#### <u>Approvals Safety Documentation Evaluations</u> <u>February 1, 2010</u>

PHMSA issues 23 different types of approvals, authorizing a range of activities, such as packaging and shipping certain radioactive materials, testing certain types of cylinders, and transporting lithium batteries. It is important to note that the agency only grants approvals for activities specifically outlined in the HMR. PHMSA's Office of Hazardous Materials Safety (OHMS) has developed the following forms as part of its comprehensive review of the approvals processes:

- CA- Safety Evaluation Form for New Applications
- CA- Safety Evaluation Form for Renewals
- CA- Safety Evaluation Form for Modifications
- Class Explosive Completeness Form
- Class Firework Completeness Form
- Class Self-reactive Completeness Form
- Class Organic Peroxide Classification Completeness Form
- Class Evaluation Form
- Short M Number Evaluation
- Short Visual RIN Evaluation
- Short K Number Evaluation
- Short Renewal Evaluation Form
- RAM RAM Special Form Checklist

The 23 approval types fall into six "Approval Categories" that include the: (1) Registration Process; (2) Classification Process; (3) Third-Party Inspection Process; (4) DOT Inspection Process; (5) Safety Evaluation Process; and (6) Radioactive Materials. Each of these six Approval Categories has a set of standard evaluation forms. Table 1 documents the various forms categorized by "Approval Folder" (see page 2).

During the review of an approval application, in all categories, the project officer must perform a technical evaluation of the information provided by the applicant, and then make a determination as to whether the applicant has justified an "equivalent level of safety." The purpose of these evaluation forms is to guide the project officer through a comprehensive evaluation process and provide documentation of that process.

These evaluation forms provide questions requiring answers to critical areas such as: hazardous materials being shipped; packaging; testing; hazard communication; operational controls; shipping experience; safety assessment; comments to the docket; potential for regulatory incorporation; and overall evaluation and recommendation of the project officer. Emphasis is placed on documenting the safety assessment of each *element* of the proposed approval (e.g., packaging). This enhanced documentation will ensure the level of justification equals the level of safety.

Process Category	Folders/Forms	Approval Types
	Short Forms Folder	M Numbers for identification of domestic
	M Number Evaluation	manufacturers
Registration	Visual RIN Evaluation	Visual cylinder regualifiers
Rogistiution	K Number Evaluation	
	Renewal Evaluation	
	Class Forms Folder	Commercial explosives
	Explosive	Government explosives
	Completeness	Fireworks
	Fireworks	Chemical oxygen generators
Classification	Completeness	Self-reactive materials and organic peroxides
	Organic Peroxide     Completeness	
	Completeness     Self Reactive	
	Completeness	
	Class Evaluation Form	
	Short Forms Folder	Domestic cylinder requalifiers
	M Number Evaluation	<ul> <li>Domestic cylinder repair/rebuild companies (K-</li> </ul>
Third-Party	Visual RIN Evaluation	number program)
Inspection	K Number Evaluation	
	Renewal Evaluation	
		Designated approval agencies
		IIAs representing US cylinder companies
		Foreign cylinder requalifiers
	CA Forms Folder	• Foreign cylinder repair/rebuild companies (K-
DOT Inspection	CA New	number program)
Dermspeenen	CA Renewal	Foreign cylinder manufacturers with IIAs
	CA Modification	UN/ISO cylinder manufacturers
		UN third-party certification agencies
		Explosive test labs
		Lighter testing agencies
	CA Forms Folder	International IMDG/ICAO CAA
Safety Evaluation	<ul><li>CA New</li><li>CA Renewal</li></ul>	General CAA
	CA Reflewal     CA Modification	Lithium batteries
Radioactive	RAM Forms Folder	Fuel cells     NPC approved packages
Materials	RAM Forms Folder     RAM Evaluation	NRC-approved packages     Special Form Cortificates
matchais		Special Form Certificates

 Table 1: Approvals Forms by Category/Type

\* There are four Approvals Folders with multiple forms in each folder: (1) Class Forms Folder; (2) CA Forms Folder; (3) Short Forms Folder; (4) RAM Form Folder.

# FORMS BY FOLDER TYPE

#### CA-NEW

# APPROVAL SAFETY EVALUATION FORM FOR NEW APPLICATIONS

Note to the Project Officer: All sections and questions must be completed. If the question is not applicable or your answer is "No" to a specific question, enter "N/A" or "No" as appropriate.

#### PART 1 APPLICANT

1	Α.	Ap	proval	I Number	:
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Application Number:

Registration Number if applicable:

Project Officer/Office:

**1B.** Date of Application:

**1C.** Name of Applicant:

Title:

Company Name:

Address:

Phone Number:

E-mail address (optional):

**1D.** U.S. Agent for foreign applicant or Consultant Name:

Company name:

Address:

Phone Number:

E-mail address (optional):

**1E.** Regulatory citation used to apply for the Approval:

**1F.** Summary of requested variance from the Hazardous Materials Regulations (HMR):

**1G.** Where will the Approval be used [physical location(s)]?

1H. How much time did the applicant request the Approval for (in months/years)?

