DIVISION OF CORPORATION FINANCE MAIL STOP 7010

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-7010

February 23, 2006

Gary L. Castagna, Chief Financial Officer Amcol International Corporation One North Arlington 1500 West Shure Drive, Suite 500 Arlington Heights, Illinois 60004-7803

Re: Amcol International Corporation

Form 10-K for the Fiscal Year Ended December 31, 2004

Filed March 31, 2005

Form 10-K/A for the Fiscal Year Ended December 31, 2004

Filed April 29, 2005

Form 10-Q for the Fiscal Quarter Ended June 30, 2005

Filed August 1, 2005

Response Letter Dated February 1, 2006

File No. 001-14447

Dear Mr. Castagna:

We have reviewed your Form 10-K and Form 10-K/A for the Fiscal Year Ended December 31, 2004, Form 10-Q for the Fiscal Quarter Ended June 30, 2005 and response letter dated February 1, 2006 and have the following comments. We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

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Form 10-K for the Fiscal Year Ended December 31, 2004

Note (4) Business Segment and Geographic Area Information, page F-12

1. We note your response to comment two from our letter dated December 29, 2005, and note your discussion of long-term economic performance on an operating subsidiary level to support aggregation of such subsidiary level information. However, your response did not address the similarity of long-term economic performance on a product line basis and all the aggregation criteria of paragraph 17 of SFAS 131. Please tell us if your product lines meet the definition of operating segments in paragraph 10 of SFAS 131. If so, explain in more detail how you applied the aggregation criteria, including your operating segments' long-term economic performance as discussed in paragraph 17 of SFAS 131, to your identified operating segments within the minerals and environmental reportable segments. For example, compare and contrast the gross margins between the metalcasting, pet products and specialty minerals operating segments. In your response, please tell us what consideration you have given to paragraph 15 of SFAS 131 in identifying your operating segments, if applicable.

Note (8) Income Taxes, page F-16

2. We note your response to comment five from our letter dated December 29, 2005. Related to your response to comment 5(iv), please tell us the quarter(s) in which the professional fees to prepare amended tax returns were incurred.

Note (10) Acquisitions, page F-19

3. We note from your response to comment four from our letter dated December 29, 2005, that you lost the majority of Linteco's Austrian customers. Please tell us how you considered the guidance in SFAS 142 in determining whether the goodwill you recorded was impaired.

Form 10-Q for the Fiscal Quarter Ended June 30, 2005

Note (1) Summary of Significant Accounting Policies, page 8

Reclassifications, page 9

4. We note your response to comment seven from our letter dated December 29, 2005. In future filings, please disclose within your financial statements where you classify product liabilities and warranty expense and provide the disclosures set forth by paragraph 14 of FIN 45.

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Closing Comments

As appropriate, please amend your filing and respond to these comments within 10 business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

You may contact Ryan Milne at (202) 551-3688, or Shannon Buskirk at (202) 551-3717, if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3684 with any other questions.

Sincerely,

April Sifford Branch Chief

cc: Mr. Ryan Milne

Ms. Shannon Buskirk