



MAY 5 2004

GSA Office of Governmentwide Policy

MEMORANDUM FOR RONALD POUSSARD

DIRECTOR
DEFENSE ACQUISITION REGULATIONS COUNCIL

FROM:

RODNEY P. LANTIER, DIRECTOR
REGULATORY AND FEDERAL ASSISTANCE
PUBLICATIONS DIVISION

SUBJECT:

FAR Case 1998-020, Hazardous Material Safety Data

Attached is a comment received on the subject FAR case published at 69 FR 10118; March 3, 2003. The comment closing date was May 3, 2004.

<u>Response Number</u>	<u>Date Received</u>	<u>Comment Date</u>	<u>Commenter</u>
1998-020-1	04/20/04	04/20/04	EPA
1998-020-2	05/11/04	05/11/04	NDIA
1998-020-3	05/11/04	05/06/04	Lockheed Martin



1998-020-1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 20 2004

OFFICE OF
ADMINISTRATION
AND RESOURCES
MANAGEMENT

Ms. Laurie Duarte
General Services Administration
FAR Secretariat (MVP)
1800 F Street, NW, Room 4035
Washington, DC 20405

Dear Ms. Duarte:

Thank you for the opportunity to comment on the proposed rule regarding Hazardous Material Safety Data, under the Federal Acquisition Regulation (FAR) Case 1998-020. The Environmental Protection Agency (EPA) has one comment for your consideration.

Please clarify the FAR language at 52.223-3(c)(3). It appears that the word "make" was inadvertently omitted at the beginning of paragraph (c)(3).

If you have questions in reference to our comment, please contact Linda Clement on (202) 564-4356.

Sincerely,

A handwritten signature in black ink that reads "Ronald L. Kovach".

Ronald L. Kovach, Director
Policy, Training and Oversight Division

Ronald
4/20/04
W

1998-020-2



May 11, 2004

General Services Administration
FAR Secretariat (MVP)
1800 F Street, NW, Room 4035
Attn: Laurie Duarte
Washington, DC 20405

Dear Ms. Duarte:

The Aerospace Industries Association (AIA) and the National Defense Industrial Association (NDIA) appreciate the opportunity to provide comments on the proposed changes to the Federal Acquisition Regulation (FAR) coverage on Hazardous Material Safety Data Sheets (FAR Case 1998-020). We continue to support the federal government's goal to extend to federal employees the same protection from workplace hazards enjoyed by workers in private industry under the OSHA Federal Hazard Communication Standard. We also understand the government's desire to take a life-cycle perspective with respect to the products that it acquires. However we strongly recommend that the rule not be issued as drafted until the major issues have been resolved.

AIA and NDIA wish to acknowledge and commend the drafters for addressing some of our concerns about equitable adjustments because of changes to the federal standard after initial contract award. However, many of our fundamental concerns with the 2002 proposed rule remain unresolved in the current proposed rule. These concerns still exist and we believe deserve further consideration. In particular we continue to be concerned with the treatment of articles under the standard, the practical aspects of implementing the requirements, the efficacy of these requirements in meeting the expressed objectives of the government, the added liability, and the significant underestimated resources and associated costs needed to meet the standard, especially for complex manufactured goods like aircraft, armored vehicles and naval vessels. These points are addressed in more detail in our attached comments.

The proposed rule appears to implement a costly and impractical solution to a problem that itself is not very well defined. We again urge the Councils to utilize for the government the existing commercial approach to hazard communication that has developed under the Federal Hazard Communication Standard. To accomplish this, we suggest that the government and the contractors work together, as we did on NAS 411, to develop and field test with ongoing programs a template or approach that government acquisition programs can utilize to address hazardous materials information needs associated with the life-cycle of a product. Using

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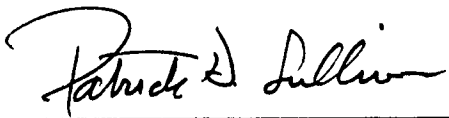
1998-020-2

