LEAD INDUSTRIES ASSOCIATION

420 LEXINGTON AVENUE
NEW YORK 17, N. Y.

RED LEAD DIVISION

December 8, 1948

To the Members of the Red Lead Technical Committee:

SUBJECT: RED LEAD TECHNICAL COMMITTEE MEETING
MINUTES - NOVEMBER 3, 1948

You will find attached the final draft of the Minutes of the Red Lead Technical Committee Meeting held on November 3, 1948 in the offices of the Association.

The agenda is enclosed for the next meeting of the Red Lead Technical Committee to be held in the offices of the Association December 16 and 17, 1948.

Very truly yours,

C. J. Vander Valk
Technical Director

LEAD INDUSTRIES ASSOCIATION

420 LEXINGTON AVENUE
NEW YORK 17, N. Y.

RED LEAD DIVISION

FINAL DRAFT
CONFIDENTIAL
SUBJECT TO REVISION

RED LEAD TECHNICAL COMMITTEE

Chicago, Illinois — November 3, 1948

A meeting of the Red Lead Technical Committee of the Lead Industries Association was held on November 3, 1948 in the Palmer House, Chicago, Illinois. The following persons were in attendance:

Present	Representing
Mr. George Diehlman	National Lead Company
Mr. A. C. Coets	The Eagle-Picher Company
Dr. J. G. Johnstone	Hammond Lead Products, Inc.
Mr. G. F. Shobe	The Glidden Company

Dr. L. L. Carrick, Director of Red Lead Research, Meeting Chairman
Mr. C. J. Vander Valk, Technical Director

PROPOSED FEDERAL SPECIFICATION TT-P-86a

The Committee convened at 10:30 A. M. on Thursday, November 3. The meeting was begun with the consideration of a letter from Mr. Diehlman concerning the status of the proposed Federal Specification TT-P-86a. A copy of this letter is attached to these minutes as Exhibit A. This letter advised the Technical Director that he had been informed by Mr. Hickson, Chairman of the Federal Specification Board, that Mr. John Moore, Director of the Scientific Section of the National Paint, Varnish, and Lacquer Association, had again raised objections to the inclusion of the paragraph (E-5k) dealing with storage stability of the four types of Red Lead paint. Mr. Hickson also advised that after considerable deliberation and after consultation with various Government agencies he had decided to retain the clause.

After some discussion, the Committee agreed that any further objections to the clause in TT-P-86a would probably prove fruitless but that it would be advisable to request the inclusion of a storage stability clause in the new proposed Federal Specification for zinc chromate primers since this specification calls for similar vehicles. Mr. Diehlman was asked to take the necessary action on this matter in the name of the Red Lead Technical Committee.

Along with Mr. Diehlman's letter concerning the paragraph on storage stability, a copy of a letter from Mr. Diehlman to Mr. Hickson was considered calling attention to the unsuitability of certain proprietory types of alkyd resins for use in Type II and Type III Specification

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paints. A copy of this letter is attached to these minutes as Exhibit B. An alkyd designated 807-1 and manufactured by the American Cyanamide Company, was found to thicken on storage to an objectionable degree when formulated in Types II and III according to tests carried on at the National Lead Company Research Laboratory.

In view of this, Mr. Diehlman suggested in his letter that a paragraph be added to the specification reading somewhat as follows:

> "The alkyd resin solution shall meet the requirements of Federal Specification TT-R-266, Type III with the added requirement that the alkyd resin solution shall be compatible with red lead in the proportions specified for the Types II and III paints".

The Committee agreed that the inclusion of such a paragraph in the new specification would be desirable. It was also suggested and agreed that a similar or identical paragraph be included in the new proposed federal specification on zinc chromate primers.

SUGGESTED RED LEAD BASE MIXED PIGMENT PAINTS FOR THE CONSOLIDATED EDISON COMPANY

The Technical Director reported that he had recently been called in by Mr. Galloway, the head of the Structural Engineering Bureau of the Consolidated Edison Company to discuss red lead primers. The committee was told that Consolidated Edison was planning on abandoning their present red-lead-in-oil primer paint because of its high cost and difficult application, and that a few suggested red lead base mixed pigment formulations were requested for performance tests in shop coating structural steel and for general maintenance. These primer paints would necessarily have to contain a considerably reduced proportion of Red Lead to reduce cost and weight. The Technical Director told the Committee members that he had recommended Type II of the new Federal Specification TT-P-86a as suitable for their requirements but that a few additional formulations had also been requested for trial. After considerable discussion, the following formulations were proposed for recommendation to the Consolidated Edison Company:

(1) Type II, Federal Specification TT-P-86a.

(2) L. I. A. Paint No. 239.

(3) A paint containing 40% Red Lead, 32% Iron Oxide, and extended with magnesium silicate in a medium oil length linseed-tertiary-butyl phenolic vehicle.

