DEPARTMENT OF TRANSPORTATION
Pipeline and Hazardous Materials Safety Administration
Office of Hazardous Materials Safety; Notice of Delays in Processing of Special Permits Applications
AGENCY: Pipeline and Hazardous Materials Safety Administration (PHMSA), DOT.

APPLICATION: List of applications delayed more than 180 days.

SUMMARY: In accordance with the requirements of 49 U.S.C. 5117(c), PHMSA is publishing the following list of special permit applications that have been in process for 180 days or more. The reason(s) for delay and the expected completion date for action on each application is provided in association with each identified application.


Key to “Reason for Delay”
1. Awaiting additional information from applicant.
2. Extensive public comment under review.
3. Application is technically complex and is of significant impact or precedent-setting and requires extensive analysis.
4. Staff review delayed by other priority issues or volume of special permit applications.

Meaning of Application Number Suffixes
N—New application.
M—Modification request.
PM—Party to application with modification request.

Issued in Washington, DC, on February 27, 2008.

Delmer F. Billings,
Director, Office of Hazardous Materials, Special Permits and Approvals.

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Application No. | Applicant | Reason for delay of completion | Estimated date
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11579–M | Austin Powder Company, Cleveland, OR | | 03–31–2008
13173–M | Dynetek Industries Ltd., Calgary Alberta, Canada | | 03–31–2008
14576–N | Structural Composites Industries(SCI), Pomona, CA | | 03–31–2008
14402–N | Lincoln Composites, Lincoln, NE | | 03–31–2008

DEPARTMENT OF TRANSPORTATION
Pipeline and Hazardous Materials Safety Administration

[Docket No. PHMSA–RSPA–2004–19856]

Pipeline Safety: Issues Related to Mechanical Couplings Used in Natural Gas Distribution Systems

AGENCY: Pipeline and Hazardous Materials Safety Administration (PHMSA), DOT.

ACTION: Notice; issuance of advisory bulletin.

SUMMARY: Recent events concerning failures of mechanical couplings and related appurtenances have raised concerns about safety in natural gas distribution systems. This notice updates information provided in Advisory Bulletin ADB–86–02 and advises owners and operators of gas pipelines to consider the potential failure modes for mechanical couplings used for joining and pressure sealing two pipes together. Failures can occur when there is inadequate restraint for the potential stresses on the two pipes, when the couplings are incorrectly installed or supported, or when the coupling components such as elastomers degrade over time. In addition, inadequate leak surveys which fail to identify leaks requiring immediate repair can lead to more serious incidents. This notice urges operators to review their procedures for using mechanical couplings and ensure coupling design, installation procedures, leak survey procedures, and personnel qualifications meet Federal requirements. Operators should work with Federal and State pipeline safety representatives, manufacturers, and industry partners to determine how best to resolve potential issues in their respective state or region. Documented repair or replacement programs may prove beneficial to all stakeholders involved.

FOR FURTHER INFORMATION CONTACT: Richard Sanders at (405) 954–7214, or by e-mail at richard.sanders@dot.gov; or Max Kieba at (202) 493–0595, or by e-mail at max.kieba@dot.gov.

SUPPLEMENTARY INFORMATION:
I. Background

Mechanical couplings are fittings used for joining and pressure sealing two pipes together. Other methods of joining pipe include welding for steel and heat fusion for plastic. There have been improvements in materials and manufacturing methods over the years, but the basic design concept has not changed. Most couplings rely on elastomers and compression as sealing mechanisms. Couplings appear in a variety of configurations: Straight or inline couplings, elbows (45 or 90 degree), tees, reducing couplings (for joining pipes of different diameters), and couplings integrated with risers. A variety of gaskets and sleeves also exist. Properly installed and supported, couplings successfully connect steel, cast iron, copper, and plastic pipes. However, there is also a history of significant incidents related to coupling failures.

Advisory Bulletin ADB–86–02, issued February 26, 1986, informed natural gas pipeline operators to review procedures for using mechanical couplings and ensure coupling design, procedures, and personnel qualifications meet 49 CFR part 192 requirements. ADB–86–02 is posted on PHMSA’s Web site and in Docket ID PHMSA–RSPA–2004–19856. The bulletin discussed pipeline failures that had been attributed to temperature-related contraction of the plastic pipe and the inadequate restraint capabilities of mechanical couplings.

Additionally, the National Transportation Safety Board (NTSB) issued a Pipeline Accident Report titled “National Fuel Gas Company, Natural Gas Explosion and Fire, Sharpsville, Pennsylvania, February 22, 1985” (NTSB/Par-85/02). The factors involved in the Sharpsville incident were similar to those of several other incidents reported to PHMSA’s Office of Pipeline Safety. As documented in the NTSB report, the cyclic effects of temperature-related contraction and expansion on plastic pipe in an improperly designed mechanical joint can be cumulative and lead to a failure even after several years of satisfactory service.