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Page 2

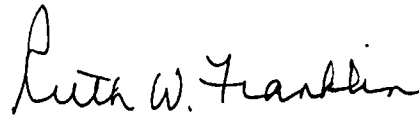
feedback from ongoing programs, we can refine this life-cycle management tool together as partners. The NAS 411 concept of a Hazardous Materials Management Program (HMMP), explicitly designed to address life-cycle issues, provides an excellent starting point to address the government's concerns. Using NAS 411 or starting with a blank slate and by working together, we should be able to develop a more effective and less costly tool than the current proposal which would yield a book of MSDSs and a list of parts. AIA and NDIA would be pleased to work with the government to ensure that federal workers receive the same protection we currently provide to all our workers and to address life-cycle considerations in a way which, to the extent possible, avoids creating added costly and unnecessarily burdensome requirements that appear to provide no real benefits.

We look forward to meeting with you to discuss this further and thank you again for the opportunity to offer comments on this important issue. For further information, please contact Patrick Sullivan of AIA at (703) 358-1045 or Ruth Franklin of NDIA at (703)-247-2598.

Sincerely,



Patrick D. Sullivan
Assistant V.P., Procurement and Finance
Aerospace Industries Association



Ruth W. Franklin
Director for Procurement
National Defense Industrial Associations

Attachment

AIA\NDIA Comments on Proposed Rule on FAR Case 1998-020, Material Safety Data Sheet (MSDS)

Treatment of Articles

The MSDS was designed as a tool for situations where workers in the commercial workplace were handling hazardous materials, and it is there where it is most effectively employed. The MSDS system also was designed for commodity-like products such as chemicals, paints, cleaners, etc. provided by chemical manufacturers, importers and distributors. It was not designed for life-cycle maintenance of complex products such as military weapons systems or for environmental impacts of these systems.

As the drafters acknowledge, complex products can be simultaneously greater than the sum of their parts with respect to some risks and with respect to others, may pose insignificant risks. A collection of individual MSDS's cannot adequately address these synergistic effects. Just as it would not make sense to impose a NAS 411 requirement on a supplier of adhesives, it does not make sense to apply an MSDS-approach to suppliers of complex products. The application of the MSDS approach to include manufactured articles, especially complex military hardware, is not a mere extension, but rather an expensive and impractical quantum leap.

In the Federal Register (FR) notice at page 10120, under the heading 'MSDSs/Updated List', the Council's response to comment c states that the FAR and FED-STD 313 "are only a means used to enforce the same regulatory requirements on contractors under Government contracts that are imposed on private sector contracts." The application of an 'expanded-MSDS' system that the proposal envisions to achieve life cycle coverage goes directly against this concept of commonality in the treatment of government and private contracts.

Until such time as a pilot program or comparable test can be accomplished, we again recommend that the FAR use the same terminology and the same exemption of articles to ensure consistency between the FAR clause and OSHA Hazard Communication Standard and to provide a clause with which government contractors can comply. We strongly recommend that government and industry work together to create an approach that meets our mutual needs.

Implementation

The elimination of the exemption of articles in the FAR proposed rule places a significant administrative burden on suppliers of products with extensive supply chains. A vast book of MSDS's to meet the proposed FAR requirements will be difficult to assemble and maintain for complex products and will result in costs that the contractor will find difficult, if not impossible, to estimate. Further, these costs will be borne by the government. For all of this expensive effort, a book of MSDS's will not be particularly useful to cover all aspects of the product life-cycle. Moreover, as the product undergoes maintenance and upgrades over its life-cycle, the government will need to ensure that the set of MSDS's accompanying each piece of equipment is regularly updated as new parts are placed into service or new health information is found.

