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ENVIRONMENTAL MONITORING REPORT
JANUARY 1, 1961, to MARCH 31, 1961

ATOMICS INTERNATIONAL
CANOGA PARK, CALIFORNIA

SUMMARY

The environs of Atomics International World Headquarters and Nuclear Development Field Laboratory near Los Angeles, California are periodically surveyed to determine the radioactivity of typical surface soil, vegetation and water samples. In addition, continuous air samples taken at the above sites provide information concerning airborne particulate radioactivity. This report summarizes the environmental monitoring results for the first quarter of 1961.

Soil and vegetation are sampled monthly at forty-two locations. Ten of these are within the boundaries of Atomics International sites.

The average soil and vegetation activities are shown in Tables I and II:

Table I - Soil

Location	Activity	1960		First Quarter 1961	
		No.Samples	Average uuc/gram	No.Samples	Average uuc/gram
On Site	α	104	0.45	17	0.32
	β-γ	114	23.0	30	37.0
Off Site	α	324	0.36	45	0.30
	β-γ	360	19.0	96	24.0

Table II - Vegetation

Location	Activity	1960		First Quarter 1960	
		No.Samples	Average uuc/gram(ash)	No.Samples	Average uuc/gram(ash)
On Site	α	89	0.41	13	0.24
	β-γ	113	136.0	30	167.0
Off Site	α	282	0.28	48	0.19
	β-γ	358	135.0	96	156.0

Two water wells at the Nuclear Development Field Laboratory are sampled monthly. The average water activity is shown in Table III.

Table III - Well Water

Location	Activity	1960		First Quarter 1961	
		No.Samples	Average uuc/liter	No.Samples	Average uuc/liter
N.D.F.L.	α	12	0.14	1	0.05
	β-γ	19	2.0	6	3.6

Environmental air sampling is performed continuously at the Headquarters and N.D.F.L. sites. The average concentration of long-lived airborne beta emitters is shown in Table IV.

Table IV - Air

Location	Activity	1960		First Quarter 1961	
		No.Samples	Average uuc/m^3	No.Samples	Average uuc/m^3
Head-quarters	β-γ	182	0.24	95	0.25
N.D.F.L.	β-γ	44	0.44	42	0.40

Table I indicates that the first quarter 1961 soil alpha radioactivity is somewhat lower than the 1960 average, whereas the beta gamma activity is slightly higher. Table II indicates that the first quarter 1961 vegetation alpha radioactivity is lower than the 1960 average and is slightly lower in off-site samples. Vegetation beta-gamma activity reflects an increase in both on and off-site samples.

Since N.D.F.L. operations do not release significant levels or quantities of radioactivity to the soil, the variation in well water is attributed to natural causes.

Table IV indicates that airborne beta-gamma activities at the N.D.F.L. and Headquarters sites were approximately the same as the 1960 averages.