



GEORGE C. WALLACE  
GOVERNOR

# STATE OF ALABAMA HIGHWAY DEPARTMENT

MONTGOMERY, ALABAMA 36130

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HIGHWAY DIRECTOR  
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M&T TECHNICAL ADVISORY 1-78

June 9, 1978

TO: Division Materials Engineers  
FROM: Edward Eiland (E)  
RE: Dry Ice in Concrete

We recently had a request to use dry ice to cool the mixing water so that the delivery temperature of concrete could be maintained within specification limits. Our Concrete Section has researched this subject and found the attached article in the American Concrete Institute Journal. Dry ice is frozen carbon dioxide and, if used in concrete mixing water, damage to the concrete would probably occur.

In no case will we allow dry ice to be used to reduce the temperature of the mixing water where the dry ice comes in contact with the water. There may be cases where the dry ice is used to cool the water by indirect means that will not contaminate the mixing water with carbon dioxide. This method may be used provided this office is advised of the method to be used and approval is given.

EE/fp

cc: Mr. W. E. Page  
Mr. C. H. Cook  
Mr. T. L. Cain  
Mr. W. F. McCullough  
Mr. F. H. Sims, Jr.  
Mr. W. R. Crook  
Mr. W. W. Dean  
File

Attachment