(4) A paint containing 75% Red Lead, 8% diatomaceous silicate and the balance magnesium silicate in a vehicle similar to a Type II of Federal Specification TT-P-86a.

Since the latter two paints are modifications of L.I.A. formulations, it was decided that a laboratory batch of each of these paints should be prepared to determine the practicability of the pigment and vehicle combinations. Mr. Diehlman agreed to prepare these paints and inform the Technical Director of the results.

L.I.A. ATMOSPHERIC PROGRAM IN EDGE COATING OF FLAT PANELS

The Committee was told that the flat panels containing the atmospheric program paints at Sayville had been edge coated with a wax composition after the appearance of slight corrosion at the edges of many of the panels. After some deliberation it was agreed that a study of the performance of both edge coated and non-edge coated panels would be of interest. Therefore it was decided to coat the edges of the flat panels at Cleveland and Joplin and to leave the edges of the panels at New Orleans and San Francisco uncoated.

Mr. Coats and Mr. Shobe were supplied with copies of the wax composition used at Sayville, and the Technical Director was requested to order the necessary ingredients for compounding the wax at the two test sites.

CORROSION INHIBITIVE PAINTS FOR STEEL SURFACES IN ATMOSPHERIC EXPOSURE

A draft of "Report No. 1 - Description of Project" for publication was reviewed by the Committee. Several additions and editorial changes were also proposed. The Technical Director stated his intention of including all of these changes in a new draft at the earliest date so that this report might be reviewed by the advertising and publicity departments of various companies in the Red Lead Division as well as by the Red Lead Technical Committee.

Mr. Coats agreed to obtain the necessary photographs for illustrating this report. These are to include a general view of the 45° test fence at Joplin, a close-up view of the test fence showing the arrangement and method of attachment of the flat and angle specimens, and close-ups of flat and angle specimens showing identification numbers.

NEXT MEETING

It was decided to hold the next meeting of the Red Lead Technical Committee on December 16, 17, 1948 in the offices of the Lead Industries Association.

The meeting was adjourned at 5:30 P. M.

C. J. Vander Valk
Technical Director

COPY
EXHIBIT A

NATIONAL LEAD COMPANY
Research Laboratories
105 York Street
Brooklyn 1, N. Y.

October 29, 1948

Mr. C. J. Vander Valk
Lead Industries Association
420 Lexington Avenue
New York 17, New York

Dear Mr. Vander Valk:

One of the various matters discussed with Mr. Hickson, National Bureau of Standards, recently was the storage stability requirement made part of the last draft of the new proposed Federal Specification TT-P-86a, dated June 17, 1948.

Mr. Hickson advised that he had heard again from Mr. John Moore, Director of the Scientific Section of the Paint, Varnish, and Lacquer Association, to the effect that they were opposed to its inclusion. However after considerable thought and consultation with Government personnel of various divisions, he has decided to retain the clause.

Many complaints involving the storage stability of red lead paints has come to his attention through the various Government agencies, and it is this situation which has prompted his decision.

I thought this might be of interest to you and that it might receive further consideration at the next meeting of the Red Lead Technical Committee planned for November third.

Very truly yours,

NATIONAL LEAD COMPANY

George Aichlmann

GD:AM
Enclosure

c/c: Messrs. Coats, Johnstone, Shobe

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COPY

EXHIBIT B

October 29, 1948

Mr. E. F. Hickson
National Bureau of Standards
417 Chemical Building
Washington, D. C.

Dear Mr. Hickson:

Subject: Pending revision of Specification TT-P-86a for Paint; Red-Lead-Base, Ready-Mixed (Draft dated June 17, 1948)

In connection with the subject specification a matter has arisen which we feel should be brought to your attention.

In Types II and III paint, the alkyd resin required is specified as conforming with Federal Specification TT-R-266. The alkyd resin solution required for producing paints meeting the TT-P-86 specification is Type III. The point of this discussion is that alkyds are available which meet the requirements set forth for Type III in this specification, but which can have an adverse effect upon package stability. Examination of quite a few different batches of red lead paints based on Types II and III of the proposed red lead specification have revealed this shortcoming as evidenced by the analytical data furnished with my letter of April 4, 1947.

For your convenience, we are enclosing a copy of the table which is specifically referred to. Across the top of the various formulations we have indicated the proprietary type of alkyd used in preparing the paints. One of these is designated 807-1, which is manufactured by the American Cyanamid Company. You will note from the consistency measurements that this alkyd produced paints which thickened on storage to an objectionable degree.

In view of this and if still feasible, it would seem advisable to include somewhere in the specification a notation reading somewhat as follows:

The alkyd resin solution shall meet the requirements of Federal Specification TT-R-266, Type III with the added requirement that the alkyd resin solution shall be compatible with red lead in the proportions specified for the Types II and III paints.

We will be interested in your reactions to this suggestion.

Very truly yours,

NATIONAL LEAD COMPANY

George Wehlman

GDuAHM
Enclosure

c/c: Lead Industries Association