

Electronic Filing - Received, Clerk's Office, May 7, 2010

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:

REASONABLY AVAILABLE CONTROL)	
TECHNOLOGY (RACT) FOR VOLATILE)	R2010-20
ORGANIC MATERIAL EMISSIONS FROM)	(Rulemaking-Air)
GROUP IV CONSUMER & COMMERCIAL)	
PRODUCTS: PROPOSED AMENDMENTS)	
TO 35 ILL. ADM. CODE 211, 218 AND 219)	

NOTICE

To: John Therriault, Assistant Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph, Suite 11-500
Chicago, Illinois 60601-3218

SEE ATTACHED SERVICE LIST

Please take notice that I have today filed electronically with the Office of the Pollution Control Board the TESTIMONY OF OLIN CORPORATION, a copy of which is herewith served electronically upon you. If you would like a hard copy of such testimony, please contact the undersigned and a hard copy will be sent to you.

Respectfully Submitted,

OLIN CORPORATION


By: Philip L. Sutton

Dated: May 7, 2010.

600 Powder Mill Road
East Alton, IL 62024
(618) 258-3780

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)
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TECHNOLOGY (RACT) FOR VOLATILE) R2010-20
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TESTIMONY OF OLIN CORPORATION

[Olin Corporation expects that this testimony will be presented by Michael L. Roark or Philip L. Sutton, both of Olin Corporation, but reserves the right to designate another individual to give such testimony. The presenter will swear to the accuracy of the testimony.]

East Alton, Illinois is the headquarters of Olin Corporation's ("Olin's") Winchester Division which maintains manufacturing operations at East Alton, Illinois and Oxford, Mississippi. The Winchester Division employs approximately 2100 people, with approximately 1800 employees at East Alton, Illinois. Winchester manufactures small arms ammunition and ammunition components for military, law enforcement and commercial customers worldwide. Winchester's East Alton operations include:

- Manufacture of Centerfire Ammunition (up to 50 Caliber)
- Manufacture of Shotshell Ammunition
- Manufacture of Ammunition Components (Primers, Shellcases, Shot, Bullets, etc.)
- Manufacture of Ejection Cartridges

Olin's East Alton Winchester Division operates under Clean Air Act Permit No. 96030015 (Title V Permit). In the manufacture of small arms ammunition and ammunition components, Olin uses sealants containing volatile organic materials ("VOM") in order to assure that the

ammunition will perform safely and effectively under extreme weather conditions and other extreme atmospheric and environmental conditions. At present, Olin's VOM emissions are subject to limits under the Title V permit. Certain applications which IEPA contends are coating applications are subject to Title V permit requirements derived from 35 *Ill. Adm. Code* Part 219, Subpart F. Other applications that are either not coating or not otherwise subject to more specific standards are subject to Title V permit requirements derived from 35 *Ill. Adm. Code* Part 219, Subpart TT. Olin's VOM emissions are in compliance with these limits.

The rulemaking docket does not contain sufficient information for Olin to determine whether the unique characteristics of ammunition manufacturing were considered when evaluating operations for this rulemaking, but the available information indicates that ammunition manufacture was not considered. Olin has had very little time to consider the full implications of these proposed changes, but Olin is certain that the stated cost estimates and allotted time for compliance are completely inaccurate and both infeasible and commercially impractical for its operations. Olin is very concerned that the proposed limits, if applicable to its East Alton operations, will be technically and/or economically infeasible.

Impact of Changes To Olin

There are three changes proposed in R2010-20 that could have a significant impact on Olin's East Alton ammunition manufacturing operations: 1) the new military specification coating category; 2) the new all other coating category; and 3) the short time frame to meet new emission limitations.

1. The Addition of the Military Specification Coating Classification

The new "Military Specification Coating" classification in 35 *Ill. Adm. Code* § 219.204(q)(1)(L) may apply to a number of Winchester processes, depending upon how this

term is interpreted. The term "Military Specification Coating" in proposed 35 *Ill. Adm. Code* § 211.3785 is defined as "a coating which has a formulation approved by a United States Military Agency for use on military equipment." Winchester has several sealant application processes that IEPA contends (and Olin disputes) are coating which use sealant formulations which must conform to military specifications. If the term "military equipment" is interpreted to include ammunition, then many of the sealants used by Olin may fall under this new definition and, thus, be subject to the limits in this category. For many of these sealants, the military specifications ("MILSPECs") for the sealants are in excess of the proposed pound VOM per gallon limits. It is not technically feasible for Olin to meet the proposed Military Specification Coating limits and also comply with the military specification for many of the sealants used in ammunition manufacture.

