410706

Colorado Department [illegible] Health
[illegible] West S[illegible] [illegible] Venting

Radiological [illegible]

On December 18, [illegible] the Colorado [illegible] of Health was notified by the Environmental Prote[illegible] ([illegible]EPA) [illegible] Radiological Health Laboratory (SWRHL), Las Vegas, [illegible] [illegible] radioactive material to the atmosphere which oc[illegible] [illegible] the Nev[illegible] [illegible] (NTS) during a nuclear device detonation.

Upon this notific[illegible] [illegible] Department [illegible] [illegible]ogical Health Staff activated the various radiolo[illegible] [illegible] and [illegible] [illegible] provide adequate monitoring of the situation.

Four air sampling [illegible] were [illegible]. These included air sampling stations used for [illegible] [illegible] U. S. Atomic Energy Commission-Rocky Flats surveil[illegible] [illegible] [illegible] (4) the NTS-EPA network. A total [illegible] samples [illegible] from 45 air sampling stations throughout the State [illegible] [illegible] collected, 68 were retained by the Department [illegible] samples submitted to EPA, SWRHL for their det[illegible]s.

A total of 164 determ[illegible] [illegible] the 68 samples retained by the Department. [illegible] air samples collected deviated from samp[illegible] [illegible]epartment prior to the "venting".

The Department'[illegible] [illegible] [illegible] and 16 milk samples were collected from [illegible] 20 [illegible] determinations were made on these samples a[illegible] [illegible] radioactivity above that observed prior to [illegible].

In conferring with representatives [illegible] the air samples collected in Colorado and submit[illegible] [illegible] no increase in environmental radioactivity [illegible] attrib[illegible] venting".

Individual air s[illegible] [illegible] by the Department, are tabulated in the at[illegible] Results [illegible] long-lived Beta (β) or Alpha (α) concentration [illegible] a concentration, picocurie (2.22 disintegratio[illegible] [illegible] $/m^3$). All milk samples had non-detectable [illegible] levels while the naturally-occurring Potassium [illegible]

In summary, radi[illegible] release [illegible] "vent" on December 18, 1970 was not detected [illegible]

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LARGE FILTER, HI-VOLUME AIR SAMPLING RESULTS - DECEMBER 1970 pCi/m³

#	Location	13 β	13 α	19* β	19* α	19 β	19 α	20* β	20* α	20 β	20 α	21* β	21* α	21 β	21 α	22 β	22 α
2	Colo. Dept. of Health							.39	.249	.14	.004						
5	School Admin. Bldg.									.22	.016						
7	Aurora									.13	.009						
8	Adams City							.65	.503	.14	.010			.16	.003		
9	Englewood			.26	.165	.13	.005										
11	Cherry Creek Dam									.21	.010						
13	Jefferson County									.18	<.001						
15	Arvada									.17	.008						
16	Golden									.18	.003						
[illegible]	Boulder	21	IFB													.14	.007
22	Longmont									.14	<.001						
[illegible]	[illegible]					.21	.003			16	.003			.20	.001		
[illegible]	Greeley	.10	--														
[illegible]	[illegible] Flats									[illegible]	[illegible]						
[illegible]	Littleton									.18	.009						
[illegible]	La Salle					.08											
[illegible]	Platteville													.12	--		
[illegible]	Grand Valley									.20	.199***						
79	Greeley Sewer Plant									.11	--						
80	Windsor									.19	--						
D-1	Dow	.17	.011	.43	.070	.09	.009	1.61	.157	.16	.010	2.66	1.719	.24	.010	.11	.009
D-2	Dow	.15	.003	.35	.081	.10	.008	1.34	.124	.12	.004	2.31	1.632	.20	.007	.11	.012
D-3	Dow	.18	.010	.43	.089	.10	<.001	1.75	.255	.16	.002	2.99	2.139	.24	.004	.12	IFB
D-4	Dow	.18	.008	.39	.076	.10	.007	1.45	.214	.16	.005	2.56	1.778	.20	.009	.18	.003
D-5	Dow	.16	.002	.41	.086	.10	.100	1.70	.265	.12	.007	3.78	2.712	.18	<.001	.12	IFB
	Specials																
38	Pueblo	.14	--	3.96****	--	.18	--							.17	--		
41	Trinidad							.10	.004	.09	--						
60	Castle Rock							.68	.477	.16	--						

* Early count, includes short-lived activity

** Bad sample - small deposit

*** Polonium 210 by alpha spectroscopy

**** Thoron daughter activity

IFB = Indistinguishable From Background

RAN[illegible]ber [illegible]970
Total β [illegible]

	[illegible]	[illegible]	[illegible]	21	22

Denver [illegible] 4.3 [illegible] 1.9 4.9 1.4 3.3 0.3

The fi[illegible] post sampling analys s a[illegible]te[illegible] the 24 hr. post sampling d[illegible]de[illegible] short-lived natura[illegible]

NTS [illegible] December 1970

	[illegible]	[illegible]	[illegible]	21	22
Denver	*	*		*	*
Durango	*	*	*	*	*
Grand Junction	*	*		*	*
Pueblo	*	*	*	*	*
Rangely	*	*	*	*	*

* Two sampl[illegible]er [illegible] One for particulates and one for [illegible] charcoal. Samplers manned by State [illegible] and determinations made by [illegible]dual sample results are not [illegible]

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