 CFR Hazardous Materials Table as revised by HM-181 acknowledging United Nations nomenclature. Reference 49 CFR 172.101(c)

Field	Source
Special Provisions	Indicates the special provision code applicable to the hazardous material. The meaning and requirements of that special provision are as specified in 49 CFR 172.102.
Packaging Exceptions	Indicates the applicable packaging requirements or exceptions by a numerical and alpha numerical (ex: D1) sequence. The exception or requirement associated with a particular number is explained in this field. Those particular packaging requirements or exceptions that are not found in international regulations are noted with a "D". Reference 49 CFR 176.62(d)
Packing Methods	Indicates which packing methods must be utilized for a particular explosive. The Explosives Table specifies the packing method by a two-step process. Explosives are identified in the first column of the Explosives Table by their identification number. The second column of the Explosives Table specifies the packing method or methods (e.g., E-2) which must be used to pack a particular explosive. The table of packing methods defines the packing methods. The packing methods are prefixed either by the letter "E" (E-2) or "US" (US001). The packing methods prefixed by the letter "E" are those based on the UN Recommendations. The packing methods prefixed by the letters "US" are those that are particular to the United States and are not found in any applicable International Regulations. Reference 49 CFR 173.62(c)
Class/Div	Indicates the classification code for an explosive, which is assigned by the Associate Administrator for Hazardous Materials Safety. It consists of the division number followed by the compatibility group letter. Compatibility group letters are used to specify the controls for the transportation, and storage related thereto, of explosives and to prevent an increase in hazard that might result if certain types of explosives were stored or transported together. Reference 49 CFR 173.52
Pkg Group	Packing group means a grouping according to the degree of danger presented by hazardous materials. Packing Group I indicates great danger; Packing Group II, medium danger; Packing Group III, minor danger. Explosives require Packing Group II packages. 49 CFR 172.101(f)
Label	Indicates the hazard labels required for the material in accordance with the Hazardous Materials Table. Reference 49 CFR 172.101(g) Other labels may be required per 49 CFR 172.400.
IATA Pkg	Indicates which IATA packing instruction which must be utilized for a particular explosive shipment being prepared for shipment by an IATA carrier (similar to the DOT's packing methods). Reference IATA DGR 5.1
ICAO Pkg	Indicates which ICAO packing instruction which must be utilized for a particular explosive shipment being prepared for shipment by an ICAO carrier (similar to the DOT's packing methods). Reference IATA Packaging Instructions, Chap 3
UN Pkg	Indicates which UN packing method must be utilized for a particular explosive shipment being prepared for shipment by a UN surface carrier (similar to the DOT's packing methods). Reference UN Transport of Dangerous Goods, Chap 2
Notes	Indicates notations found in the various regulations for a particular explosive.
PSN (old)	Indicates the proper shipping name of the hazardous material shown in Roman print (not italics) in the 49 CFR Hazardous Materials Table as of September 30, 1991 and does not include HM-181 United Nations nomenclature.
Class	Indicates the hazard class of hazard assigned to a hazardous material under the definitional criteria of Part 173 of 49 CFR and the provisions of its Hazardous Materials Table as of September 30, 1991 and does not include HM-181 United Nations nomenclature. A material may meet the defining criteria for more than one hazard class but is assigned to only one hazard class.
Type	Indicates which one of nine types of explosives contained within the definition of Class A explosives under 49 CFR 173.52 as of September 30, 1991.
Pkg Ref	Indicates the applicable packaging section of Part 173 of 49 CFR and the provisions of its Hazardous Materials Table as of September 30, 1991 and does not include HM-181 United Nations performance-oriented packaging standards.

Field	Source
CAA	Indicates the Competent Authority Approval number issued by the Associate Administrator for Hazardous Materials Safety as required for transportation by international regulations. For explosives, this approval has been consolidated in the new format for issuance of the EX-number. However, explosives which have previously been issued a CAA number do not require reclassification under HM-181 since the CAA certificate contained the requisite United Nations nomenclature. Reference Federal Register / Vol.56, No.345, Fri., Dec. 20, 1991, 52430
Emergency Response Guide No.	Indicates the 2-digit Emergency Response Guidebook guide number. Reference DOT P 5800.5, 1990 Emergency Response Guidebook