**1I.** Has PHMSA previously granted similar Approvals? If not, does the Approval application involve issues not addressed through the HMR or previous Approvals? If yes, describe the issues.

1J. Modes of Transportation Requested:

1 Motor Vehicle () 2 Rail Freight () 3 Cargo Vessel () 4 Cargo Aircraft () 5 Passenger Aircraft ()



**1K.** Is the applicant requesting emergency processing?

Y() N()

Summarize the justification provided for the emergency processing request. Does it satisfy the requirements in § 107.117?

## PART 2 PRE-DOCKETING REVIEW

Application contains sufficient information to support docketing. Application is incomplete or unnecessary and should be returned for the following reason(s).

#### PART 3 HAZARDOUS MATERIALS

**3A.** Hazardous materials covered by the application:

	Hazardou	s Materials Des	cription	
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group	Authorized by Air in the HMR?(Y/N)
				Pass., Air? (Y/N)
				Cargo Air? (Y/N)
				No Air Requested? (Y/N)

# **3B.** Does the hazardous material meet the definition for a Class 1 material in § 173.50?

Has it been tested, classed, and approved under § 173.56?



Is stabilization required? If so, what type?

**3C.** Does the material pose risks in transportation other than the risks associated with its hazard class/division that warrant special consideration or assessment? (e.g., detonation risk; flammable or toxic gases produced upon contact with water; material can initiate or enhance a fire; article or device contains an ignition source)

**3D.** Is the material a lithium or lithium ion battery?

Has it been tested, classed, and approved under § 173.185?

#### PART 4 PACKAGING

**4A.** Is the applicant requesting a variance from the packaging requirements of the HMR? (If No - Go to Part 5)

**4B.** Type of packaging variance requested:

Non-authorized specification packaging

Quantity or size variation (e.g., for combination packagings, variation in number or size of inner packagings)

Non-specification package. List the most comparable specification package, if applicable.

Variations from authorized packaging:

- ] Change in material(s) of construction
- Increase in authorized pressure
- Alternative testing criteria (Parts 178 or 179)

**4C.** Packaging integrity:

If the packaging is comparable to an authorized specification packaging, does the evaluation of design criteria and test results demonstrate that the packaging(s) are equivalent? Explain.

If the packaging is not comparable to an authorized specification packaging, does the evaluation of design criteria and test results demonstrate an appropriate integrity level? Explain.

In the case of a pressurized packaging, is the packaging designed to adequately contain any pressure that might develop in conditions normally encountered during transportation without damage to the packaging? Explain.

**4D.** If intended for air transportation, does the packaging meet the performance requirements in § 173.27?

#### PART 5 TESTING

**5A.** Is the applicant seeking a variance from testing or inspection requirements? (If No – go to Part 6)

CA-NEW

**5B.** Is the applicant seeking a variance from testing/inspection requirements at the time of manufacture (Parts 178 or 179)? Describe any testing/inspection alternatives or justification for waiving the required procedure.

**5C.** Is the applicant seeking a variance from periodic requalification or other testing requirements? Describe any testing/inspection alternatives or justification for waiving the required procedure.

# PART 6 HAZARD COMMUNICATION

**6A.** Is the applicant seeking a variance from the hazard communication requirements in Part 172? (If No - go to Part 7)

**6B.** Indicate hazard communication a requirements for which variance is sought. (e.g., shipping papers, labeling, placarding requirements, etc.)

**6C.** What measures are proposed or are appropriate to ensure that the hazards associated with the shipment are communicated to transport workers and emergency response personnel?

# PART 7 OPERATIONAL CONTROLS

**7A.** Are special handling measures needed (e.g., refrigeration, stowage and/or segregation, mode-specific operational controls)? If so, specify.

**7B.** Should there be any limitations on the use of the Approval if granted (e.g., timeframe, number of shipments, etc.)? If so, specify.

# PART 8 SHIPPING EXPERIENCE

**8A.** Does the application include information concerning shipping experience with the requested packaging and/or operations or a similar material, package, or operation? If so, summarize.

**8B.** If the Approval is granted, what special data collection and reporting requirements are needed to document shipping experience and safety performance?

#### PART 9 SAFETY ASSESSMENT

**9A.** 49 CFR § 107.709(d) prescribes requirements for justification of an Approval through comparisons with established levels of safety in the Hazardous Materials Regulations. Has the applicant demonstrated that the measures proposed for the Approval would achieve an equivalent level of safety as the HMR? Explain.

**9B.** Does this Approval application address a public safety issue of an unusual nature (e.g. man-made or natural disaster)?

**9C.** What risks are posed by granting this Approval? What measures are proposed to mitigate any risks associated with transportation operations under the Approval?