For example, once a product has been acquired, its operation and maintenance will occur at multiple bases, shops and depots. Moreover each base, shop or depot will have a different mix of dozens or even hundreds of products. If such a depot was a commercial facility, the depot management would be responsible for establishing and implementing a hazard communication program, using MSDSs for the chemicals utilized by the depot and Technical Orders or maintenance manuals. The depot would not be receiving MSDSs for the articles (products). If the facility uses a chromate-containing paint, there would be one MSDS for that paint. Under the proposed rule, the government contracting office will receive a deluge of MSDSs for each product if the paint formulation changes. The contracting office will then need to identify all sites associated with the product and send to those sites the appropriate information. Unless there is a high level of coordination between programs, our hypothetical depot can expect to receive multiple copies of the same MSDS because of the multiplicity of products passing through the depot. This will increase the workload on the depot without increasing the protection of the workers. In essence the proposal shifts the maintenance of the hazard communication program for the depot onto the suppliers of all the products that pass through the depot. The result is unnecessary work, massive duplication of effort, increased administration for the depot, and added costs for all. It is simply not efficient. The existing commercial sector approach to hazard communication may not be perfect, but it works. We urge the government to use the same system with the same definitions.

Efficacy

Even though the Councils non-concurred with comment c at page 10120, "MSDS/Update List" AIA/NDIA continues to believe that a significant problem with the proposed FAR revision is its expansion to situations where original equipment and parts manufacturers (OEM's) will be required to prepare, rather than pass on, MSDSs. This is not merely an ordinary administrative task. To require the equipment manufacturer to take on this responsibility will create additional costs and liability. The situation is exacerbated by the substantial number of firms in the supply chains of most prime contractors. The prime contractor can request such information from its vendors and suppliers and can insist that this requirement be "flowed down" the entire subcontract matrix. The extent to which such information when provided to the government is accurate, complete and current can only be attested to by the prime contractor with the caveat "to the best of its knowledge." In addition, sub-tier suppliers may invoke confidentiality protections under the OSHA rules and thereby withhold information thus rendering the data incomplete.

As we stated before, the implementation of the proposed FAR standard will result in the generation of a significant volume of information, primarily in the form of MSDSs. For a complex product such as an aircraft there can be hundreds of thousands of parts, components and subassemblies, many of which may involve multiple MSDSs. In order for this information to be of value and translate into enhanced protection for the government workforce, each program will require a major, labor intensive, effort to manage these data. For military products there is already a system of Technical Orders and the availability of a Hazardous Materials Management Plan under NAS 411. It is not clear that another layer of data will provide any increased protection to justify the increased efforts by the contractors and the government acquisition programs.

We believe that a better approach is to tailor the creation of MSDSs to the unique circumstances of complex products. In general, the member companies of AIA and NDIA have only limited experience in preparing MSDSs, and that experience is principally limited to chemical MSDSs. What should an article MSDS look like for a complex product? Is it a collection of MSDS for its constituents or is it a single, extremely long and detailed document? Because of the variability in chemical composition allowed by material specifications, the potential exists that each individual aircraft, vehicle or vessel will have its own unique MSDS or set of MSDSs. The task of tracking this array of paper or electronic documents will be administratively formidable and economically burdensome. A one size fits all requirement for the creation of MSDSs is bound to create unnecessary cost and delay that could be avoided through a field test of a variety of approaches.

Liability

The inclusion of a new standard of knowledge combined with an expansion of the articles to be covered creates a significant increased risk and liability for the contractor. By revising FAR 52.232-3(c) (1) to indicate that the contractor shall submit a revised MSDS only if the "contractor has knowledge, or reasonably should have knowledge of" (Emphasis added.) certain information that would render the MSDS incomplete or inaccurate is an invitation to litigation, argumentation and court determination of required compliance. Both parties to the contract need to know with finality what is expected under the contract. If a contractor has specific knowledge of an incomplete or inaccurate MSDS, that information should be made known to the customer. To insert a standard of knowledge about what should be known about all products delivered, even when parts or components of these products are not manufactured by the contractor itself - over an indefinite period - unduly burdens the contractor with liability that is disproportionate to the value of the products themselves. It opens the way for second guessing by third parties and endless litigation.

