

MAY 6 1976

License No. 24-04206-01

Mallinckrodt, Incorporated  
ATTN: Mr. Donald W. Soldan  
Chief Radiation Safety Officer  
Box 10172 Lambert Field  
St. Louis, Missouri 63145

Gentlemen:

This will acknowledge receipt of your letter dated April 8, 1976, reporting the exposure of an individual to radiation. The cause of this apparent noncompliance item with an NRC regulation and your actions to preclude a recurrence will be reviewed during a future inspection.

Sincerely,

Original signed by  
D. Thompson  
Dudley Thompson  
Acting Director  
Division of Field Operations  
Office of Inspection and  
Enforcement

bcc: w/cpy ltr dtd 4/8/76  
PDR  
NSIC  
MF:AEB  
MF:MB  
BGBrooks  
EBoyle  
EDO Central Files  
IE Files  
Region III

Information in this record was deleted  
in accordance with the Freedom of Information  
Act, exemptions 1, 7C, 3, 4, 5, 7D, 7E, 7F, 7G, 7H, 7I, 7J, 7K, 7L, 7M, 7N, 7O, 7P, 7Q, 7R, 7S, 7T, 7U, 7V, 7W, 7X, 7Y, 7Z, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 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1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 214

April 8, 1976

Mr. James M. Allan, Chief  
Fuel Facility and Materials  
Safety Branch  
U.S. Nuclear Regulatory Commission  
Region III  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

Reference: U.S. NRC License  
No. 24-04206-01

Dear Mr. Allan:

A production technician received an exposure to his extremities of 23,000 mRem beta and 250 mRem gamma for the week ending 3/14/76. This exposure was reported to us by telephone on 3/17/76, at which time we restricted the individual from further exposure.

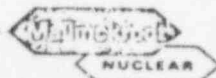
A special meeting of the Radiation Safety Committee was held on 3/19/76 to review the circumstances resulting in the exposure and to determine appropriate corrective actions.

It was concluded that the exposure resulted while processing a P-32 product on 3/8/76 after which contamination was found on the right glovebox glove in a localized spot almost directly in contact with the dosimeters worn on that hand.

At one step in the process, a small volume of a highly concentrated solution of P-32 was transferred from a glass bottle to a resin column using a disposable glass pipette as specified in the procedures. At all other steps the P-32 is contained and in a diluted concentration. It is most likely that the glove was contaminated during the transfer step.

The Radiation Safety Committee agreed upon the following procedural changes:

1. That a closed transfer system be used instead of the glass pipette.



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U.S. Nuclear Regulatory  
Commission - Region III  
April 8, 1976

2. That the Master Batch Sheet be rewritten accordingly and include the requirement that radiation level surveys be performed after specific steps in the procedure.

The closed transfer system has been used for all subsequent processing of this product and radiation level surveys have been made as specified by the Committee.

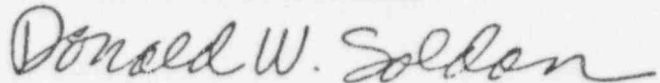
No significant contamination has been found since these procedural changes have been made.

The Master Batch Sheet for this product has been rewritten and is in the process of being approved.

The individual's total extremities exposure for the quarter ending 3/28/76 was 25,360 mRem beta plus gamma.

Sincerely yours,

MALLINCKRODT, INC.  
MALLINCKRODT/NUCLEAR



Donald W. Soldan,  
Chief Radiation Safety Officer

DWS/lm

cc: Dir. of Inspection and  
Enforcement  
Dir. Office of Management  
Information and Control

The individual referenced in this report is

[REDACTED]

Ex 6

His Social Security number is [REDACTED] and his date of birth is

[REDACTED]