**9D.** What are the benefits to the public for granting this Approval?

**9E.** Will the Approval be used for a one-time movement of hazardous materials or a number of movements over an extended time frame? Does the number of planned movements affect the safety analysis? If so, explain (e.g., safety factors and corresponding safety controls for a one-time movement may differ from those for multiple movements).



# PART 10 DOCKET COMMENTS/OTHER INFORMATION

10A.	Date	e checked:

Comments:	(If Yes, summarize)	

**10C.** Has CONFIDENTIAL or PROPRIETARY information (49 CFR 107.5) been considered in this application?

#### PART 11 REGULATORY REVISIONS

**11.** Could this Approval be handled by future regulatory change?

Y 🗌	N 🗌	If no, please explain.

#### PART 12 OVERALL EVALUATION & RECOMMENDATION

# Note to the Project Officer: All statements that are based on proprietary or confidential material submitted by the applicant must be contained in brackets and preceded and followed by asterisks.

**12A.** Summarize the applicant's request. Identify similarities to and differences from the HMR requirements. Note whether the agency has issued similar Approvals in the past. If the Approval application addresses issues not previously handled through the HMR or previous Approvals, discuss possible impacts of granting the Approval.

**12B.** Provide technical conclusions and recommendations to grant or deny the Approval (e.g. based on your technical review and evaluation, explain why you agree or disagree with the applicant's rationale supporting an equivalent level of safety).

Denial. Basis for denial:
Approval. Basis for approval:
Project Officer/Date:
Office: PHH-
Office of Hazardous Materials Technology (OHMT) or

Office of Hazardous Materials Technology (OHMT) or Office of Hazardous Materials Approvals and Approvals (OHMSPA)

# PHMSA OFFICE OF HAZARDOUS MATERIALS SAFETY

# GENERAL APPROVAL SAFETY EVALUATION FORM FOR APPLICATIONS TO RENEW AN EXISTING APPROVAL

Note to the Project Officer: All sections and questions must be completed. If the question is not applicable or your answer is "No" to a specific question, enter "N/A" or "No" as appropriate.

# PART 1 APPLICANT

**1A.** Approval Number:

Application Number:

Registration Number if applicable:

Project Officer/Office:

**1B.** Date of Application:

**1C.** Name of Applicant:

Title:

Company Name:

Address:



Phone Number:

E-mail address (optional):

**1D.** U.S. Agent for foreign applicant or Consultant Name:

Company name:

Address:

Phone Number:

E-mail address (optional):

**1E.** Summary of authorizations granted by the existing Approval, including the regulatory citation used to grant the Approval:

()

**1F.** Modes of Transportation Requested, if any:

1 Motor Vehicle () 2 Rail Freight

3 Cargo Vessel () 4 Cargo Aircraft ()

5 Passenger Aircraft ()

**1G.** Where will the Approval be used [physical location(s)]?

**1H.** How much time did the applicant request the Approval for (in months/years)?

**1I.** Does the available data indicate that the applicant is fit to conduct the activity authorized by the Approval? If no, describe the issues.

**1J.** Summarize the shipping history provided with the application, including incidents involving shipments made under the Approval. Does the shipping history indicate safety issues that should be addressed? Explain?

Project Officer/Date:

Office: PHH-

Office of Hazardous Materials Special Permits and Approvals (OHMSPA)

# PHMSA OFFICE OF HAZARDOUS MATERIALS SAFETY

# APPROVAL SAFETY EVALUATION FORM FOR APPLICATIONS TO MODIFY AN EXISTING APPROVAL

Note to the Project Officer: All sections and questions must be completed. If the question is not applicable or your answer is "No" to a specific question, enter "N/A" or "No" as appropriate.

#### PART 1 APPLICANT

**1A.** Approval Number:

Application Number:

Registration Number if applicable:

Project Officer/Office:

**1B.** Date of Application:

**1C.** Name of Applicant:

Title:

Company Name:

Address:

Phone Number:

E-mail address (optional):

**1D.** U.S. Agent for foreign applicant or Consultant Name:

	Company name:
	Address:
	Phone Number:
	E-mail address (optional):
E. Su	ummary of authorizations granted by the existing Approval, including the

regulatory citation used to apply for the Approval:

**1F.** New regulation(s) from which variance from the HMR is requested, if any:

**1G.** Where will the Approval be used [physical location(s)]?

**1H.** How much time did the applicant request the Approval for (in months/years)?

**1I.** Summary of requested modification to the Approval:

**1J.** Does the request for modification involve new issues not addressed through the HMR or previous Approvals? If yes, describe the issues.

**1K.** New Modes of Transportation Requested, if any:

1 Motor Vehicle () 2 Rail Freight ()

3 Cargo Vessel () 4 Cargo Aircraft ()

5 Passenger Aircraft ()

1L. Is the applicant requesting emergency processing? Y ( ) N ( )

Have they provided the justification? Y ( ) N ( )

Summarize. Does it satisfy the proper determination of emergency processing in accordance with § 107.117?

