

# **Peer Review Plan**



**Pipeline & Hazardous Materials Safety Administration**

**Pipeline Safety Research & Development Program**

**November 2006**

## TABLE OF CONTENTS

<u>1.0</u>	INTRODUCTION .....	3
<u>2.0</u>	PEER REVIEW TIMING.....	3
<u>3.0</u>	INFORMATION DISSEMINATION TYPE .....	3
<u>4.0</u>	PEER REVIEW TYPE .....	4
<u>5.0</u>	PEER REVIEWERS.....	4
<u>6.0</u>	RESEARCH SUBJECT MATTER .....	4
<u>7.0</u>	PEER REVIEWER CHARGE.....	4
<u>8.0</u>	PEER REVIEW COORDINATOR .....	4
<u>9.0</u>	PUBLIC INVOLVEMENT .....	5
<u>10.0</u>	PEER REVIEW REPORT.....	5
<u>11.0</u>	ADMINISTRATIVE RECORD .....	6
	APPENDIX.....	7

## **1.0 Introduction**

This document describes components of the research and development (R&D) Peer Review Plan for the Pipeline and Hazardous Materials Safety Administration (PHMSA).

Department of Transportation (DOT) Operating Agencies (OA) are required to begin a systematic process for peer review planning for all influential and highly influential information that the OA plans to disseminate in the “foreseeable” future.

Through the Information Quality Act<sup>1</sup>, Congress directed Office of Management and Budget (OMB) to “provide policy and procedural guidance to Federal agencies for ensuring and maximizing the quality, objectivity, utility, and integrity of information, (including statistical information) disseminated by Federal agencies.” A resulting OMB Bulletin entitled, “Final Information Quality Bulletin for Peer Review” was issued prescribing required procedures for Federal programs.

The Office of the Secretary of Transportation (OST) produced procedures governing modal implementation of this OMB Bulletin. These procedures as well as the OMB Bulletin serve as the basis of peer review plan and justification for the PHMSA Pipeline Safety R&D Program peer reviews.

Peer review is intended to uncover any technical problems or unsolved issues in a scientific work product through the use of technically competent and independent (objective) experts. Peer review of a major scientific work product that will have the imprimatur of the Federal Government needs to be incorporated into the upfront planning of any action based in the work product. This includes obtaining the proper resources commitments (reviewers and money) and establishing realistic schedules.

## **2.0 Peer Review Timing**

The peer review of active research projects will occur annually in the January or February timeframe. It will be held over the internet using Microsoft Live Meeting. Information Technology issues will be worked out in advance of the meeting. Information on the impact of the research and the peer review agenda are submitted in advance of the review. They correspond to an October annual deadline for identifying information dissemination type and a December annual deadline for identifying the peer review agenda.

## **3.0 Information Dissemination Type**

Per the OMB Bulletin and DOT guidance, PHMSA pipeline safety research is categorized as Influential Scientific Information (ISI) meaning scientific information that DOT can reasonably determine “will have or does have a clear and substantial impact on important public policies or private sector decisions.”

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<sup>1</sup> Pub. Law. No. 106-554-515(a)

#### **4.0 Peer Review Type**

A panel peer review was selected to further establish research quality and meet OMB and OST requirements. The panel peer review is designed to further establish quality and to keep research projects on track to meet their ultimate goal(s).

Panel peer reviews fit well into a systematic evaluation process implemented with the PHMSA Pipeline Safety R&D Program. Each step of this systematic process ensures that project outcomes will be of high quality, relevant to the mission of PHMSA/OPS and applied to the appropriate end users. A depiction of this process can be seen in Appendix A.

#### **5.0 Peer Reviewers**

Approximately four (4) to six (6) expert panelists will be secured by PHMSA for the review. Panelists are willing participants and have a level of technical or scientific knowledge commensurate with that of the scientific/technical dissemination developers. They will read all materials, participate fully, and protect confidential information that arises while peer reviewing the research subject matter.

