



## *Florida Department of Transportation*

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GOVERNOR

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**MIKE DEW**  
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**MATERIALS BULLETIN NO. 08-18**

**DCE MEMORANDUM NO. 13-18**

*(FHWA Approved: 5/21/2018)*

**TO: DISTRICT MATERIALS AND RESEARCH ENGINEERS  
DISTRICT CONSTRUCTION ENGINEERS**

**FROM:** Timothy Ruelke P.E., Director, Office of Materials  
David A. Sadler, P.E., Director, Office of Construction

**COPIES:** Courtney Drummond, Amy Tootle, Bob Burleson, Ananth Prasad, Nick Finch, Rafiq Darji, Ivan Lasa, John Shoucair

**SUBJECT: USE OF RECYCLED CONCRETE AGGREGATE AS BACKFILL WITH  
ALUMINUM AND METALIZED PIPE**

Sufficient evidence exists indicating that aluminum and metallic coated (galvanized and aluminized) pipe in contact with soil or backfill exhibiting a pH greater than 9.0 results in an in-service condition that is detrimental to the service life of these types of pipe. Research by the University of Florida recently confirmed that recycled concrete aggregate (RCA) materials have a pH greater than 9.5. RCA backfill and aluminum or metalized drainage pipe must not come in contact with each other. Therefore, the combination of RCA and aluminum or metalized pipe placed in accordance with Section 125 of the Standard Specifications for Road and Bridge Construction shall not be allowed.

Additionally, a safety buffer of at least 1-foot of clean select soil should be maintained between any RCA and aluminum or metallic coated pipe.

On active construction projects, work with your staff to determine if any such conditions exist where aluminum or metalized drainage pipe are expected to be in contact so that this can be corrected. If this condition exists on your active project, contact the State Construction Engineer for further instructions.

Should you have any questions concerning this matter, please contact John Shoucair (352) 955-2925 or Ivan Lasa (352) 955-2901 at the State Materials Office.