#### PART 2 PRE-DOCKETING REVIEW

CA-MOD

Application contains sufficient information to support docketing. Application is incomplete or unnecessary and should be returned for the following reason(s).

# PART 3 HAZARDOUS MATERIALS

**3A.** NEW hazardous materials covered by the application: (If NONE – go to Part 4)

Hazardous Materials Description					
Proper Shipping Name	Hazard Class/ Division	Identification Number	Packing Group	Authorized by Air in the HMR?(Y/N)	
				Pass., Air? (Y/N)	
				Cargo Air? (Y/N)	
				No Air Requested? (Y/N)	

**3B.** Does the hazardous material meet the definition for a Class 1 material in § 173.50?

Has it been tested, classed, and approved under § 173.56?

Is stabilization required? If so, what type?

**3C.** Does the material pose risks in transportation other than the risks associated with its hazard class/division that warrant special consideration or assessment? (e.g., flammable or toxic gases produced upon contact with water; material can initiate or enhance a fire; article or device contains an ignition source; detonation risk)

**3D.** Is the material a lithium or lithium ion battery?

Has it been tested, classed, and approved under § 173.185?

## PART 4 PACKAGING

**4A.** Is the applicant requesting a change to the packaging currently authorized in the Approval? (If No – Go to Part 5)

**4B.** Does the applicant request a change to the existing packaging? Describe the change(s) (e.g. variation in size, pressure)

**4C.** Does the applicant request the addition of a new packaging(s)? What is the requested variance from the packaging requirements of the HMR?

Non-authorized specification packaging

Quantity or size variation (e.g., for combination packagings,

variation in number or size of inner packagings)

Non-specification package.

List the most comparable specification package, if applicable.



CA-MOD

Variations from authorized packaging:

- Change in material(s) of construction
- Increase in authorized pressure
- Alternative testing criteria (Parts 178 or 179)

**4D.** For new packaging(s) or significant changes to existing packagings:

If the packaging is comparable to an authorized specification packaging or a packaging currently authorized in the Approval, does the evaluation of design criteria and test results demonstrate that the packagings are equivalent? Explain.

If the packaging is not comparable to an authorized specification packaging or a packaging currently authorized in the Approval, does the evaluation of design criteria and test results demonstrate an appropriate integrity level? Explain

In the case of a pressurized packaging, is the packaging designed to adequately contain any pressure that might develop in conditions normally encountered during transportation without damage to the packaging? Explain.

**4E.** If intended for air transportation, does the packaging meet the performance requirements in § 173.27?

# PART 5 TESTING

**5A.** Is the applicant seeking a variance from testing or inspection requirements that was not previously authorized in the Approval? (If No – go to Part 6)

**5B.** Is the applicant seeking a variance from testing/inspection requirements at the time of manufacture (Parts 178 or 179)? Describe any testing/inspection alternatives or justification for waiving the required procedure.

**5C.** Is the applicant seeking a variance from periodic requalification (Part 180) or other testing requirements (e.g., hot water bath testing)? Describe any testing/inspection alternatives or justification for waiving the required procedure.

# PART 6 HAZARD COMMUNICATION

**6A.** Is the applicant seeking a variance from the hazard communication requirements in Part 172 that was not previously authorized in the Approval? (If No - go to Part 7)

**6B.** Indicate hazard communication requirements for which variance is sought. (e.g., shipping papers, labeling, placarding requirements, etc.)

**6C.** What measures are proposed or are appropriate to ensure that the hazards associated with the shipment are communicated to transport workers and emergency response personnel?

# PART 7 OPERATIONAL CONTROLS

**7A.** Are special handling measures needed as a result of the changes requested in the application for modification (e.g. refrigeration, stowage and/or segregation, mode-specific operational controls)? If so, specify.

**7B.** Should there be any new limitations on the use of the Approval (e.g., time frame, number of shipments, etc.)? If so, specify.



# PART 8 SHIPPING EXPERIENCE

**8A.** Summarize the shipping history provided with the application, including incidents involving shipments made under the Approval. Does the shipping history indicate safety issues that should be addressed? Explain.

# PART 9 SAFETY ASSESSMENT

**9A.** 49 CFR § 107.109(d) prescribes requirements for justification of an Approval through comparisons with established levels of safety in the Hazardous Materials Regulations. Has the applicant demonstrated that the new measures proposed for the Approval would achieve an equivalent level of safety as the HMR? Explain.

**9B.** Does this Approval application address a public safety issue of an unusual nature (e.g. man-made or natural disaster)?

**9C.** What risks are posed by granting this Approval? What measures are proposed to mitigate any risks associated with transportation operations under the Approval?