Search Find Next Reports View Home View Classification Info Help Return

Explosives Classification Information

Ops Office Contractor: EX-81090450 Review Date

Product Desc: 100346

Initiated Contractor: Initiated Ops Office

Review Rec'd Date: Review Completed Date

TMD to DOT Date: 12/09/80 DOT Approval Date: 10/19/82

TMD Informs Ops Office: Turnaround Ops to Ops

Comments:

1 of 424

Home Edit Table Ctrl Pol Ops Prev Ctrl Pg Dns Next Alt F9 Co Edit Main

Field	Source
Initiated Contractor	Indicates the date the contractor request for classification was submitted to the appropriate Operation Office.
Initiated Ops Office	Indicates the date that the Operation Office submitted their approval of the classification to EM-561 for forwarding to the Department of Transportation (DOT).
Review Rec'd Date	Indicates the date the ECTS administrator entered the classification into the ECTS. This is essentially the date received.
Review Completed Date	Indicates the date the ECTS administrator completed the documentation review and forwarded the review package back to EM-561.
TMD to DOT Date	Indicates the date the transmittal of the documentation package to DOT was made by EM-561.
DOT Approval Date	Indicates the date that the DOT acknowledged the classification filing to EM-561 by issuance of an EX-number.
TMD Informs Ops Office	Indicates the date EM-561 informed the responsible Operation Office of the DOT assignment of the EX-number.
Comments	Indicates any problems or highlights for the classification. An EX/CA in this field indicates the explosive has been either classified or reclassified under HM-181 requirements.

Interim Hazard Classification Information

Search Band Next Reports View More Help Return
IHC Screen
Operations Office: [redacted] Contractor: [redacted]
Description: [redacted]
Drawing/Part No.: [redacted]
Proper Shipping Name: [redacted] (Detonating with protective features)
UN/NA Number: [redacted]
Special Provisions: 116
Packaging Exceptions: 38
Packing Methods: E-137
Class/Div: [redacted] Pkg Group: [redacted]
Label: [redacted]
Reference: [redacted] (Letter No., Control No., etc.)
Issued: [redacted] Expiration: [redacted] Renewal: [redacted]
Comments: [redacted]
THIS HAS BEEN EXTENDED. DO NOT USE. CONTACT OPERATIONS OFFICE
1 of 18
[redacted] Ctrl-Poll+Prcs Ctrl-Poll+Next 011-F9 CoEdit [redacted] Main

Field	Source
Ops Office	Indicates one of two (AL or SF) Operations Offices authorized to approve interim hazard classifications of explosives for the DOE. Reference DOE 1540.2, Chap XI, 2.b.(3)(a) and DOT-E 10536 exemption
Contractor	Indicates the contractor originating the request for classification.
Reference	Indicates the DOE letter number for the IHC approval.
Description	Indicates the basic description, model, or other name commonly associated with the explosive. Each IHC must be traceable to a product code (description, drawing number, etc.) in accordance with the IHC exemption.
Drawing/Part No.	Indicates the design reference assigned to an IHC. May be used to meet product code requirements found in the exemption. Reference DOT-E 10536
UN/NA No.	Indicates the identification number assigned to each proper shipping name. Those preceded by the letters "UN" are associated with proper shipping names considered appropriate for international transportation as well as domestic transportation. Those preceded by the letters "NA" are associated with proper shipping names not recognized for international transportation, except to and from Canada. Reference 172.101(e)
Proper Shipping Name	Indicates the proper shipping name of the hazardous material shown in Roman print (not italics) in the 49 CFR Hazardous Materials Table as revised by HM-181 acknowledging United Nations nomenclature. Reference 49 CFR 172.101(c)
Special Provisions	Indicates the special provision code applicable to the hazardous material. The meaning and requirements of that special provision are as specified in 49 CFR 172.102.
Packaging Exceptions	Indicates the applicable packaging requirements or exceptions by a numerical and alpha numerical (ex: D1) sequence. The exception or requirement associated with a particular number is explained in this field. Those particular packaging requirements or exceptions that are not found in international regulations are noted with a "D". Reference 49 CFR 176.62(d)