#### **6.0 Research Subject Matter**

Specific research project subject matter varies from one annual peer review to another. Generally, subject matter falls within the eight program elements shown in Appendix B. Technical issues usually address metallurgical, structural, technological and risk-based subjects commonly seen in the pipeline industry.

#### **7.0 Peer Reviewer “Charge”**

A separate document was created describing the “Charge” given to peer reviewers. Please reference this document entitled “Peer Review Panelist Charge for the PHMSA Pipeline Safety R&D Program” for additional information. This document will be kept current and posted annually with the peer review agenda.

#### **8.0 Peer Review Coordinator**

The Peer Review Coordinator (PRC) organizes, coordinates, monitors, and facilitates the annual panel peer review. The PRC is the main contact for panelists and the researchers involved with a peer review and for public inquiries. The PRC is Mr. Robert Smith of PHMSA/OPS.

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## 9.0 Public Involvement

The following paragraphs identify and elaborate the public involvement for the peer review.

Opportunity for Comment – Since the public cannot attend the peer review event, they will have the opportunity to provide comment on the peer review. Each December, the peer review agenda, panelist charge and peer review plan for every ISI research project part of the annual review will be posted on the DOT Dockets Management System (DMS)<sup>2</sup>. Comments can be submitted in writing to the PRC and can address any of the research scheduled during the review.

Significant and Relevant Comments – The public comments will be categorized as significant and relevant by the PRC. These types of comments will be provided to the peer review panel prior to the review and designated to any identified research projects. These comments will be read by the peer review panel and addressed by the researcher at a specified time during the review. The researcher response will be included in the Peer Review Report and available to the public.

Opportunity to Nominate Peer Reviewers – The public will have the opportunity to nominate future peer review panelists. Information such as the name, phone, email and biography of prospective peer reviewers can be submitted to the PRC. PHMSA will evaluate submitted nominees to establish if their expertise, independence, and willingness is conducive for future peer reviews.

## 10. Peer Review Report

The official peer review report will contain the following outline:

- Title Page
- Outline
- Executive Summary
- Introduction
- Program Background
- Peer Review Panelists
- Scope of the Review
- Associated Research
- Peer Review Findings
- PHMSA Official Response
- Appendices (A. PHMSA Acceptance Memo, B. Panelist Curriculum Vitae, C. Project Summaries, D. PRC contact information)