**9D.** What are the benefits to the public for granting this Approval?

**9E.** Does the application for modification propose changes to the use of the Approval such as a change from one-time movement to an extended timeframe? Does the number of planned movements affect the safety analysis? If so, explain (e.g., safety factors and corresponding safety controls for a one-time movement may differ from those for multiple movements).

## PART 10 DOCKET COMMENTS/OTHER INFORMATION

10A. Date checked:		
10B. Comments:	(If Yes, summarize)	

**10C.** Has CONFIDENTIAL or PROPRIETARY information (49 CFR 107.5) been considered in this application?

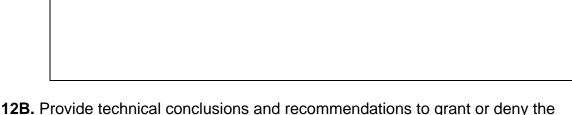
#### PART 11 REGULATORY REVISIONS

**11A.** Does this request for modification suggest a need for possible regulatory changes? If yes, should this be issued? Explain.

#### PART 12 OVERALL EVALUATION & RECOMMENDATION

#### Note to the Project Officer: All statements that are based on proprietary or confidential material submitted by the applicant must be contained in brackets and preceded and followed by asterisks.

**12A.** Summarize the applicant's request for modification. Identify similarities to and differences from the requirements of the existing Approval. If the Approval application for modification addresses issues not previously handled through the HMR or previous Approvals, discuss possible impacts of granting the request for modification.



**12B.** Provide technical conclusions and recommendations to grant or deny the Approval (e.g. based on your technical review and evaluation, explain why you agree or disagree with the applicant's rationale supporting an equivalent level of safety).

Denial. Basis for denial:	

Approval. Basis for approval:

Project Officer/Date:

Office: PHH-

<u>Office of Hazardous Materials Technology (OHMT) or</u> Office of Hazardous Materials Special Permits and Approvals (OHMSPA)

# PHMSA OFFICE OF HAZARDOUS MATERIALS SAFETY

# Explosive Classification Approval Application Completeness Form FOR NEW APPLICATIONS

# PART 1 APPLICANT INFORMATON

**1A.** Explosive Classification Number:

Tracking Number:

Project Officer/Office:

**1B.** Date of Application:

**1C.** Name of Applicant:

Title:

Company Name:

Address:

Phone Number:

E-mail address:

# **1D.** U.S. Agent for foreign applicant or Consultant Name:

Company name:

Address:

Phone Number:

E-mail address:

**1E.** Regulation(s) under which classification approval is requested:

**1F.** Hazardous materials covered by the application:

# PART 2 EXPLOSIVE CLASSIFICATION COMPLETENESS CHECKLIST

**2A.** Has the examination and class recommendation report been signed by an authorized examining laboratory, agency or recognized Competent authority of a foreign government?

**2B.** Does the UN Identification number agree with the proper shipping name given in the most current revision of 49 CFR 172.101 Table \* (49 CFR)?

**2C.** Does the spelling of the proper shipping name agree with the most current revision of 49 CFR 172.101 Table (49 CFR)?

CLASS-EX1

**2D.** Do the product names, part numbers or drawing numbers for the explosive substances or articles correctly correspond to the supporting documentation?

**2E.** Is there a complete summary table for ALL the explosive compositions contained in the explosive substance or article, the percentages by weight shown and the composition of all mixtures specifically enumerated?

**2F.** Are there clear and legible engineering drawings in  $8.5 \times 11$  in. format of all the explosive articles with names, product numbers, or drawing numbers that correspond to the class recommendation report?

**2G.** What, if any, packaging instructions or recommendations are specified in the class recommendation report?

**2H.** What tests were conducted to support the class recommendation report or Competent authority document? If they were waived for any reason, are those reasons clearly presented?

**2I.** Were all UN tests conducted in conformance with the most current edition of the UN Test and Criteria Manual? Were they in conformance with the hazardous materials regulation requirements in 49 CFR 173.57 and 49 CFR 173.58?

**2J.** Have the explosive substances (e.g., solid propellants for rocket motors, explosives for warheads, detonators for ammunition, etc.) within articles been separately classed and previously approved? If so, what were these UN and EX-approval numbers?

**2K.** Have any and all special provisions applicable to the UN numbers and proper shipping names been certified in writing by the examining laboratory as having been met (e.g., Special Provision 103 for detonators and detonator assemblies, Special Provision 116 for detonating fuses, Special Provision 109 for rocket motors, Special Provision 51 for model rocket motors, etc.)