Field	Source
Packing Methods	Indicates which packing methods must be utilized for a particular explosive. The Explosives Table specifies the packing method by a two-step process. Explosives are identified in the first column of the Explosives Table by their identification number. The second column of the Explosives Table specifies the packing method or methods (e.g., E-2) which must be used to pack a particular explosive. The table of packing methods defines the packing methods. The packing methods are prefixed either by the letter "E" (E-2) or "US" (US001). The packing methods prefixed by the letter "E" are those based on the UN Recommendations. The packing methods prefixed by the letters "US" are those that are particular to the United States and are not found in any applicable International Regulations. Reference 49 CFR 173.62(c)
Class/Div	Indicates the classification code for an explosive, which is assigned by the Associate Administrator for Hazardous Materials Safety. It consists of the division number followed by the compatibility group letter. Compatibility group letters are used to specify the controls for the transportation, and storage related thereto, of explosives and to prevent an increase in hazard that might result if certain types of explosives were stored or transported together. Reference 49 CFR 173.52
Pkg Group	Packing group means a grouping according to the degree of danger presented by hazardous materials. Packing Group I indicates great danger; Packing Group II, medium danger; Packing Group III, minor danger. Explosives require Packing Group II packages. 49 CFR 172.101(f)
Label	Indicates the hazard labels required for the material in accordance with the Hazardous Materials Table. Reference 49 CFR 172.101(g) Other labels may be required per 49 CFR 172.400.
Issued	Indicates the date the IHC was issued.
Expiration:	Indicates the date the IHC expires.
Renewal	Indicates the date the IHC was renewed. Renewal of IHC are not standard procedure. Justification must be submitted to approving Operations Office describing extenuating circumstances for renewal. Formal DOT classification would be the standard transition for an IHC.
Comments	An optional area to display any special requirements or details concerning the IHC.

Emergency Response Information

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 Emergency Response Guide 32

FIRE OR EXPLOSION

Flammable/combustible material; may be ignited by heat, sparks or flames. May burn rapidly with flare-burning effect.

HEALTH HAZARDS

Fire may produce irritating or poisonous fumes. Contact may cause injury to skin and eyes. Runoff from fire control or dilution water may cause pollution.

EMERGENCY ACTION

Keep unnecessary people away; isolate hazard area and deny entry. Stay upwind; keep out of low areas. Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide limited protection. CALL CHEMTREC AT 1-800-424-9300 FOR EMERGENCY ASSISTANCE. If water pollution occurs, notify the appropriate authorities.

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The 2-digit Emergency Response Guidebook guide number indicates emergency responder information, including fire and explosion hazards, health hazards, emergency action, fire, spill or leak, and first aid instructions. Reference DOT P 5800.5, 1990 Emergency Response Guidebook

Transportation, Shipping and Packaging Information

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 SHIPPING INFORMATION

ID No: NA0096

Proper Shipping Name: Explosive payload control devices

Hazard Class/Div: 1.1A Packing Group: II

Hazard Labels: EXPLOSIVE 1.1

Special Provisions: 109

PACKAGING INFORMATION

Packing Methods: 15005

Packing Exceptions: 13

Notes:

DATA Pkg: Forbidden
 TCAD Pkg: Forbidden
 UN Pkg: Forbidden

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Field	Source
ID No.	Indicates the identification number assigned to each proper shipping name. Those preceded by the letters "UN" are associated with proper shipping names considered appropriate for international transportation as well as domestic transportation. Those preceded by the letters "NA" are associated with proper shipping names not recognized for international transportation, except to and from Canada. Reference 172.101(e)
Proper Shipping Name	Indicates the proper shipping name of the hazardous material shown in Roman print (not italics) in the 49 CFR Hazardous Materials Table as revised by HM-181 acknowledging United Nations nomenclature. Reference 49 CFR 172.101(c)
Hazard Class/Div	Indicates the classification code for an explosive, which is assigned by the Associate Administrator for Hazardous Materials Safety. It consists of the division number followed by the compatibility group letter. Compatibility group letters are used to specify the controls for the transportation, and storage related thereto, of explosives and to prevent an increase in hazard that might result if certain types of explosives were stored or transported together. Reference 49 CFR 173.52
Packing Group	Packing group means a grouping according to the degree of danger presented by hazardous materials. Packing Group I indicates great danger; Packing Group II, medium danger; Packing Group III, minor danger. Explosives require Packing Group II packages. 49 CFR 172.101(f)
Hazard Labels	Indicates the hazard labels required for the material in accordance with the Hazardous Materials Table. Reference 49 CFR 172.101(g) Other labels may be required per 49 CFR 172.400.
Special Provisions	Indicates the special provision code applicable to the hazardous material. The meaning and requirements of that special provision are as specified in 49 CFR 172.102.
Packing Methods	Indicates which packing methods must be utilized for a particular explosive. The Explosives Table specifies the packing method by a two-step process. Explosives are identified in the first column of the Explosives Table by their identification number. The second column of the Explosives Table specifies the packing method or methods (e.g., E-2) which must be used to pack a particular explosive. The table of packing methods defines the packing methods. The packing methods are prefixed either by the letter "E" (E-2) or "US" (US001). The packing methods prefixed by the letter "E" are those based on the UN Recommendations. The packing methods prefixed by the letters "US" are those that are particular to the United States and are not found in any applicable International Regulations. Reference 49 CFR 173.62(c)22
Packaging Exceptions	Indicates the applicable packaging requirements or exceptions by a numerical and alpha numerical (ex: D1) sequence. The exception or requirement associated with a particular number is explained in this field. Those particular packaging requirements or exceptions that are not found in international regulations are noted with a "D". Reference 49 CFR 176.62(d)
IATA Pkg	Indicates which IATA packing instruction which must be utilized for a particular explosive shipment being prepared for shipment by an IATA carrier (similar to the DOT's packing methods). Reference IATA DGR 5.1
ICAO Pkg	Indicates which ICAO packing instruction which must be utilized for a particular explosive shipment being prepared for shipment by an ICAO carrier (similar to the DOT's packing methods). Reference IATA Packaging Instructions, Chap 3
UN Pkg	Indicates which UN packing method must be utilized for a particular explosive shipment being prepared for shipment by a UN surface carrier (similar to the DOT's packing methods). Reference UN Transport of Dangerous Goods, Chap 2
Notes	Indicates notations found in the various regulations for a particular explosive.

Exemption Information

Search	Previous	Next	Print	Help	Return
10536		Granted		11/01/91	
3/01/93				Renewal	
Regulations Affected: 173.86					
Modes: MV RF CV CA					
SUMMARY					
To ship various types of explosives, including dynamite, see exemption hazard classification is 1.4 for Division 1.4 for the condition, see exemption					
SHIPPING NAME (s)					
explosive material and explosive devices					
HAZARDOUS MATERIAL					
explosive materials and explosive devices					
Class: Explosive A, B, C					

Exemption Information is extracted from the DOT Hazardous Materials Information System. This data includes an exemption summary, authorized modes of transportation, regulations affected, exemption users, renewal status, expiration date, shipping name, hazard class, hazardous material, container type, and container specification. All contents of the HMIS data for an exemption is copied to the record's memo field. The exemption number, status, status date, expiration date, and type, are all entered into separated record fields for queries. This data is updated prior to each quarterly update.

Special Provision Information

Special Provisions: 116 for UN0367
Special Provision No: 116
Fuzes, detonating may be classed in Division 1.4 if the fuzes do not contain more than 25 g of explosive per fuze and are made and packaged so that they will not cause functioning of other fuzes, explosives or other explosive devices if one of the fuzes detonates in a shipping package or in adjacent packages.

Indicates the special provision code applicable to the hazardous material. The meaning and requirements of that special provision are as specified in 49 CFR 172.102.

Packaging Exception Information

Packaging Exceptions: 38 for UN0367
Exception No: 38
The detonating fuses must be separated from each other in the inner packagings.

Indicates the applicable packaging requirements or exceptions by a numerical and alpha numerical (ex: D1) sequence. The exception or requirement associated with a particular number is explained in this field. Those particular packaging requirements or exceptions that are not found in international regulations are noted with a "D". Reference 49 CFR 176.62(d)

Packing Method Information

Packing Methods: E-137 for UN0367
Packing Method No: E-137
Inner Packagings
Receptacles: Fiberboard, Metal, Plastic (Rigid), Plastic (Flexible)
Note: Dividing partitions in the outer packaging may be used instead of inner packagings
Outer Packagings

Indicates which packing methods must be utilized for a particular explosive. The Explosives Table specifies the packing method by a two-step process. Explosives are identified in the first column of the Explosives Table by their identification number. The second column of the Explosives Table specifies the packing method or methods (e.g., E-2) which must be used to pack a particular explosive. The table of packing methods defines the packing methods. The packing methods are prefixed either by the letter "E" (E-2) or "US" (US001). The packing methods prefixed by the letter "E" are those based on the UN Recommendations. The packing methods prefixed by the letters "US" are those that are particular to the United States and are not found in any applicable International Regulations. Reference 49 CFR 173.62(c)

Explosive Definitions

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Explosive Definitions

TERM
Ammonium nitrate fuel oil mixture (ANFO)

DEFINITION
A blasting explosive consisting of prilled ammonium nitrate and fuel oil.