We are uncertain what materials are subject to the Military Specification Coating category or whether ammunition manufacture is intended to be included in this category, or any of the other categories in 35 *Ill. Adm. Code* § 219.219(q)(1). We were unable to find any discussion of the military specification limit in the background documents listed by the Agency as supporting the *Control Techniques Guidelines for Miscellaneous Metal and Plastic Parts Coatings*, EPA-453/R-08-003. We note that in one of the background documents, the final NESHAPs rule for Miscellaneous Metal Parts and Products, 69 *Fed. Reg.* 130 (Jan. 2, 2004), military munitions were excluded:

We have revised the scope of the high performance subcategory to remove "military combat, tactical, and munitions coating" from the definition of high performance coating. As indicated in this preamble, the surface coating of metal parts and products performed on-site at installations owned or operated by the Armed Forces of the United States, or the surface coating of military munitions manufactured by or for the Armed Forces of the United States, will be addressed in the NESHAP for defense land systems and miscellaneous equipment that is currently under development.

69 *Fed. Reg.* at 140. The Defense Land Systems and Miscellaneous Equipment rulemaking is in progress but has not been completed. In coming to this conclusion, the U.S. Environmental Protection Agency (“USEPA”) cited comments that explained:

The commenter claimed that the proposed compliance options would be impractical and extremely costly for DoD facilities because of the complexity of military coating operations, the number of coatings and solvents used, and the number of different items and substrates coated. Many DoD installations (especially those that service or remanufacture artillery, armored vehicles, weapons systems, and support equipment) use thousands of different coatings, and each material is subject to its own military specification.

Because DoD facilities use HAP containing solvents, the commenter claimed they could not use the proposed compliant materials option. Reformulating solvents or coatings requires extensive field testing before they may be approved for use in tactical field equipment and weapons systems. In addition, updating the coatings for which there is a military specification requires updating the documentation applicable to military specifications and the documentation for the relevant equipment and weapons systems that adopt those military specifications.

The proposed emission rate option and the add-on controls option are not feasible because they would require DoD to be able to accurately track the amount of coating or cleaning solvent used on each item or substrate.

69 *Fed. Reg.* at 143. The above commenter describes the unique nature of manufacturing to military specifications and as a response to such comments, USEPA determined a separate rulemaking for such materials was warranted. We ask the Agency to clarify what analysis was done on the feasibility of the proposed limitations in this rulemaking for materials subject to military specifications, especially small arms ammunition.

Operations at Winchester that may be subject to the new Military Specification Coating limit are currently limited under either 35 *Ill. Adm. Code* § 219.204(j)(1) & (2) or 35 *Ill. Adm. Code* Part 219, Subpart TT and such limits are included in Olin’s Title V Permit. If applicable, the new air dried limit of 2.8 lb/gal under proposed 35 *Ill. Adm. Code* § 219.204(q)(1)(L) would replace the currently applicable air dried limits of 3.5 or 4.3 lbs VOM/gal provided for in 35 *Ill.*

Adm. Code § 219.204(j)(1) & (2). If considered applicable, IEPA may contend that the new air dried limit of 2.8 lb/gal under proposed 35 *Ill. Adm. Code* § 219.204(q)(1)(L) could also apply to Primer Sealant and Ejection Cartridge Operations. These operations are currently regulated under 35 *Ill. Adm. Code* Part 219, Subpart TT and are subject to an overall plant-wide emission limit of 99 tons/year.

If the new 2.8 lb/gal limit proposed under 35 *Ill. Adm. Code* § 219.204(q)(1)(L) applies to Olin ammunition sealants with a formulation approved by United States Military Agency, then a reduction to this level would cause a significant reformulation of numerous sealant processes and all of these reformulations, if a reformulation is even feasible, would have to go through the extensive military specification exception process. To meet the currently applicable limits, Olin needed to get specific exemptions from military specifications and, at present, Olin expects that a further sealant reformulation that would allow the final product to meet exacting military performance standards may not be technically or economically feasible.