A number of incidents have occurred since issuance of ADB–86–02. PHMSA searched 3.417 gas distribution incident reports submitted to the agency since 1984, and identified 274 incidents that could potentially include coupling or fitting failures. After closer examination of the incident detail, PHMSA determined 148 of those incidents more reliably coupling or fitting failures on steel or plastic pipe. Although this accounts for only four to eight percent of all distribution incidents reported to PHMSA, the significant incidents within that data, as well as the potential for additional significant incidents, should not be ignored. Significant incidents include the following: a failure in Buffalo, Minnesota on February 19, 2004 that resulted in significant property damage; a failure in Ramsey, Minnesota on December 28, 2004 that resulted in three fatalities and one serious injury; and, a failure in Wylie, Texas on October 16, 2006 that resulted in two fatalities.

It is important to note that this data only includes incidents that were reportable to PHMSA. These numbers could be much greater if they included incidents that were reported at the State level. In addition to these incidents, a number of other issues have been cited:

- In 1993, the New York State Public Service Commission (NY PSC) concluded an investigation concerning the increased incidence of leaks attributed to gaskets and gas quality in a coupled steel natural gas distribution system on Long Island.
- In 2005, Washington Gas Company issued a report on the increased incidence of natural gas leaks attributed to gaskets and gas quality on mechanically coupled steel pipe in a major portion of its distribution system.
- In 2005, the Public Utilities Commission of Ohio (PUCO) opened a statewide investigation due to a series of natural gas incidents reported to PUCO by local distribution companies involving risers, the vertical portions of the service lines that connect the distribution systems to customers’ meters. In addition to four reportable incidents, a number of “non-incident” riser failures were also reported to the staff. The PUCO opened a case to examine riser types, reviewing installation and overall performance because of the potential risk posed by risers as links between the gas distribution service lines and meters, located near or within a customer’s premises.
- In addition to the 2004 incidents in Minnesota already discussed, two other incidents occurred in the State. After the first incident, Minnesota’s Office of Pipeline Safety began to review the couplings installed in the system in question. The second incident occurred while the study was being conducted. Between 1980 and 2007, seven incidents occurred in Texas. These are outlined in a February 2008 Railroad Commission of Texas report titled “Study Report on Compression Type Couplings.” (http://www.rrc.state.tx.us/divisions/gas/pls/7XCouplingrpt.pdf)

These incidents involve a variety of types and sections of couplings or risers. For example, the issues surrounding the Ohio couplings were slightly different than the Texas couplings. Both were related to risers, but the Ohio issues involved the compression mechanisms located aboveground on the risers that connect meter settings to underground service lines. The couplings in Texas have been located on the ends of service risers where service lines connect to risers. While some incidents in question were reportable to PHMSA and investigated by PHMSA, those that were not were investigated by the relevant State pipeline safety agency. This notice does not focus on a particular State, operator, or type of coupling. Rather, it intends to provide generally applicable advice on incidents affecting multiple stakeholders and systems throughout the country.

Although a number of variables exist, the safety problem appears to involve two predominant failure modes. First, in the cases involving pullout of pipe, often plastic, from compression couplings, an additional and perhaps unique factor produced the pullout forces. These additional factors could include cyclic fatigue from changing of the seasons (especially in northern climates), or soil shifting by other means (ground movement from earthquakes or after heavy rains). Improper installation (most couplings currently come with product warnings) or old age (parts of the coupling deteriorating) could also have contributed to the pullout. Some studies found couplings that were installed with components that differed from the original manufacturer specifications, modified prior to installation, or missing parts entirely. As another example of incorrect application, the coupling involved in the Ramsey, Minnesota incident was designed to be used on steel pipe, not plastic, and had a service tee welded to it contrary to manufacturer’s recommendations. The common factor in all incidents involving pullout is that the compression fitting did not have adequate restraint to assure safety under service conditions. In some cases, the coupling failed after many years of successful service.

The second failure mode involves leakage through the sealing surface between the coupling and the pipe. This occurred when the integrity of long-term viscous and elastic effects of the seals degraded which eventually caused a leak path to develop. In some cases, a change in the gas quality in the distribution system may have contributed to the failure.
Other contributing factors can also lead to incidents. These factors include leak surveys conducted in conditions that prevent gas from properly migrating to the surface, such as after heavy rains or certain soil and surface features. Some incidents indicated leak surveys involving equipment not calibrated properly or not appropriate for the intended use, or personnel not sufficiently trained. If an operator is doing proper leak surveys at regular intervals, an operator can usually detect a leak early, fix the source of the leak, and prevent an incident. There have, however, been cases where a leak survey, using properly calibrated equipment showing no problems, was followed by an incident involving sudden pullout only weeks later.