Include

Exclude

Search Find Next Previous Def Next Def Help Return

Ctrl-F Ctrl-P Ctrl-N Ctrl-E Ctrl-D Ctrl-H Ctrl-R

This definition module contains descriptions of terms for explosives extracted from 49 CFR 173.59. The terms are provided for information only. They must not be used for purposes of classification or to replace proper shipping names prescribed in 172.101 of the Hazardous Material Table.

HM-181 Definitions

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HM-181 Definitions

Term: Approved

Approved means approval issued or recognized by the Department unless otherwise indicated in this subchapter.

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Ctrl-F Ctrl-P Ctrl-N Ctrl-E Ctrl-D Ctrl-H Ctrl-R

The definitions contained in this module are extracted from 49 CFR 171.8, "Definitions and abbreviations."

Safety Definitions

The definitions appearing in this definition module are extracted from the DOE/EV/06194, "DOE Explosives Safety Manual." The definitions are provided for information only.

APPENDIX C - Report Samples

ECTS summary report sample.

ECTS CLASSIFICATION SUMMARY REPORT

EX-#: EX-8109045A

** NEEDS RECLASSIFICATION UNDER HM-181 **

Review #:

Contractor:

Fld Office:

Product Desc: MC3346

ID#: UN0367 HM-181 PSN: Fuzes, Detonating

Special Provisions: 116

Packaging Exceptions: 38

Packing Methods: E-137

Class/Div: 1.4S

Pkg Group: 11

Hazard Labels: EXPLOSIVE 1.4S

IATA Pkg: 155 (155)

ICAO Pkg: 155 (155)

UN Pkg: E137

Notes:

PSN (old): Fuzes, Detonating

Class: Class C Explosive

Type:

Pkg Ref: 173.113

CAA: CA-

Emergency Response Guide No.: 50

Status Comments:

ECTS detailed report sample

ECTS CLASSIFICATION - DETAILED REPORT

EX-No: EX-8906074 Okay to ship per HM-181
 Product Description: P/N 420872, 1C Squib Valve
 Effective Date: September 16, 1993 Fld Office: AL Contractor: Allied
 Review Number: 32

PACKAGING & SHIPPING INFORMATION

Proper Shipping Name: Cartridges, Power Device
 Hazard Class/Division: 1.4S
 ID No.: UN0323
 Packing Group: 11 Emergency Response Guide No.: NA
 Hazard Label(s): EXPLOSIVE 1.4S
 Special Provision(s): 110,112

Special Provision No: 110

Cartridges containing 3.2 grams or less of deflagrating (propellant) explosives installed in a fire extinguisher are not subject to the requirements of this subchapter.

Special Provision No: 112

"Cartridges, small arms" and "Cartridges, power devices (which are used to project fastening devices)" which have been classed in Division 1.4 Compatibility Group 3 (1.4S) may be reclassified and offered for domestic transportation as ORM-D material if they are offered for transportation and transported in accordance with the limitations and packaging requirements of 173.230 of this subchapter.

Packing Methods - Inner/Outer Packagings: E-114

Packing Method No: E-114

Inner Packagings

Receptacles: Fiberboard, Plastic, Metal, Wood

Outer Packagings

Boxes: Fiberboard (4G), Wood, ordinary (4C1), Plywood (4D), Reconstituted wood (4F), Steel, with inner liner or coating (4A2)

INTERNATIONAL PACKAGING INFORMATION

ICAO Pkg Instruction: 134 (134)

IATA Pkg Instruction: 134 (134)

UN Pkg Method: E114

Notes:

Packaging Exceptions:

TRANSITION DOT PACKAGING & SHIPPING INFORMATION

Proper Shipping Name: Ammunition, Nonexplosive

Hazard Class: Not Regulated

Type:

Packaging Reference: 173.55

Competent Authority Approval No.: 890629

STATUS for EX-8906074

Sent by Contractor:	4/18/89	Forwarded by Field Office:	5/05/89
Received by Reviewer:	5/24/89	Review Completed:	5/24/89
DOE (TMD) to DOT:	6/05/89	DOT to DOE (TMD):	6/20/89
DOE (TMD) to Field Office:	6/20/89	46 Days Turnaround Field to Field	

Comments: Notification to Ops Office by FAX. Reclass to not Class 1 pending.