2. The Addition of 35 *Ill. Adm. Code* 219.204(q)(BB)(i) All Other Coatings

The addition of 35 *Ill. Adm. Code* § 219.204(q)(1)(BB)(i) All Other Coatings – Air Dried may cause some non-military sealant operations at Winchester that are currently subject to 35 *Ill. Adm. Code* Part 219, Subpart TT to be subject to the limits under Subpart F for the first time. These sealants may then be subject the air dried limit of 3.3 lb VOM/gal. Those sealant operations currently placed in the Subpart TT category do not have a lb/gal limit, but are subject to an overall plant-wide emission limit of 99 tons/year. Based upon statements made by the Agency in the past, Olin is concerned that IEPA will assert that some military and commercial operations, in particular its primer sealant and ejection cartridge operations, will be subject to this All Other Coatings limit. Primer sealant and ejection cartridge operations are unique to

ammunition manufacture and alternate sealants are not currently available. Historically, Olin has disagreed with IEPA's determination that primer sealants and ejection cartridge sealants are coatings, but if the Agency continues to assert that these operations are coating, then application of this new limit proposed under 35 *Ill. Adm. Code* § 219.204(q)(1)(BB)(i) for these two operations may not be technically or economically feasible.

3. Timing of New Changes

Beginning May 1, 2011 the proposed R2010-20 would eliminate 35 *Ill. Adm. Code* § 219.204(j) and institute the new limits under 35 *Ill. Adm. Code* § 219.204(q). It took more than three years for Olin to reformulate, test and obtain military approval of its sealants to meet the current 35 *Ill. Adm. Code* § 219.204(j) limits. A similar, if not greater effort, would be required if sealant operations currently designated by the Agency as subject to 35 *Ill. Adm. Code* Part 219, Subpart F would be subject to the new Military Specification Coating category and those previously unclassifiable sealant operations subject to 35 *Ill. Adm. Code* Part 219, Subpart TT were subject to the All Other Coatings category. Due to the limited time allowed for comment on the proposed regulation, Olin has just begun to realize the potential impact of having to reformulate its sealants. Olin has already reduced the VOM content of the sealants specified by the military to the lowest feasible level. Based upon available information, Olin knows of no feasible option to further reduce the VOM content and produce an acceptable product for the military or commercial applications.

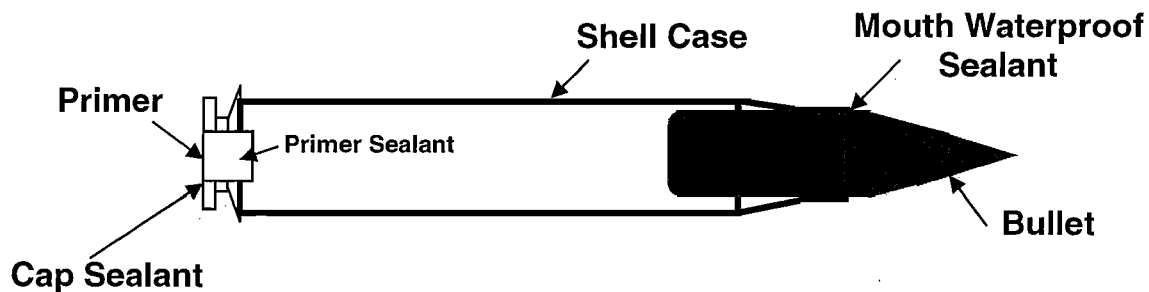
It is completely infeasible for Olin to arrive at a reformulation, test the reformulation to determine if the reformulated sealant still meets performance criteria and, where necessary, advocate a variance from military specifications in a one year time frame. In addition, if reformulation is finally determined to be infeasible, designing, permitting, constructing and

implementing controls would add significantly more time. At the time that Olin last reformulated its sealants to meet the current limits, Olin estimated that it would take at least 34 months to install appropriate control equipment. As we indicated earlier, Olin ammunition operations are nonstandard and off-the-shelf technologies and products readily available for other operations have not been developed for and cannot be adapted to ammunition manufacture. A one year time frame for implementing the new limits is infeasible.