We strongly recommend that the troublesome language "or reasonably should have knowledge of" be deleted from the final rule.

Costs

The discussion in the FR notice at page 10122 provides estimates of the impact of the proposal. We believe these estimates to be far too low. The cost estimate provided by the GSA FAR Rule Supporting Statement, was \$268,268 to the government, which only included the cost to the government to receive, scan and insert MSDSs into HMIS. The GSA estimated cost to industry cited in the same supporting statement was \$140,000.

The estimate of costs for the government would seem to be quite low. As noted above, each aircraft, vehicle or vessel could have a unique MSDS or associated set of MSDSs as it comes from the contractor. Once in service, as it undergoes maintenance, upgrades, etc., a new MSDS or set of MSDSs will need to be generated. The cost to create and maintain the computer program to implement and track these accounting complexities will not be trivial. A cost estimate of slightly more than a quarter million dollars per year for the entire Department of Defense seems several orders of magnitude too low.

Since comparable requirements do not exist for commercial customers, the government will have to bear the cost of implementation and maintenance of the new system to comply with the proposed rule. For industry, the burden associated with the requirements of FAR 52.223-3 would include the cost of substantial effort to create a whole new class of article MSDSs and expansion of existing MSDSs to a life-cycle document, the cost to keep apprised of new hazard rating and protection information (even when not significant to contractor use of a chemical), asking material suppliers to publish revised MSDS before they would otherwise be obligated, the cost of duplicating and sending this information to multiple government programs, and the cost of establishing data systems to track required activities. As noted above, the lack of experience in creating MSDSs for complex products combined with the inability to accurately forecast the frequency of change over the life cycle of a product (the C-130 aircraft has been in operation for several decades) makes it very difficult, if not impossible, to provide cost estimates for purposes of contract negotiation.

For comparison purposes, we estimate the cost to create a new MSDS for a chemical to be in the range of \$1,000. This assumes all necessary testing and toxicological studies are completed, and the cost reflects only the time of the various professional and administrative personnel needed to create the document. While we do not have specific information, the cost for a comparable article-MSDS would logically seem to be higher. However, based on a parts list for one aircraft and the variation permitted by material specifications, there could easily be 100,000 parts with unique chemical constituents. Assuming only 10% of these parts required an article-MSDS, the cost of simply preparing the documents, using the experience with chemicals, would be approximately \$10,000,000 for just one complex product. The additional costs of tracking this information before and after delivery and transferring the correct information to the government are not included.

One of our member companies has looked at the potential impact of implementing the proposal on a business basis rather than a product basis. Based on their assessment, the impact on just one of their businesses is significant. This firm estimates that the proposal would require an initial cost of \$16,000,000 to create a management system to track all activity for all their government products, and maintain documentation and control the flow of information to the government. They further estimate their ongoing costs to be approximately \$1,600,000 per year. If this cost is aggregated across the industry the budget impact could be substantial.

Both of these industry cost estimates indicate that the costs to industry of the proposal are substantially higher than the \$140,000 figure estimated by the GSA.



William H. Persky
Director
Environment, Safety & Health
and Medical Services

6 May, 2004

FAR Desk Officer, OMB,
Room 10102, NEOB,
Washington, DC 20503,

General Services Administration,
FAR Secretariat (MVA),
1800 F Street, NW, Room 4035,
Washington, DC 20405.

Comments in Response to
Proposed Rule 69FR42 10118 March 3, 2004
DEPARTMENT OF DEFENSE
GENERAL SERVICES ADMINISTRATION
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
48 CFR Parts 23 and 52
[FAR Case 1998-02]

Lockheed Martin Aeronautics Company appreciates the opportunity to submit comments to the Federal Acquisition Regulation (FAR) proposed rule regarding hazardous materials safety data. Lockheed Martin Aeronautics Company is providing the following comments as it pertains to the execution of current and future contracts with the Department of Defense (DOD), Lockheed Martin's primary customer.

