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Charles I. Browne, J-11

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411344

PISONIA WEATHER AND ITS EFFECTS ON AIR SAMPLES

J-11

As a result of a close investigation of the weather, atmospheric conditions and mean fall rates for this shot, I can make some rather positive statements about the samples collected. During the sampling period, rain was reported to have been falling throughout the sampling area from 20K ft. down. This rain, however, would not have contributed to fallout in the samples in question. There were thunder storms in the area which topped out above 50K ft. with the possibility of some falling snow and ice. Due to the storms and bomb cloud relative locations, this also does not look as if it could have contributed much in the way of fallout. A very likely answer is that the winds at the higher levels were such that, coupled with the mean fallout rate of 10K ft. per hour allowed some of the debris from the 40-50K ft. levels to be at 30-40K ft. altitudes in the area where the sampling was done.

I have also interrogated the crew of the aircraft which collected the questionable sample; since the weather was so bad on this particular day, they were able to recall this shot quite clearly. Their account of the sampling sortie substantiated my own recollection of the event in that they did not sample in a rain cloud but that much of the balance of the bomb cloud was partially obscured in thunder storm clouds. The portion of the cloud in which they sampled was indeed very thin and well dispersed as evidenced by the low radiation intensities which were observed and recorded. All of this seems to lend support to the statements made earlier that indeed this sample was contaminated with fallout from the 40-50K ft. or even higher portions of the cloud.

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PRG:cj

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DEPARTMENT OF ENERGY DECLASSIFICATION REVIEW	
1ST REVIEW DATE: 08-20-97	DETERMINATION (CIRCLE NUMBER(S))
AUTHORITY: OAC OADC OADP	1. CLASSIFICATION RETAINED
NAME: P. Browne	2. CLASSIFICATION CHANGED TO:
2ND REVIEW DATE: 0-12-97	3. CONTAINS NO DOE CLASSIFIED INFO
AUTHORITY: ADD	4. COORDINATE WITH:
NAME: P. Carpenter	5. CLASSIFICATION CANCELED
	6. UNCLASSIFIED INFO BRACKETED
	7. OTHER (SPECIFY):

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