Details of Sealant Operations and Reformulation Issues

Figure 1 below shows a cross section of an assembled cartridge and indicates where the primer sealants, cap sealants and mouth waterproofing sealants are applied.

Figure 1. Assembled Cartridge



- Primer Sealant is applied to assembled primers to maintain the primer assembly and prevent the explosive priming mix from dusting during the transfer of primers in the Primer Manufacturing area and during subsequent ammunition assembly operations. The sealant allows primers to be handled safely and stored in extreme weather conditions and other extreme atmospheric and environmental conditions, thereby assuring proper performance when assembled into a finished round. Olin reported 24.1 tons of VOM emissions from its Primer Sealant Operations in 2009.
- Cap Sealant is applied to seal the annular crevice between the primer and shellcase after

the primer has been inserted into the empty shellcase in order to assure that the ammunition will perform safely and effectively under extreme weather conditions and other extreme atmospheric and environmental conditions. Olin reported 0.2 tons of VOM emissions from its Cap Sealant operations in 2009.

- Mouth waterproofing sealant is used to provide a waterproof barrier between the shellcase mouth and the bullet in order to assure that the ammunition will perform safely and effectively under extreme weather conditions and other extreme atmospheric and environmental conditions. Olin reported 1.5 tons of VOM emissions from its mouth waterproofing operations in 2009.
- An Ejection Cartridge sealant is used to provide a waterproof barrier in the assembly of an Ejection Cartridge that is used in military applications in order to assure that the ejection cartridge will perform safely and effectively under extreme weather conditions and other extreme atmospheric and environmental conditions. Olin reported 0.1 tons of VOM emissions from its Ejection Cartridge in 2009.

Attachment 1 presents an example of a MILSPEC for a primer sealant. As shown in the example, Section 3.2.1 of the MILSPEC calls for VOM content of the sealants to be a minimum of 98% by weight of the total solvent content of the lacquer. Table I in Section 3.2 shows the maximum allowable solids content to be 1.3%. Per the MILSPEC, the primer sealant is well in excess of the proposed 2.8 lb VOM/gal.

The following is a preliminary review of potential issues associated with sealant reformulations that point out that further reformulation is infeasible:

- Potential Primer Sealant Reformulation Issues:

Primer Sealants are made using a base compound with nitrocellulose in an alcohol base.

The alcohol base is a critical component of the sealant as it is responsible for controlling the evaporation or drying rate and residual moisture. Using a substitute solvent with too quick a drying solvent could result in moisture problems and a substitute solvent drying too slowly could result in incomplete bonds with the primer.

- Potential Cap Sealant Reformulation Issues:

Reformulation of the Cap Sealants to meet current restrictions relied heavily upon the use of acetone (a non-VOM). Further substitution of acetone would require additional testing and approvals because of the affect that acetone has on drying time and moisture content.

- Potential Mouth Waterproofing Reformulation Issues:

Reformulation of the mouth waterproofing sealants to meet current limits relied heavily upon the use of Methylene Chloride (a non-VOM) which had the correct properties for this application. Additional substitution of Methylene Chloride as a solvent in the mouth waterproofing sealant will increase the East Alton facility Methylene Chloride hazardous air pollutant ("HAP") emissions, which Olin wants to avoid. A reformulation of mouth waterproofing sealants may also result in an economically infeasible re-design of the entire application and drying process due to increased solids or significant changes in the drying times.

- Potential Delays in Obtaining Approval for Sealant Formulation Changes:

Based on Olin's experience with reformulating the sealants to meet current limits, Olin would work closely with the government and other commercial customers to obtain approval for reformulated sealants, but expects that the timing of the approval process will exceed one year. In addition, approval of any reformulation may not be acceptable to the government or other commercial customer.

If Olin were not able to develop suitable reformulations, then capture and control systems would be required. Olin currently has over 50 separate machines that apply cap sealant and/or mouth waterproofing compounds. These machines are at several locations throughout the facility. The primer sealants are also applied on small scale operations over a large area. Emission controls may have to consider not only the application area, but also the drying area. Design of the capture and control system would also need to consider the explosive operations in these areas and account for potential concentration of explosives. Due to the limited time for review of the proposed regulations, it is not possible to develop a preliminary design or cost estimates for a capture and control system, but Olin is certain that such a system would cost far in excess of the \$1758 per ton of VOM removed estimate that was presented in the 4/15/2010 IEPA testimony. For a potential mouth waterproofing capture and control system, Olin has estimated the VOM removal cost to be in excess of \$100,000 per ton.