IHC report sample.

9/16/93		Interim Hazard Classification				Page 1			
Reference	Product Description	Part/Draw No.	Proper Shipping Name	UN/NA No.	Class Division	Field Office	Issue Date	Expire Date	Renewal Date
SPD:JRB (92-135)	M87 Mug Assembly Mock-JTA	Drw Nos. 250527, 250529	Fuzes, Detonating, with protective features	UN0410	1.4D	AL	6/01/92	6/01/93	
SPD:JRB (92-157)	LAX-219 Explosive Substance	LAX-219	Substance Explosive, n.o.s. (LAX-219)	UN0475	1.1D	AL	6/17/92	7/01/93	
SPD:JRB (92-244)	1429 P Shaped Charge	1429 P Shaped Charge	Charges, Shaped, Commercial	UN0089	1.1D	AL	9/23/92	10/01/93	
SPD:JRB (92-256)	Sandwich Subassembly, Forward, P/N 253643	P/N 253643	Charges, Bursting, Plastics Bonded	UN0457	1.1D	AL	10/02/92	10/05/93	
SPD:JRB (92-257)	Sandwich Subassembly, Aft, P/N 253642	P/N 253642	Charges, Bursting, Plastics Bonded	UN0457	1.1D	AL	10/02/92	10/05/93	
SPD:JRB (92-258)	MC2068 Lens Assembly, P/N 250226	P/N 250226	Articles, Explosive, n.o.s. (MC2068 Assembly)	UN0463	1.1D	AL	10/02/92	10/05/93	
SPD:JRB (92-263)	Composition B-3 Hemisphere		Article, Explosive, n.o.s. (CDMP B-3)	UN0463		AL	10/16/92	10/05/93	
SPD:JRB (92-307)	M79 Recovery System Assembly, P/N 238811-04	P/N 238811-04	Fuzes, Detonating	UN0367	1.4S	AL	12/02/93	10/05/93	
SPD:JRB (92-330)	X-0450 Explosive Boosters	X-0450	Boosters, without detonator	UN0042	1.1D	AL	12/23/92	10/05/93	
SPD:JRB (92-306)	PEX Isolation Test Vessel	N/A	Charges, Demolition	UN0048	1.1D	AL	12/02/92	12/01/93	

Contacts mailing labels sample.

James J. Bayne EG&G - Mound Applied Technologies P.O. Box 3000 Miamisburg, OH	Marvin Bennett Department of Energy - OR P.O. Box 2001 Oak Ridge, TN	Patricia Berglund Department of Energy - LAAD 528 35th Street Los Alamos, NM
Jess C. Beyers Mason & Hanger - Silas Mason Co., Inc. P.O. Box 30020 Amarillo, TX	Julian R. Biggers Department of Energy - AL P.O. Box 5400 Albuquerque, NM	Larry G. Blalock Department of Energy - HQ 12800 Middlebrook Road Germantown, MD Mail Stop: EM 561
Gary N. Callihan Department of Energy - SF 1333 Broadway Oakland, CA	Jim Cogan EG&G - Mound Applied Technologies P.O. Box 3000 Miamisburg, OH	Thaddeus J. Dobry Department of Energy - HQ Office of Military Applications Washington, DC
Jim E. Dotts Sandia National Laboratories P.O. Box 5800 Albuquerque, NM	John Ford Department of Energy - ID 785 DOE Place Idaho Falls, ID	Richard P. Genoni Westinghouse Hanford Company P.O. Box 1970 Richland, WA Mail Stop: G2-02
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Gerald Meyers Department of Energy - EH 31.3 19901 Germantown Road Germantown, MD Mail Stop: EH 31.3	Gracie Miranda Sandia Livermore P.O. Box 969 Livermore, CA	Alan C. Munger EG&G - Mound Applied Technologies P.O. Box 3000 Miamisburg, OH

Exemption report sample

Report for Exemption Number 10536

Status: Granted Status Date: 2/07/93 Expiration Date: 9/30/94 Type: Renewal

EXEMPTION NUMBER: 10536

SUMMARY: Authorizes the shipment of various kinds of explosive substances and devices with an interim hazard classification to test facilities.