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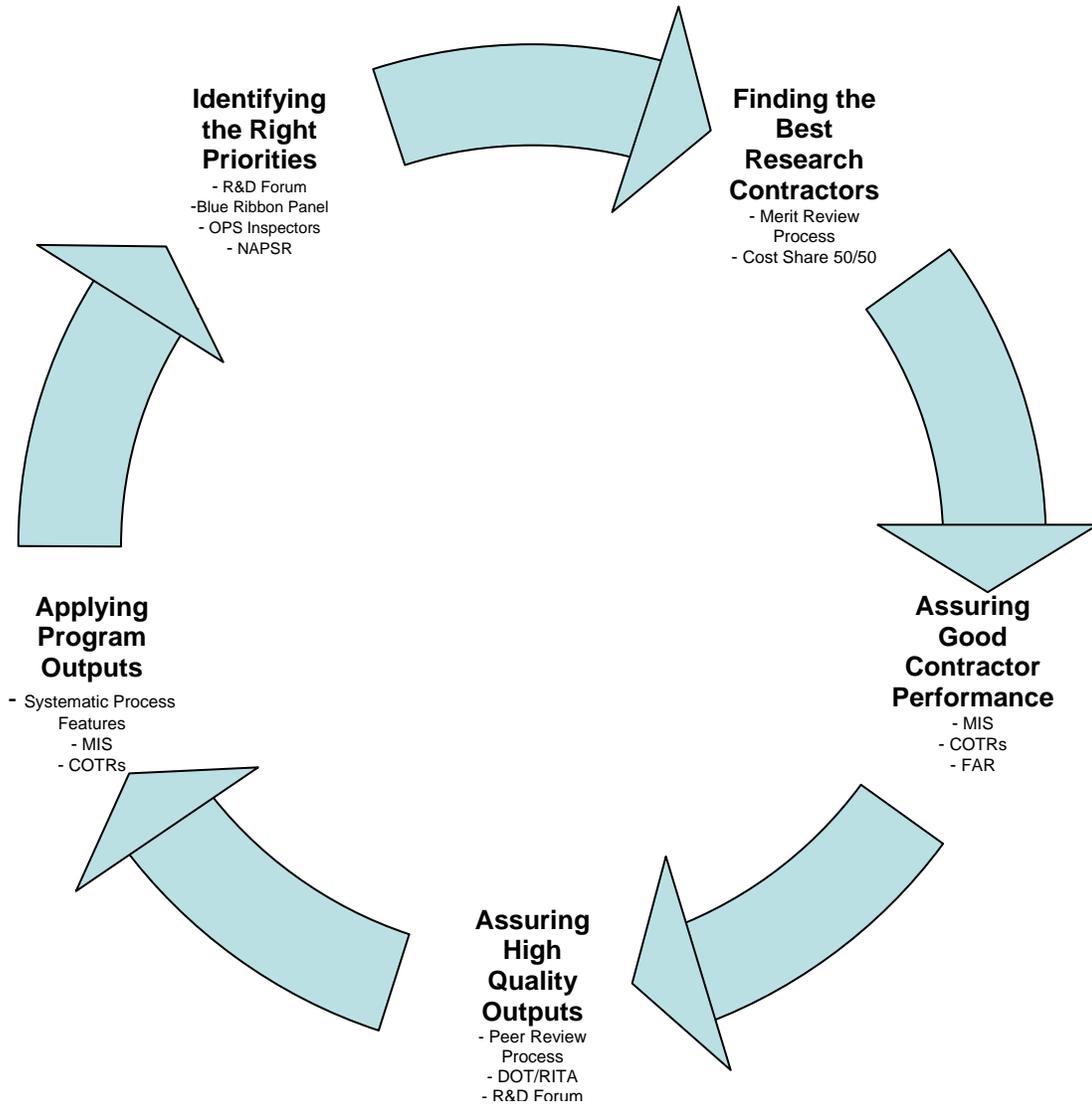
<sup>2</sup> DMS is an electronic, image-based database in which all DOT docketed information is stored for easy research, and retrieval. See <http://dms.dot.gov>

## **11.0 Administrative Record**

The public files associated with pre and post peer review events will be filed on the DOT Dockets Management System <http://dms.dot.gov/> which is currently used to support DOT regulatory and adjudicatory actions.

Public information will also be posted on the DOT Influential/Highly Influential Scientific Disseminations website at <http://www.dot.gov/peerst.htm> and on the PHMSA Pipeline Safety Program website at <http://primis.phmsa.dot.gov/rd/>.

# APPENDIX A: PHMSA Pipeline Safety R&D Program Systematic Evaluation Process



**APPENDIX B: Elements of PHMSA Pipeline Safety R&D Program**

	<b>Program Elements</b>	<b>Program Element Goals</b>
1.	Damage Prevention	Reducing the number of incidents and accidents resulting from excavation damage and outside force
2.	Pipeline Assessment and Leak Detection	Identifying and locating critical pipeline defects using inline inspection, direct assessment and leak detection
3.	Defect Characterization and Mitigation	Improving the capability to characterize the severity of defects in pipeline systems and to mitigate them before they lead to incidents or accidents
4.	Improved Design, Construction, and Materials	Improving the integrity of pipeline facilities through enhanced materials, and techniques for design and construction
5.	Systems for Pipeline Mapping and Information Management	Enhancing the ability to prevent and respond to incidents and accidents through management of information related to pipeline location (mapping) and threats definition
6.	Enhanced Operation Controls and Human Factors Management	Improving the safety of pipeline operations through enhanced controls and human factors management
7.	Risk Management & Communications	Reducing the probability of incidents and accidents, and mitigating the consequences of hazards to pipelines
8.	Safety Issues for Emerging Technologies	Identifying and assessing emerging pipeline system technologies for opportunities to enhancing their safety