Conclusions

Olin has had very limited time to review the potential impact that R2010-20 would have on its ammunition manufacturing operations. Based on its limited review, several issues have been identified:

- Olin is uncertain how the Agency will classify operations that make ammunition using sealants that need to meet military specifications.
- Olin is uncertain how the Agency will classify sealant operations that are now considered unclassifiable coating operations. If Olin's primer and ejection cartridge sealant operations are included in either the proposed Military Specification Coating or Other Coatings classification, continuing these manufacturing operations may not be technically or economically feasible.

- Any necessary adjustments to the current MILSPECS for sealants would be a lengthy process extending beyond the one year available to achieve compliance with the proposed limits.
- Any reduction in allowable sealant VOM content will require extensive development, testing, and approval by the military or other commercial customers before alternate sealants can be substituted.
- Based on Olin's experience with reformulating its sealants to meet current limits, the reformulation process, if feasible at all, would likely take 3 or 4 years, with additional time needed to install controls, if reformulation is infeasible.
- Reformulating the primer sealants is not the same as the reformulation process Olin used to meet current limits for its cap sealants and mouth waterproofing compounds. The drying rate is critical to the manufacture of primers and any other solvent used in its primer sealants would likely require extensive testing and manufacturing adjustments which may well be infeasible for the East Alton operations.

Suggested Resolution

Olin suggests the following actions to resolve the potential issues identified above:

- That the military specification coating definition in proposed 35 *Ill. Adm. Code* § 211.3785 be amended to exclude ammunition sealants. If this occurs many of Olin's ammunition sealants would continue to be classified as "Extreme Performance Coatings" regulated under proposed 35 *Ill. Adm. Code* §219.204(q)(1)(G) and others would be regulated under other subsections or subparts of 35 *Ill. Adm. Code* Part 219.
- That the primer sealants used in ammunition manufacturing and the ejection cartridge sealants used in the manufacture of ejection cartridges not be subject to the proposed

coating regulations and that they continue to be regulated under 35 *Ill. Adm. Code* Part 219, Subpart TT.

ATTACHMENT 1
OLIN CORPORATION

NOTICE OF
VALIDATION

EXAMPLE OF
PRIMER SEALANT
MILSPEC

INCH-POUND

MIL-L-46075A(AR)
NOTICE 1
24 June 1999

SPECIFICATION

LACQUER, RED (FOR AMMUNITION PRIMERS)

MIL-L-46075A(AR), dated 29 September 1971, has been reviewed and determined to be valid for use in acquisition.

Custodian:
Army - AR

Preparing activity:
Army - AR

AMSC N/A

FSC 8010

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

MIL-L-46075A(MR)
29 September 1971
SUPERSEDING
MIL-L-46075(MR)
10 December 1963

MILITARY SPECIFICATION

LACQUER, RED (FOR AMMUNITION PRIMERS)

1. SCOPE

1.1 This specification covers one grade of red lacquer for application over the foil and anvil of ammunition primer after anvil seating operation. It can be used in areas covered by AIR POLLUTION REGULATIONS.

2. APPLICABLE DOCUMENTS

2.1 The following documents of the issue in effect on the date of invitation for bids or request for proposal form a part of this specification to the extent specified herein.

SPECIFICATIONS

FEDERAL

TT-P-143 - Paint, Varnish, Lacquer and Related Materials; Packaging, Packing and Marking of.

STANDARDS

FEDERAL

Fed. Test Method Std. No. 141 - Paint, Varnish, Lacquer and Related Materials; Methods of Inspection, Sampling and Testing.

(Copies of specifications and standards required by contractors in connection with specific procurement functions should be obtained from the procuring agency or as directed by the contracting officer.)

FSC 8010

MIL-L-46075A(MR)

3. REQUIREMENTS

3.1 Composition. The lacquer shall be nitrocellulose combined with a red azo dye^{1/} and necessary amounts of solvents to yield a product conforming to the requirements of this specification.