AUTHORIZED MODES OF TRANSPORTATION:

MOTOR VEHICLE: Y RAIL FREIGHT: Y CARGO VESSEL: Y
PASSENGER ONLY AIR: N CARGO ONLY AIR TRANS: Y
COPY OF EXEMPTION MUST BE CARRIED ABOARD THE MOTOR VEHICLE:

REGULATIONS AFFECTED: 173.86

COMPANY:

U. S. Department of Energy
RENEWAL APPLICATION GRANTED on 02/07/1993 Expires on: 09/30/1994

SHIPPING NAME: explosive materials and explosive devices
HAZARD CLASS: explosive A
HAZARDOUS MATERIAL: explosive materials and explosive devices

SHIPPING NAME: explosive materials and explosive devices
HAZARD CLASS: explosive A/B
HAZARDOUS MATERIAL: explosive materials and explosive devices

SHIPPING NAME: explosive materials and explosive devices
HAZARD CLASS: explosive B
HAZARDOUS MATERIAL: explosive materials and explosive devices

SHIPPING NAME: explosive materials and explosive devices
HAZARD CLASS: explosive C
HAZARDOUS MATERIAL: explosive materials and explosive devices

Emergency Response guide sample

1990 Emergency Response Guidebook
 DOT P 5800.5
 U. S. Department of Transportation

««« GUIDE 46 »»»
 POTENTIAL HAZARDS

FIRE OR EXPLOSION

MAY EXPLODE AND THROW FRAGMENTS 1 MILE OR MORE IF FIRE REACHES CARGO.

HEALTH HAZARDS

Fire may produce irritating or poisonous gases.

EMERGENCY ACTION

IF FIRE REACHES CARGO, DO NOT FIGHT FIRE. IF YOU KNOW OR SUSPECT THAT HEAVILY-ENCASED EXPLOSIVES, SUCH AS BOMBS OR ARTILLERY PROJECTILES ARE INVOLVED, STOP ALL TRAFFIC AND BEGIN TO EVACUATE ALL PERSONS, INCLUDING EMERGENCY RESPONDERS, FROM THE AREA IN ALL DIRECTIONS FOR 5000 FEET (1 MILE) FOR RAIL CAR OR 4000 FEET (3/4 MILE) FOR TRACTOR/TRAILER. WHEN HEAVILY-ENCASED EXPLOSIVES ARE NOT INVOLVED, EVACUATE THE AREA FOR 2500 FEET (1/2 MILE) IN ALL DIRECTIONS. Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide limited protection. CALL CHEMTREC AT 1-800-424-9300 AS SOON AS POSSIBLE, especially if there is no local hazardous materials team available.

FIRE

Cargo Fires: DO NOT FIGHT FIRE WHEN IT REACHES CARGO. Withdraw from area and let fire burn. Truck and Equipment Fires: Try to prevent fire from reaching the explosive cargo compartment. Flood with water; if no water is available use CO₂, dry chemical or earth. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. First, move people out of line-of-sight of the scene and away from windows. Then, obtain more information and specific guidance from competent authorities listed on the shipping papers.

SPILL OR LEAK

Shut off ignition sources; no flares, smoking or flames in hazard area. Do not touch or walk through spilled material.

FIRST AID

Call emergency medical care. Use first aid treatment according to the nature of the injury.

Transportation report sample

9/16/93

Explosives Classification Tracking System
General Shipping/Packaging Information

SHIPPING INFORMATION

ID No.: NA0273

Proper Shipping Name:
Propellant explosive, solid

Hazard Class/Division: 1.1C Packing Group: II

Hazard Labels: EXPLOSIVE 1.1C

Special Provisions:

PACKAGING INFORMATION

DOT Packing Methods: E-22(a), E-22(b), E-22(c)

Packing Method No: E-22(a)

Inner Packagings

(a) Bags: Paper, Kraft, Plastic, Textile, Rubberized Textile

Outer Packagings

(a) Barrels: Wood, removable head (2C2) Boxes: Fiberboard (4G), Wood, ordinary (4C1), Wood, sift-proof (4C2),
Plywood (4D) Reconstituted wood (4F) Drums: Fiber (1G) Plywood (1D)

Packing Method No: E-22(b)

Inner Packagings

Outer Packagings

Packing Method No: E-22(c)

Inner Packagings

(c) Not necessary

Outer Packagings

(c) Drums: Steel, removable head (1A2), Fiber (1G), Plywood (1D) Jerricans: Steel (3A1), Steel, removable head
(3A2)

Packaging Exceptions: 10.6.9

Exception No: 10

Metal receptacles must be so constructed that the risk of explosion, by reason of increase in internal pressure
from internal or external causes, is reduced.