# PHMSA OFFICE OF HAZARDOUS MATERIALS SAFETY

# Explosive (Fireworks) Classification Approval Application Completeness Form FOR NEW APPLICATIONS

# PART 1 APPLICANT INFORMATION

1A. Explosive (Fireworks) Classification Number:
Tracking Number:
Project Officer/Office:
<b>1B.</b> Date of Application:
1C. Name of Applicant:
Title:
Company Name:
Address:
Phone Number:
E-mail address:

#### **1D.** U.S. Agent for foreign applicant or Consultant Name:

Company name:
Address:
Phone Number:
E-mail address:
<b>1E.</b> Regulation(s) under which classification approval is requested:
<b>1F.</b> Hazardous materials covered by the application:

# PART 2 EXPLOSIVE (FIREWORKS) CLASSIFICATION COMPLETENESS CHECKLIST

**2A.** Did the applicant submit a certified, signed, and dated application in accordance with APA Standard 87-1?

**2B.** Does the application include the correct DOT class, UN Identification number that agrees with the proper shipping name given in the 49CFR 172.101 Table; and the Category of Device, as described under the APA 87-1?

**2C.** Does the applicant provide the name and address of the manufacturer of the product?

**2D.** Is the application complete in the Description of the Device: Item Name, number of tubes, diameter of the device, maximum powder weight per tube, maximum propellant per tube, maximum effect per tube, total powder weight in the device, if the tubes are sequentially fused, tubes are fused in sequence, if the Item complies with the base/height ratio, if the device contains a report and the effects produced?

**2E.** Was the Thermal Stability Test performed and was it performed prior to the Certification of the application?

**2F.** Did the applicant include the Diagram and Chemical Sheet?

**2G.** Is the diagram clear and legible? Did the diagram identify all the internal components, dimensions, fuse locations, effects (lift or propellant, burst charge, effect compositions)?

2H. Are all the chemicals described in the application listed in the APA Standard 87-1?

# PHMSA OFFICE OF HAZARDOUS MATERIALS SAFETY

# Organic Peroxide Classification Approval Application Completeness <u>Form</u> <u>FOR NEW APPLICATIONS</u>

# PART 1 APPLICANT INFORMATION

1A. Organic Peroxide Classification Number:
Tracking Number:
Project Officer/Office:
<b>1B.</b> Date of Application:
1C. Name of Applicant:
Title:
Company Name:
Address:
Phone Number:
E-mail address:

## **1D.** U.S. Agent for foreign applicant or Consultant Name:

Company name:
Address:
Phone Number:
E-mail address:
<b>1E.</b> Regulation(s) under which classification approval is requested:
1F. Hazardous materials covered by the application:

# PART 2 ORGANIC PEROXIDE CLASSIFICATION COMPLETENESS CHECKLIST

**2A.** Did the applicant submit an application in accordance with 49CFR and identify the section of the chapter under which the application is made and a description of the activity for which approval is requested?

**2B.** Did the company provide the complete company name, address, e-mail address and telephone number?

**2C.** Did the company include all the relevant data concerning the physical state, temperature controls and test results for the self-reactive material formulation to determine the classification? Was there a determination as to the control and emergency temperatures?

**2D.** Were all the UN Tests conducted in conformance with the most current edition of the UN Test and Criteria Manual? Were the test results determined by using the testing protocol from Flow Chart Scheme for Organic Peroxide to Division 5.2 from the UN Manual of Tests and Criteria; or other tests as approved and determined to be equivalent.

**2E.** Was the organic peroxide material assigned to one of the seven types of generic types for Division 5.2?

**2F.** Was the organic peroxide material identified by technical name in the Self-Reactive Materials Table §173.224?

**2G.** Did the request for approval include an approval issued for the self-reactive material by a competent authority of a foreign government?

**2H.** Does the UN identification number agree with the proper shipping name and classification type?

## Self-Reactive Classification Approval Application Completeness Form FOR NEW APPLICATIONS

## PART 1 APPLICANT INFORMATION

1A. Self-reactive Classification Number:
Tracking Number:
Project Officer/Office:
<b>1B.</b> Date of Application:
1C. Name of Applicant:
Title:
Company Name:
Address:
Phone Number:
E-mail address:

## **1D.** U.S. Agent for foreign applicant or Consultant Name:

Cor	npany name:
Adc	dress:
Pho	one Number:
E-m	nail address:
Regula	ation(s) under which classification approval is requested:

#### **1F.** Hazardous materials covered by the application:

## PART 2 SELF-REACTIVE CLASSIFICATION COMPLETENESS CHECKLIST

**2A.** Did the applicant submit an application in accordance with 49CFR and identify the section of the chapter under which the application is made and a description of the activity for which approval is requested?

**2B.** Did the company provide the complete company name, address, e-mail address and telephone number?

**2C.** Did the company include all the relevant data concerning the physical state, temperature controls and test results for the self-reactive material formulation to determine the classification? Was there a determination as to the control and emergency temperatures?

**2D.** Were all the UN Tests conducted in conformance with the most current edition of the UN Test and Criteria Manual? Were the test results determined by using the testing protocol from Flow Chart Scheme for Self-reactive Substances to Div.4.1 from the UN Manual of Tests and Criteria; or other tests as approved and determined to be equivalent?

**2E.** Was the self-reactive material assigned to one of the seven types of generic types for Division 4.1 Self-reactive?