3.2 Quantitative requirements. The lacquer shall conform to the requirements of Table I when tested as in 4.1.

TABLE I - Quantitative requirements

Requirements	Minimum	Maximum
Total solids, percent by weight of lacquer	0.7	1.3
Nitrocellulose, percent by weight of total solids	90	94
Ethyl acetate, percent by weight of lacquer, on analysis	58	78
Butyl acetate, percent by weight of lacquer, on analysis	20	30
Ethyl alcohol, percent by weight of lacquer, on analysis	-	10
Viscosity, Saybolt Universal at 70°F., seconds	40	60
Drying time		
Dry through, minutes	2	4

3.2.1 Solvent. On analysis ethyl acetate, butyl acetate and ethyl alcohol shall be a minimum of 98 percent by weight of the total solvent content of the lacquer.

3.3 Qualitative requirements.

3.3.1 Condition in container. When tested as in 4.4.5 the lacquer shall be clear and free from sediment and suspended matter when examined by transmitted light. It shall show no livering, curdling, gelling or skinning in a freshly opened full container. When flowed out on a clear glass plate the color shall be a transparent red characteristic of the dye used.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or order the supplier may utilize his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the specification where such inspections are deemed necessary to assure that supplies and services conform to the prescribed requirements.

^{1/}Calco oil red N-1700 manufactured by American Cyanamid Company is a dye of this type.

MIL-L-46075A(MR)

4.2 Sampling, inspection and testing. Unless otherwise specified sampling, inspection and testing shall be in accordance with method 1031 of Federal Standard 141.

4.3 Testing. Testing under this specification shall be for acceptance of individual lots. The right is reserved to make any additional tests deemed necessary to determine that the lacquer meets the requirements of the specification.

4.4 Test methods.

4.4.1 Test conditions. The routine and referee testing conditions shall be in accordance with section 7 of Federal Standard 141 except as otherwise specified herein.

4.4.2 The following tests shall be conducted in accordance with Federal Standard 141 and as hereinafter specified.

TABLE II - Index of tests

Item	Test methods		
	Applicable method in Fed Std 141	Paragraph of this specification giving further references	Paragraph of this specification giving requirements
Total solids	---	4.4.3	Table I
Nitrocellulose	---	4.4.4	Table I
Ethyl acetate	7360	---	Table I
Butyl acetate	7360	---	Table I
Ethyl alcohol	7360	---	Table I
Viscosity	4285	---	Table I
Drying time	4061	---	Table I
Condition in container	4261	4.4.5	3.3.1

4.4.3 Total solids. Weigh to the nearest milligram a small disposable aluminum dish^{1/} approximately 2 inches in diameter. Weigh into the dish from a dropping bottle approximately 2 grams of the lacquer and add 1 ml. of toluene. Dry the pan for one hour in a gravity convection oven at 105°C. Upon cooling, reweigh to the nearest milligram and calculate the percent non-volatile.

^{1/}Aluminum dishes suitable for this purpose are obtainable from Fisher Scientific Co., Catalog Number 8-732.

MIL-L-46075A(HR)

4.4.4 Nitrocellulose. Pour about 10 ml. of the lacquer into a 250 ml. Erlenmeyer flask having a 24/40 standard joint and weigh. Evaporate the solvents from the lacquer almost to dryness using a water bath at 60°C. and a gentle current of air, in such a manner that the sample will still flow but has high viscosity. Redissolve the sample in 3 ml. of acetone; if the drying has been carried too far it may be necessary to use 4 ml. of acetone. If it will not dissolve in 4 ml. of acetone, discard and start with a new sample. Add 27 ml. of ethyl alcohol and insert a magnetic stirring bar. While stirring vigorously, add water from a buret or pipet slowly at first until the resin precipitates, then continue until the flask is filled. Allow the precipitated nitrocellulose to settle, then filter through a large, 50 ml. fritted glass crucible of medium porosity, transferring and washing with water. Dry the crucible in an oven at 105°C., cool and weigh, calculating directly as nitrocellulose. Confirm that the precipitate is nitrocellulose by placing a small portion on a white porcelain plate and treating with a few drops of 1 percent diphenylamine in concentrated sulfuric acid. A deep blue color confirms the presence of nitrocellulose.

4.4.5 Condition in container. Determine package condition in accordance with method 4261 of Federal Standard 141 and observe for compliance with 3.3.1.