Exception No: 6

Exception No: 9

Drums or jerricans of steel must be constructed without pockets or crevices in which smokeless powder could be
trapped or ripped.

INTERNATIONAL PACKAGING INSTRUCTIONS

IATA Packing Instruction: Forbidden
ICAO Packing Instruction: Forbidden
UN Packing Method: Forbidden

APPENDIX D - Technical Support

When An Error Occurs

When an error occurs within ECTS you will hear a double chime alarm. A message will appear indicating that an error has occurred and the error is being logged. You will then be asked to enter a password or press <Esc> to exit. Your only option is to press <Esc> and exit the system. Restart ECTS and see if you can reproduce the problem. If you can, please call the technical support number listed later in this appendix.

Printer Problems

Problem: My Epson® or Epson® compatible printer prints funny characters on the paper in the place of line drawing.

Solution: Either your printer does not support printing of the extended characters or the switch settings do not indicate that the extended graphics characters should be printed.

If your printer does not support graphics you will not be able to print the report successfully. A printer with this capability is currently a hardware requirement for this program.

Refer to the printer's User Manual for specific instructions as to which of the dip switches on the printer needs to be set. The Epson® FX-850, for example, requires that switch 1-3 be set to ON to enable the printing of the graphic line characters. Initially, the printer must be turned off and on again for the change to become effective. Once the switch is set, the printer will remain in graphics mode until the switch is reset.

Problem: When my Epson® or Epson® compatible printer is printing a report, the last few lines of the report page appear on the top of the next page.

Solution: Make sure that the paper is being loaded such that the top of the paper is aligned with the top of the print head. Some printer will load the paper with an automatic .5" to 1" margin at the top. If your printer will allow adjustment of the paper loading position, make sure the loading position is set such that the top of the paper is aligned with the top of the printer head. Please refer to your printer manual for instructions.

Problem: The reports for HP LaserJet® are not printing correctly.

Solution: Be sure that the default font your LaserJet® is set to supports the extended characters. See your LaserJet® user's guide for more information about the character sets supported by your printer.

How to Get Technical Assistance

Please read the Software User Manual pertaining to the area that you are having trouble with to be sure that you are following the proper instructions. Once you have determined that you are using the program properly and things are still not functioning as you believe they should (as indicated in the Software User Manual) you may contact

Rich Genoni
Packaging Programs & Testing
Westinghouse Hanford Co.
P.O. Box 1970, G2-02
Richland, WA 99352

(509) 376-9372

between the hours of 8:00am and 4:00pm Pacific Time.

When calling for technical assistance please have the following information available

- CPU TYPE (286, 386SX, 386DX, 486)
- TOTAL RAM
- Total and available hard disk space on the drive where ECTS is installed.
- A detailed description of the steps taken to produce the error.

You may also FAX the above listed information, along with your name and contact phone number to (509) 376-7551 and you will be contacted.

Trademarks

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Paradox® and Paradox Runtime® are trademarks of Borland International, Inc.

LaserJet® is a registered trademark of Hewlett-Packard Company.

Epson® is a registered trademark of Epson America, Inc.

References

U.S. DEPARTMENT OF ENERGY ORDERS

DOE, 1986, *Hazardous Materials Packaging for Transport - Administrative Procedures*, DOE Order 1540.2, U.S. Department of Energy, Washington, D.C.

DOE, 1991, *DOE Explosives Safety Manual*, DOE/EV/06194, U.S. Department of Energy, Washington, D.C.

CODE OF FEDERAL REGULATIONS

49 CFR Subchapter C, "Hazardous Materials Regulations" Title 49, *Code of Federal Regulations*, Parts 171-180, 1992, U.S. Department of Transportation, Washington, D.C.

DOT, 1990, *1990 Emergency Response Guidebook*, DOT P 5800.5, U.S. Department of Transportation, Washington, D.C.

INTERNATIONAL REGULATIONS

Dangerous Goods Regulations, 1993, International Air Transport Association, Montreal, Quebec, Canada

Technical Instructions for the Safe Transport of Dangerous Goods by Air, 1993-1994, International Civil Aviation Organization, Montreal, Quebec, Canada

Recommendations on the Transport of Dangerous Goods, 8th revised edition, United Nations

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