Overview:

Although Lockheed Martin realizes the need to protect both federal and private industry employees, it also believes that this protection is already largely in place through the existing OSHA Hazard Communication Standard, which provides for worker protection for both industry and government personnel. Lockheed Martin believes the proposed regulation is fundamentally flawed and, in practice, unworkable for many products, certainly including all major system procurements. First, its implementation would require substantial changes in the procurement systems of many government suppliers and their subcontractors at substantial cost. Second, even if all of the Material Safety Data Sheets (MSDSs) apparently sought by the proposed regulation were somehow provided, the information would not be in a form useful to the Government customer without substantial coordinated changes by both the Government and the contractor in order to make the information accessible. Third, in that other methods of providing the desired information can and already do exist for many major system procurements, the attempted imposition of a costly alternative arrangement is clearly inappropriate.

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5/11/04*

Necessity and Utility of Proposed Information Collection

Through existing contract requirements, the contractor is required to control the presence of hazardous materials, identify their location and hazards, and determine the appropriate disposal method in accordance with federal, state and local environment, safety and health regulations for hazardous materials provided to the DOD by its contractors. In addition, requirements already exist for the testing, operation, maintenance, repair, and disposal/decommissioning of final products, (e.g., aircraft) provided to the DOD by its contractors, also in accordance with all applicable regulations, procedures, and policies. These requirements are met by providing MSDSs for consumable hazardous materials as defined in and required by 29CFR 1910.1200; Hazardous Material Management Plans; Deactivation, Demilitarization and Disposal Plans; caution notices; work instructions; technical orders; drawings; specifications; and parts lists.

Where hazardous materials cannot be avoided, the contractor must develop and implement plans and procedures for identifying, minimizing use of, tracking, storing, handling, packaging, transporting, and disposing of such materials for the weapon system. As alternatives become available, hazardous materials must be replaced through changes in design, manufacturing, and maintenance processes where technically and economically practicable.

A robust hazardous material identification and tracking system developed by the contractor and accepted by the customer currently exists for the collection and delivery of the above referenced information. The system provides the customer with vital hazardous materials information, while also complying with the contractor's requirement to deliver an affordable weapon system. This documentation is by no means an MSDS, but a synopsis of hazards associated with an end item piece of equipment.

Based on existing and very comprehensive contract requirements, for which costs have already been negotiated and established, it appears that collection of the proposed information will add little or no additional value or utility to the functions of the FAR as it is already being captured by numerous existing contract requirements.

Accuracy of Estimate of Public Burden

The estimation of cost provided by the GSA FAR Rule Supporting Statement was \$268,268 to the government, which only included the cost to the government to receive, scan and insert MSDSs into HMIS. The GSA estimated cost to industry cited in the same supporting statement was \$140,000.

It is believed that the cost to industry is substantially underestimated. The concept of requiring an MSDS for an end-item such as personal computer or a motor vehicle is daunting enough; the concept of an MSDS for a military aircraft or naval vessel is inconceivable. For example, the cost to author one MSDS for the most basic hazardous chemical mixture is estimated at approximately \$1,000, which includes the input of a toxicologist, environment, safety and health (ESH) subject matter expert, legal review and preparation time. This does not include the cost of testing, toxicological studies, or agency interface, if required. In the case of MSDSs for articles, such as a military aircraft, this cost would increase exponentially due to the complexity of and variations that can occur for such a complex system.

An article is composed of many parts. One would have to determine the potential hazards of each individual article, as well as the synergistic effect of the articles as they are assembled into larger and larger subassemblies, and finally, determine the overall hazards of the final article, in Lockheed Martin's case, a complex weapon system consisting of thousands of articles. To further compound this already complicated task, each article would require hazard identification for its entire life cycle, not simply for the delivered, final product. The contractor would be required to

predict and anticipate a broad range of scenarios its product may experience until deactivation in order to identify every possible hazard. This would be a Herculean task.