5. PREPARATION FOR DELIVERY

5.1 Packaging and packing. The lacquer shall be delivered in 1 gallon containers, 5 gallon lug covered steel pails or in 55 gallon steel drums as specified (see 6.2). The lacquer shall be packaged level A or C; packed level A, B, or C as specified (see 6.2) in accordance with TT-P-143.

5.2 Marking. The containers shall be marked in accordance with Specification TT-P-143.

6. NOTES

6.1 Intended use. The lacquer covered by this specification is intended as a sealer for small arms ammunition primers.

6.2 Ordering data. Purchasers should exercise any desired options offered herein and procurement documents should specify the following:

- (a) Title, number and date of this specification.
- (b) Whether inspection will be made in accordance with section 1031 of Federal Standard 141 (see 4.2).
- (c) Size of container required (see Section 5).
- (d) Level of packaging and packing required (see Section 5).

MIL-L-46075A(MR)

6.3 The lacquer should be purchased by volume, the unit being one U.S. liquid gallon of 231 cubic inches at 15.6°C. (60°F.).

6.4 The lacquer is contemplated to be comparable to the following approximate composition by weight. However, the Government assumes no responsibility for the acceptance of a product claimed to be manufactured under the identical formula.

Red Lacquer

1.4 lbs.	30-40 second R.S. Nitrocellulose (70% in denatured alcohol SD No. 1)
25.0 lbs.	N-butyl acetate
74.0 lbs.	Ethyl acetate
40 grams	Red azo dye

Military Custodian:
Army - MR

Preparing activity:
Army - MR

(Project No. 8D10-A011)

SPECIFICATION ANALYSIS SHEET		Form Approved Buyoff Bureau No. 119-0004
INSTRUCTIONS		
<p>This sheet is to be filled out by personnel either Government or contractor involved in the use of the specification in procurement of products for ultimate use by the Department of Defense. This sheet is provided for obtaining information on the use of this specification which will insure that suitable products can be procured with a minimum amount of delay and at the least cost. Comments and the return of this form will be appreciated. Fold on lines on reverse side, staple in corner, and send to procuring activity.</p>		
SPECIFICATION		
MIL-L-46075A(NR), Lacquer, Red (For Ammunition Primers)		
ORGANIZATION		CITY AND STATE
CONTRACT NO.	QUANTITY OF ITEMS PROCURED	DOLLAR AMOUNT
		3
MATERIAL PROCURED UNDER A		
<input type="checkbox"/> DIRECT GOVERNMENT CONTRACT <input type="checkbox"/> SUBCONTRACT		
1. HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN "PROCUREMENT" USE? A. GIVE PARAGRAPH NUMBER AND WORDING		
B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES		
2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID		
3. IS THE SPECIFICATION RESTRICTIVE? <input type="checkbox"/> YES <input type="checkbox"/> NO IF "YES" IN WHAT WAY?		
4. REMARKS / Attach any pertinent data which may be of use in improving this specification. If there are additional papers, attach to form and place both in an envelope addressed to procuring activity.		
SUBMITTED BY (Printed or typed name and activity)		DATE

DD FORM 1426

REPLACES NAVSHIPS FORM 4863 WHICH IS OBSOLETE

FOLD

DEPARTMENT OF THE ARMY
Army Materials and Mechanics Research Center
Watertown, Massachusetts 02172

POSTAGE AND FEES PAID
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Director
Army Materials and Mechanics Research Center
ATTN: AMMR-MS
Watertown, Massachusetts 02172

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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
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REASONABLY AVAILABLE CONTROL)
TECHNOLOGY (RACT) FOR VOLATILE) R2010-20
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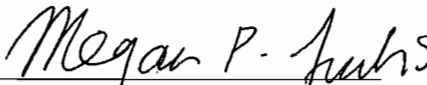
CERTIFICATE OF SERVICE

I, the undersigned, an attorney, certify that I have electronically served the attached Testimony of Olin Corporation on the date of May 7, 2010 upon the following persons:

John Therriault, Assistant Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph, Suite 11-500
Chicago, Illinois 60601-3218

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Megan Fuchs, Attorney
Illinois Bar #6298380

SERVICE LIST FOR PCB NO. R 2010-20

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