



000024673

Minutes of the Exchange of Information Meeting
 Colorado Department of Health
 EG&G Rocky Flats, Inc.

Date: 28 May 1991

Location: Broomfield City Council
Chambers

Attendees:

K. Korkia	- Rocky Flats Cleanup Commission,
G. Marsh	- CARFC
J. Seeman	- Committee Against Radiotoxic Pollution
K. Welter	
K. Wilmett	- Chem Hill
H. Mahan	- City of Broomfield
S. Nachtrieb	- City of Westminster
S. Ramer	- City of Westminster
J. Bruch	- Colorado Dept. of Health - RFPU
R. Fox	- Colorado Dept. of Health - RFPU
A. Hazle	- Colorado Dept. of Health - RFPU
C. Johannes	- Colorado Dept. of Health - HWMD
R. Terry	- Colorado Dept. of Health - RCD
N. Daugherty	- EG&G Rocky Flats, Inc.
D. Elliott	- EG&G Rocky Flats, Inc.
L. McCoy	- EG&G Rocky Flats, Inc.
M. McHugh	- EG&G Rocky Flats, Inc.
S. Pettis	- EG&G Rocky Flats, Inc.
G. Setlock	- EG&G Rocky Flats, Inc.

N. Daugherty reported that there were no changes to the List of Radioactive Materials Associated with Rocky Flats Plant. The existing isotopic composition of typical Rocky Flats Plant weapons-grade plutonium was reconfirmed.

H. Mahan presented the City of Broomfield Radiometric Monitoring Report for the April 1991 monitoring period. All reported data for radioactivity and chemical analyses were below regulatory limits and consistent with past measurements at their sampling locations. The only volatile organic compounds or VOA target compounds identified were trihalomethanes (THM) byproducts associated with the chlorination process for Broomfield's treated drinking water.

S. Ramer presented the City of Westminster Radiation Data Monthly Report for April 1991. All data in the Westminster Report were consistent and normal with what has been seen in the past. Included in the Westminster Report was a special report, presented by S. Nachtrieb, on soil concentrations of cesium-137, natural uranium, and plutonium-239, -240 along the potential interceptor canal alignment for the Standley Lake Protection Project. Americium-241 data will be presented in a later report. Soil sampling was performed by the City of Westminster

ADMIN RECORD

SW-A-003827

115

with the assistance of the Colorado Department of Health on October 29-30, 1990. Additional soil sampling will be conducted along the exact canal alignment prior to construction of the interceptor canal which is scheduled for this fall.

R. Terry presented the Colorado Department of Health (CDH) Environmental Surveillance Report for April 1991. All measurements in both air and water were consistent with measurements that have been reported in the past.

N. Daugherty presented the April 1991 Rocky Flats Monthly Environmental Monitoring Report. Several reporting requirements for the Rocky Flats Plant Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) permit have been modified by the NPDES Federal Facility Compliance Agreement (FFCA), which was signed by EPA Region VIII on March 25, 1991. As a result of the NPDES/FFCA, format changes were incorporated into the Monthly Environmental Monitoring Report for NPDES monitoring beginning with the April report. The changes correspond to the NPDES/FFCA reporting requirements.

A field reading for total residual chlorine (TRC) taken during transfer of water from Pond B-5 to Pond A-4 on April 25, 1991, was recorded as 0.71 mg/l. Under the NPDES/FFCA, the TRC limit for discharges of Pond B-5 is a maximum concentration of 0.5 mg/l. Preliminary discussions with EPA indicate that this TRC limit may apply only to Pond B-5 discharges when Rocky Flats Plant sewage treatment plant treated effluent is diverted directly to pond B-5, bypassing Pond B-3. Since Pond B-3 had not been bypassed for any STP-treated effluent, the April 25th field reading may not be an NPDES/FFCA exceedance. Nevertheless, in the spirit of the NPDES/FFCA, the reading was reported to the EPA as an official notification. Discussions with TRC sampling personnel, as well as results of other sampling data from this period, indicated that the elevated TRC reading was likely the result of a simple transposition of numbers during the recording of the reading (the true reading being 0.17 mg/l).