**2F.** Was the self-reactive material identified by technical name in the Self-Reactive Materials Table §173.224?

**2G.** Did the request for approval include an approval issued for the self-reactive material by a competent authority of a foreign government?

**2H.** Does the UN identification number agree with the proper shipping name and classification type?

## PHMSA OFFICE OF HAZARDOUS MATERIALS SAFETY Evaluation Form For Classification Approvals

FRACK	XING NUMBER:
ID NUM	1BER:
PROJE	CT OFFICER:
APPLIC	CANT NAME, ADDRESS, POC:
APPLIC	CA <u>TION DATE:</u>
REGUL	LATORY AUTHORITY:
ГЕСНИ	IICAL EVALUATION:

**ACTION:** The applicant is requesting an approval for classification. Results of the HIP Report and Safer Report (see attached checklist) are included in the evaluation and the recommendation on the company's fitness is determined on the findings. Approval will be based on Technology Office review.

The classification for which an approval has been requested is/is not recommended.

**EVALUATOR:** 

DATE:

Approval Tracking Number:	
Approval EX ID Number:	
Company Name:	
Approval Type:	
Application Type:	
Evaluator:	
Is the applicant fit to conduct the activity authorized by the classification approval:	

Is the applicant requesting authorization for classification or transport of the materials indicated below:

Explosives (Class 1.1, 1.2, 1.3 or 1.4)

Division 4.1 Division 5.1

Division 5.2 (Organic peroxide Type B, liquid or solid, temperature controlled)

In the five year period prior to the application, the applicant has been involved, directly or indirectly in the type and number of hazardous materials incidents below:

More than 1 "serious incident, involving any hazardous material;

More than 1 hazardous material incident involving any § 172.504 Table 1 and any material listed above;

More than 1 hazardous material incident involving a cargo tank, motor vehicle, railroad tank car or other bulk packaging;

More than 2 hazardous materials incidents involving any § 172.504 Table 2 materials in intermediate bulk or portable tank packaging

More than 30 hazardous materials incidents involving any § 172.504 Table 2 materials in non-bulk packagings.

 In the five year period prior to the application, the applicant has received:

 Four civil enforcement cases

 Four warning letters

 A combination totaling four civil enforcement cases and/or warning letters

SAFER REVIEW:	
A Motor Carrier Safety Rating of less than satisfactory according to the Federal Motor Carrier Safety Administration's Safety and Fitness Electronic Records System (SAFER)	
A HAZMAT Out of Service percentage of greater than the national average according to SAFER	
A Driver or Vehicle Out of Service percentage of twice the national average or greater according to SAFER	

Reviewed by:

# APPROVALS EVALUATION FORM For M-Number

Manufacturer ID NUMBER:

The applicant is requesting a Manufacturer's Symbol in accordance with 49 CFR 171-180. The company has been satisfactorily reviewed in the HIP and SAFER systems and the summary is attached to the file. No current outstanding violations were identified in the HIP system. For these reasons, the applicant's request is recommended.

## APPROVALS EVALUATION FORM For RIN Facilities

APPROVA	L ID NUMBER:
APPLICAN	<u>T:</u>
APPLICAT	ION DATE:
APPROVA	L TRACKING NUMBER:
	ORY SECTION FOR WHICH L IS BEING REQUESTED:
	49 CFR 107.805

#### JUSTIFICATION FOR ACTION:

The applicant is requesting approval to requalify DOT cylinders in accordance with 49 CFR 107.805. In accordance with the regulations, an onsite fitness examination was conducted by an approved Independent Inspection Agency and the applicant has been certified by the IIA in the inspection report as meeting the requirements to continue to requalify DOT cylinders in accordance with their approval. No current outstanding violations were identified in the HIP and SAFER systems. For these reasons, the applicant's request is recommended for approval.

## APPROVALS EVALUATION FORM For Repair/Rebuild (K Number) Facilities

APPROVA	L ID NUMBER:
APPLICAN	<u>T:</u>
APPLICAT	ION DATE:
APPROVA	L TRACKING NUMBER:
	ORY SECTION FOR WHICH L IS BEING REQUESTED:
	49 CFR 107.805

## **JUSTIFICATION FOR ACTION:**

The applicant is requesting approval to repair or rebuild DOT cylinders in accordance with 49 CFR 107.805. In accordance with the regulations, an onsite fitness examination was conducted by an approved Independent Inspection Agency and the applicant has been certified by the IIA in the inspection report as meeting the requirements to continue to repair/rebuild DOT cylinders in accordance with their approval. No current outstanding violations were identified in the HIP and SAFER systems. For these reasons, the applicant's request is recommended for approval.