Follow-up has already occurred with some of the incidents mentioned in this bulletin:

- The NY PSC and the operator agreed to a replacement program involving approximately 45,000 natural gas service lines equipped with couplings.
- In Ohio, nearly 500,000 risers were identified by the PUCO’s study as prone to failure. Currently, the PUCO is working with the operators who have these risers and the Ohio Consumers’ Counsel to set up replacement schedules and address costs.
- In May 2005, Minnesota’s Office of Pipeline Safety issued a compliance order to an operator to replace service lines installed prior to January 1, 1984, or visually inspect the entire service line to verify it contains only mechanical fittings that comply with 49 CFR 192.283(b). Any mechanical fittings identified that did not meet the requirements were required to be replaced.
- The Railroad Commission of Texas has required operators to replace, within a 2-year period, 97,000 remaining old mechanical couplings that have been in service for some 28 to 30 years. In addition, the Railroad Commission of Texas has adopted mandatory replacement programs in an effort to remove compression couplings found leaking on both steel and plastic pipe that are susceptible to pullout.
- A number of other studies, tests, and repair or replacement programs, some of them voluntary, have been conducted in other States.

II. Advisory Bulletin (ADB–08–02)

To: All Gas Distribution Operators.
Subject: Identifying Issues with Mechanical Coupling That Could Lead to Failure.

Advisory: Due to variables related to age of couplings, specific procedures and installation practices, and conditions specific to certain regions of the country, it is difficult to cite common criteria affecting all failures that operators should address. However, PHMSA advises operators of gas distribution pipelines using mechanical couplings to do the following to ensure compliance with 49 CFR part 192:

1. Review procedures for using mechanical couplings, including the coupling design and installation and ensure that they meet manufacturer’s recommendations;
2. Review leak survey procedures to ensure that leak surveys are properly conducted, taking into account other contributing factors (i.e., weather conditions, calibration); and,
3. Review personnel qualifications to ensure they address leak surveys sufficiently.

PHMSA also advises operators of gas distribution pipelines using mechanical couplings to consider taking the following measures to reduce the risk of failures of mechanical couplings:

4. Use Category 1 fittings only if mechanical couplings are used on pipe sizes ½” CTS (Copper Tube Size) to 2” IPS (Iron Pipe Size). Per ASTM D2513–99 titled “Standard Specification for Thermoplastic Gas Pressure Pipe, Tubing and Fittings,” Category 1 is a mechanical joint design that provides a seal plus a resistance to a force on the pipe end equal to or greater than that which will cause a permanent deformation of the pipe. At this time there is insufficient data to indicate there are issues involving fittings for larger diameter pipe. PHMSA will revisit if such issues do arise with larger diameter pipe.

5. Improve recordkeeping on specific couplings that exist, i.e., their type, installation date, maintenance schedule, and any failures encountered, to help identify a trend of problems that may occur with a specific coupling or type of installation.

6. Consider whether to adopt a full replacement program if there are too many unknowns related to couplings in service.

7. Work with Federal and State pipeline safety representatives, manufacturers, and industry partners to determine how best to resolve potential issues in their respective state or region.

Documented repair and replacement programs may prove beneficial to all stakeholders involved. If operators are unsure of the appropriate representative, contact the individual(s) listed in this advisory bulletin for further information.

DEPARTMENT OF THE TREASURY
Office of Foreign Assets Control

Additional Designations of Entities Pursuant to Executive Order 13448

AGENCY: Office of Foreign Assets Control, Treasury.

ACTION: Notice.

SUMMARY: The Treasury Department’s Office of Foreign Assets Control ("OFAC") is publishing the names of two newly-designated entities whose property and interests in property are blocked pursuant to Executive Order 13448 of October 18, 2007, "Blocking Property and Prohibiting Certain Transactions Related to Burma."

DATES: The designation by the Director of OFAC of two entities identified in this notice, pursuant to Executive Orders 13448, is effective February 25, 2008.

FOR FURTHER INFORMATION CONTACT: Assistant Director, Compliance Outreach & Implementation, Office of Foreign Assets Control, Department of the Treasury, 1500 Pennsylvania Avenue NW., (Treasury Annex), Washington, DC 20220, Tel.: 202/622–2490.

SUPPLEMENTARY INFORMATION:

Electronic and Facsimile Availability

Information about these designations and additional information concerning OFAC are available from OFAC’s Web site (http://www.treas.gov/ofac) or via facsimile through a 24-hour fax-on-demand service, Tel.: 202/622–0077.

Background

On October 18, 2007, the President signed Executive Order 13448 (the “Order”) pursuant to, inter alia, the International Emergency Economic Powers Act (50 U.S.C. 1701 et seq.). In the Order, the President took additional steps with respect to, and expanded, the national emergency declared in Executive Order 13047 of May 20, 1997, to address the Government of Burma’s continued repression of the democratic opposition. The President identified twelve individuals and entities as subject to the economic sanctions in the Annex to the Order. Section 1 of the Order blocks, with certain exceptions, all property and