A simple typical example is described as follows: a radar supplier buys an aluminum box in which to place electronic circuit boards and chromated paint to protect the box against corrosion. Sanding of the painted box during maintenance of the product by the Air Force user creates a potential for exposure to dust containing aluminum and chromium. This inhalation hazard is not addressed by any MSDS received by the supplier (it received no MSDS for a simple aluminum box and the MSDS for the paint addressed the inhalation hazard of sprayed or drying paint, not dust from maintenance years later) and in this very typical situation, the supplier would now be required to develop a new MSDS for the painted box. The prime contractor that installed that box in an aircraft would require the supplier to deliver this new MSDS (not previously required) so that the prime contractor could then pass along that MSDS to the Government. The supplier would of course impose the same duties on its supplier of the electronic components that the prime contractor placed on it with respect to the entire assembled box. In that no MSDS exists for assembled circuit boards, this would generate a new requirement for an MSDS from a lower tier supplier.

Using this philosophy, to estimate the potential cost of providing MSDSs for one Lockheed Martin product, a parts list was obtained for a U. S. Air Force single seat aircraft. Based on the parts list for one aircraft, 20,484 articles exist that would require MSDSs. Due to variations in acceptable alloys and other material compositions, each article will typically exist in multiple variations. Assuming an average of only five variations in materials in an article, perhaps 100,000 new MSDSs would be required per aircraft (the number may vary with each contracted program, e.g., each version of each aircraft). Even if similarity between articles and other efficiencies could be developed in creating MSDSs, at the conservative estimate of \$1,000 to create an MSDS, this would result in an additional cost passed on to the customer of tens of millions of dollars for a single aircraft program.

That estimate of the cost of authoring MSDSs does not include the cost of tracking the MSDSs within the program or the cost of flowing the data to the customer, nor does it account for the recurring costs of managing MSDSs for material substitutions during the span of the contract. The estimate also does not include the cost of developing databases by both the contractor and/or customer to track all the referenced MSDSs throughout the life cycle of a contract. A system that would actually track different MSDSs to each specific item with its varying formulations would require a life cycle tracking of each through manufacture, delivery, maintenance, storage, and disposal. Neither the Government nor contractors have such a system in place for the majority of the parts in a major system.

Summary

It appears that the rule proponents envision that the major system suppliers will simply collect and pass along to the Government customer the MSDSs it receives from its suppliers plus, perhaps, some small additional number of MSDSs for items that the prime contractor has made itself. This fails to recognize the fundamentally new requirement for a very large class of new article MSDSs for products not formerly considered hazardous but which could during their life cycle produce a hazard requiring an MSDS under this new requirement. As written, this rule would impose fundamental changes in established business practices because the prime contractor does not receive such MSDSs from its suppliers, just as those suppliers do not receive MSDSs from their suppliers. The MSDS that contractors and their suppliers do receive from their lower tier suppliers are rarely, if ever, useful after incorporation of a hazardous material into an article.

The logistics of the requirement are ill defined in the proposed rule. For example, no protocol or standard exists for the generation of MSDSs for articles. OSHA has provided for exemptions to the Hazard Communication Standard for articles. Consequently, the proposed rule will generate the requirement for government to develop an entire standard for the development, formatting, identification, nomenclature, revision, tracking, maintenance, management, distribution, and archiving of said MSDSs.

1998-020-3

The costs of the proposed rule discussed above are new costs that would necessarily be added to the price of new procurements to which the rule applied. These costs will be flowed to government customers and will drastically impact the contractor's ability to deliver an affordable product.

DOD contracts already exist that require data that meet the intent of the proposed rule change. Federal, state and local regulations exist that protect the worker, the environment and commerce in transit. . In the short term, no contractor will be able to comply with the proposed rule. Over the longer term, implementation of the referenced rule change will add little or no value or utility at substantial cost to both industry and government.

LOCKHEED MARTIN CORPORATION
Lockheed Martin Aeronautics Company



William H. Persky, Director
Environment, Safety & Health, and Medical Services