Preliminary surface water monitoring results for the April 8-12, 1991, samples taken at Pond C-1 and at Walnut Creek at Indiana Street were above usual values for plutonium (Pu) concentrations for these locations. Samples taken before and after the April 8-12 sampling period showed normal Pu concentrations. Additional aliquots of the Pond C-1 and Walnut Creek at Indiana Street samples for the April 8-12 period are being analyzed to verify the original values, and results will be reported when available.

An initial Pond A-4 surface water sample result for americium-241 (Am-241) for the November 19-23, 1990, sampling period was above the level typically seen for this location. A second aliquot of the sample showed a normal Am-241 concentration. Both analyses met all quality assurance criteria for the analyses. A mean of the two analytical results will be used to represent the Pond A-4 Am-241 concentration for the November 19-23 sampling period.

D. Elliott presented the May 1991 Engineering Update. The following General Interest Projects were included: Roof Repairs for Various Buildings, Laundry Facility, Electrical Distribution System, HF Piping, Calibration Laboratory, TRUPACT Shipping Facility, Office Trailers, and Sewage Treatment Plant Projects, New Medical Facility, and Integrated HS&E Building. Environmental Interest Projects included: Exhaust Plenum Modifications (on hold, Bldg. 771), FU-1 Plenum (Bldg. 771), FU-2B Plenum (on hold, Bldg. 771), Ventilation System Building Supply Replacement (Bldg. 771), Interim Remedial Action for the 881 Hillside, CDH Air Sampling Stations, Air Pollution Emission Notices (APENs) Study, Supercompactor (Bldg.

776), Plutonium Recovery Modification Project (on hold, Bldg. 371), and Treatment System Upgrades at Ponds A-4, B-5, and C-2.

There were changes to the monitoring programs for the Cities of Broomfield and for the Colorado Department of Health. Beginning next month, the City of Broomfield will be reporting EPA Method 502.2 volatile organic compound (VOC) analyses, rather than EPA Method 8240 analyses for VOCs. The change is being made to provide analyses for additional drinking water parameters, as well as some greater sensitivity for the analyses. The Colorado Department of Health has modified its method of correcting for self absorption in its gross alpha radioactivity analyses. It is adding air and detector window density thickness corrections to the correction for sample density thickness. In addition CDH now uses an exponential function to describe self-absorption, rather than the quadratic equation used previously. Terry reported that beginning with next month's report, the Lower Limit of Detection (HASL-300 LLD) for tritium analysis in water will be reduced from 120 pCi/l to 110 pCi/l.

In response to questions concerning the NPDES/FFCA changes, N. Daugherty proposed that a special agenda item presentation be given by Rocky Flats Plant on whole effluent toxicity testing at a future Monthly Information Exchange Meeting. The date for the presentation has not yet been determined.

The next Information Exchange Meeting will be held at 1:30 pm, Tuesday, June 25, 1991, at the Colorado Department of Health, Denver, Colorado, Room 150.

Nancy M. Daugherty

Nancy M. Daugherty, Health Physicist VI
Clean Air and Environmental Reporting Division, Environmental Management Department
EG&G Rocky Flats, Inc.

Environmental Surveillance of Rocky Flats Plant Vicinity -- Sample Collection Schedule

