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- 1 -

June 23, 1986

Mr. Fahmy Haggag  
Battelle Columbus, Room 15-1-681  
505 King Avenue  
Columbus, Ohio 43201-2693

Dear Mr. Haggag,

I have enclosed a copy of NUREG/CR-4067, "The Effects of Environment and Gamma Irradiation on the Mechanical Properties of High Density Polyethylene." I would be most interested in any similar tests of which you might be aware, even if they are related to other applications of high density polyethylene.

Feel free to contact me at (301) 427-4744. I will look forward to further discussions relating to the performance of high density polyethylene.

Sincerely,

*JAH*

Joel A. Hunt  
Engineering Branch  
Division of Waste Management, NMSS

Enclosure:  
As stated

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PDR WASTE PDR  
WM-16

WM Record File 106 WM Project 16  
 Docket No. \_\_\_\_\_  
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OFC	: WMEG <i>JAH</i>	: WMEG <i>DUT</i>	:	:	:	:
NAME	: JHunt/cj	: MTokar	:	:	:	:
DATE	: 6/23/86	: 6/23/86	:	:	:	: 1317

# CONVERSATION RECORD

TIME 2:15 p.m. DATE 6/23/86

TYPE

VISIT

CONFERENCE

TELEPHONE

INCOMING

OUTGOING

ROUTING

NAME/SYMBOL	INT
M. Tokar	
J. Greeves	
R. Browning	

Location of Visit/Conference:

NAME OF PERSON(S) CONTACTED OR IN CONTACT WITH YOU

FAHMY HAGGAG

ORGANIZATION (Office, dept., bureau, etc.)

Battelle Columbus

TELEPHONE NO.

PH 976-5991

SUBJECT

EXTENDED STORAGE OF HDPE

SUMMARY

Conference call with Michael Tokar, Joel Hunt, and Fahmy Haggag in response to request for information through J.T. Greeves, R.E. Browning, J.G. Davis, and V. Stello.

Fahmy Haggag had read NUREG/CR-4062 "Extended Storage of Low-Level Radioactive Waste: Potential Problem Areas". Pages 64-66, relating to corrosion of polyethylene attracted Mr. Haggag's attention. He is familiar with other applications of HDPE where a thin coating of Nickel-Phosphorus alloy is used on HDPE to reduce oxygen contact. He wondered if this would be of use.

Joel Hunt briefly discussed ongoing effort at BNL including structural analysis and work reported in NUREG/CR-4067. He also pointed out that current practice does not typically include long-term storage of HDPE containers. Mr. Haggag requested a copy of NUREG/CR 4067. ~~and a copy of~~ Mr. Haggag said that he would call back after reviewing the requested NUREG/CR.

ACTION REQUIRED

Send NUREG/CR-4067, "The Effects of Environment and Gamma Irradiation on the Mechanical Properties of High Density Polyethylene" to: FAHMY HAGGAG, Battelle Columbus, Room 15-1-681, 505 King Ave., Columbus Ohio 43201-2693

NAME OF PERSON DOCUMENTING CONVERSATION

JOEL A. HUNT

SIGNATURE

Joel A. Hunt

DATE

6/23/86

ACTION TAKEN

SIGNATURE

TITLE

DATE