## APPROVALS EVALUATION FORM For RIN Renewals

**APPROVAL ID NUMBER:** 

**APPLICANT:** 

**APPLICATION DATE:** 

APPROVAL TRACKING NUMBER:

#### REGULATORY SECTION FOR WHICH APPROVAL IS BEING REQUESTED:

49 CFR 107.805

## **JUSTIFICATION FOR ACTION:**

The applicant is requesting renewal of the above approval to continue to requalify DOT cylinders in accordance with 49 CFR 107.805. In accordance with the regulations, an onsite fitness examination was conducted by an approved Independent Inspection Agency and the applicant has been certified by the IIA in the inspection report as meeting the requirements to continue to requalify DOT cylinders in accordance with their approval. No current outstanding violations were identified in the HIP and SAFER systems. For these reasons, the applicant's approval is recommended for renewal.

# EVALUATION WORKSHEET SPECIAL FORM CERTIFICATE

Certificate Number/Revision:
Date Review Completed:
Applicant:
Date of application:
Is applicant a Registered User?
Y() N()
Model or ID Numbers:
Manufacturer:
Are sources presently being manufactured? Y() N()
I. SOURCE DESCRIPTION
A. Radioactive Contents.
1. Radionuclide(s):
2. Max. Activity [Bq and (Ci)]:
3. Physical/Chemical Form:

RAM

#### 4. Thermal Output:

B. Physical Descriptions (49 CFR 173.403, 173.476(c)(1) and 96 TS-R-1 para. 803))

**1.** Capsule Description (Include pertinent configuration features, dimensions, materials, and weld type):

- C. Drawings (173.476(c)(2) and IAEA 96 para. 803).
  - 1. Assembly and Component Drawings:

2. Drawings to be included with Certificate:

3. Adequate identification: dimensions: materials: welds: miscellaneous:

#### **II. EVALUATION DATA**

A. Basic Design Features (49 CFR 173.403):

1. Form (Either a single solid piece or is enclosed in an encapsulation which can be opened only by destroying the capsule):

2. Dimension Limit (At least one dimension not less than 5 mm (0.2 in):

3. Capsule Criteria (Meets tests in 173.469):

# B. What methods were used to demonstrate compliance with tests? (173.461 and IAEA 96 para. 701)?

1. Device/Prototype Tested:

2. Related to Similar Design:

3. Scale Model W/ Compensations:

4. Engineering Evaluation Computation and/or Reasoning:

C. Test criteria used:

1. Title and date of test documentation in file:

2. Used criteria in 49 CFR 173.469(b)(1)-(4) (or equivalently, in IAEA 96 paras. 705-709):

3. Used ISO 2919-1980(E) Heat and Impact classifications <u>6x4xx</u> (173.469(d)(1) and (2) or IAEA 96 para. 709):

a. If ISO impact tested, is special form radioactive material mass <200 g:

## D. Performance Tests/Evaluation Data

**1.** Required performance tests (delete columns not applicable):

Test Criteria	49 CFR Reference	ANSI/ISO Reference	IAEA-96 Reference	Pass/Fail
Temperature	173.469(b)(4)	<u>6</u> xxxx	708	
Impact	173.469(b)(1)	xx <u>4</u> xx	705	
Percussion	173.469(b)(2)	xx <u>4</u> xx	706	
Bending	173.469(b)(3)		707	

2. Leak test results (49 CFR 173.469 (a) & (c) & IAEA 96 paragraphs 603(c), 710, 711503, 606 & 613(b)) (delete rows not applicable):

Test Method	Test Limits	Pass/ Fail
Leaching	2 kBq (0.05 uCi)	
Volumetric (Solid)	Void Vol.> 0.1 cm³, Leak Rate < 1.3x10 <sup>-4</sup> atm cm³/sec	
Volumetric (Liq/Gas)	Void Vol.> 0.1 cm <sup>3</sup> , Leak Rate < 1.3x10 <sup>-6</sup> atm cm <sup>3</sup> /sec	

RAM

#### a. If leach tested, give liquid volume and detection sensitivity:

- b. If volumetric tested, give method and sensitivity, per ANSI/ISO. (Identify report and date):
- 3. Describe the condition of the source during and after applicable tests. (Describe orientation of capsule to assure maximum damage for IAEA percussion test or ISO/ANSI impact test. Describe any corrosion, deterioration, distortions, etc., observed as a result of the tests.):

- E. Prototype information. If prototypes were tested:
  - 1. Describe the prototype(s) and contents used for testing:
  - 2. If a range of source sizes are to be certified, what justification was given for the suitability of the prototypes to serve as the most vulnerable of the various source sizes:
  - 3. Do the prototypes adequately represent the sources to be certified?

- F. Quality Assurance and Quality Control (173.461, 173.462, 173.469(a), 173.476(c)(4) and IAEA 96 paras. 310, 803(d))
  - 1. Does the applicant have a valid Quality Assurance Program? (173.476(4) and IAEA 96 paras. 310 and 803(d)):

Y() N()

G. Other Comments:

#### **III. RECOMMENDATION:**

Issue certificate or renewal (against 1996 regulations)?

Evaluation by:

**Date Completed:**