Location	Frequency	Analysis (each sample)	Analysis (periodic composites)
AIR			
D-1 TSP (Primary Security Zone)	Continuous; changeout and	Gross alpha/beta	Plutonium (monthly)
D-2 TSP (Primary Security Zone)	maintenance twice weekly;	Gross alpha/beta	Plutonium (monthly)
D-3 TSP (Primary Security Zone)	Tuesdays and Fridays	Gross alpha/beta	Plutonium (monthly)
D-4 TSP (Primary Security Zone)		Gross alpha/beta	Plutonium (monthly)
D-5 TSP (E. perimeter)		Gross alpha/beta	Plutonium (monthly)
D-6 TSP (E. perimeter)		Gross alpha/beta	Plutonium (monthly)
D-7 TSP (N. perimeter)		Gross alpha/beta	Plutonium (monthly)
D-8 TSP (W. perimeter)		Gross alpha/beta	Plutonium (monthly)
D-9 TSP (N. buffer zone)		Gross alpha/beta	Plutonium (monthly)
D-10 TSP (W. buffer zone)		Gross alpha/beta	Plutonium (monthly)
D-11 TSP (Primary Security Zone)		Gross alpha/beta	Plutonium (monthly)
Broomfield	Continuous; changeout and	Gross alpha/beta	Plutonium (monthly)
Westminster	maintenance once weekly;	Gross alpha/beta	Plutonium (monthly)
Arvada	Tuesdays	Gross alpha/beta	Plutonium (monthly)
D-4 precipitation	When precipitation occurs	Tritium	
CDH precipitation	When precipitation occurs	Tritium	
Scheduled additions (Spring 1991)			
TSP (S. perimeter)	Continuous; changeout and	Gross alpha/beta	Plutonium (monthly)
TSP (E. buffer zone)	maintenance twice weekly;	Gross alpha/beta	Plutonium (monthly)
TSP (E. buffer zone)	Tuesdays and Fridays	Gross alpha/beta	Plutonium (monthly)
TSP (E. perimeter)		Gross alpha/beta	Plutonium (monthly)
PM-10 (E. buffer zone)	Continuous; changeout and	Gross alpha/beta	Plutonium (monthly)
PM-10 (E. buffer zone)	maintenance twice weekly;	Gross alpha/beta	Plutonium (monthly)
PM-10 (E. perimeter)	Tuesdays and Fridays		
Precipitation (E. buffer zone)	When precipitation occurs	Tritium	Plutonium
Precipitation (50-mile remote)	When precipitation occurs	Tritium	Plutonium
SOIL			
13 sector composites to a distance of 7 miles from center of Plant	Composites of 25 samples per sector; annually	Gross alpha/beta, plutonium, fission products, uranium & beryllium	
NOTE: Effective in 1989 2 sectors are now made of nine sub- sectors	Composites of 5 samples per subsector; annually	Gross alpha/beta, plutonium, fission products, uranium & beryllium	
8 composites from remote locations around Colorado	Composites of 25 samples per location; annually	Gross alpha/beta, plutonium, fission products, uranium & beryllium	
Planned 6 new remote locations	Composites of 25 samples per location; annually	Gross alpha/beta, plutonium, fission products, uranium & beryllium	

COLORADO DEPARTMENT OF HEALTH
 Radiation Control Division
 Environmental Radiation Unit

Environmental Surveillance of Rocky Plats Plant Vicinity -- Sample Collection Schedule

Location	Frequency	Analysis (each sample)	Analysis (periodic composites)
WATER			
A-4 Pond	Grabs; weekly; Tuesdays	Gross alpha/beta & tritium	Plutonium & uranium (monthly)
B-5 Pond	Grabs; weekly; Tuesdays	Gross alpha/beta & tritium	Plutonium & uranium (monthly)
Walnut Creek E. of Indiana Street	Grabs; twice weekly; Tuesdays and Fridays (when running)	Gross alpha/beta & tritium	Plutonium & uranium (monthly)
Broomfield (WTP)	Weekly composites of daily samples collected by Broomfield WTP personnel	Gross alpha/beta & tritium	Plutonium & uranium (monthly)
C-1 Pond	Grabs; monthly	Gross alpha/beta & tritium	Plutonium & uranium (monthly)
C-2 Pond	Grabs; monthly	Gross alpha/beta & tritium	Plutonium & uranium (monthly)
Dry Creek Valley Ditch below Broomfield Diversion Ditch	Grabs; twice weekly; Tuesdays and Fridays (when running)	Gross alpha/beta & tritium	Plutonium & uranium (monthly)
Woman Creek E. of Indiana Street	Grabs; twice weekly; Tuesdays and Fridays (when running)	Gross alpha/beta & tritium	Plutonium & uranium (monthly)
Westminster (WTP)	Bi-weekly composites of daily samples collected by Westminster WTP personnel	Gross alpha/beta & tritium	Plutonium & uranium (monthly)
Arvada North Table Mountain Boulder Golden Others (as requested)	Annual composites of quarterly samples collected by local WTP personnel	Gross alpha/beta, tritium & plutonium	