

U. S. DEPARTMENT OF ENERGY
ROCKY FLATS PLANT
ENVIRONMENTAL RESTORATION PROGRAM WEEKLY REPORT
WEEK ENDING JULY 23, 1993

Section I - Interagency Agreement (IAG)

OU 1 - 881 Hillside-Phase III Resource Conservation and Recovery Act (RCRA) Facility Investigation/Remedial Investigation (RFI/RI)

Remedial Investigation (RI)

Resolution was apparently met last week between the Environmental Protection Agency (EPA), the Colorado Department of Health (CDH), and the Department of Energy (DOE) on the final contaminant list for the OU1 site. This resolution allowed work to proceed again at full speed on the environmental evaluation (EE), human health risk assessment (HHRA) (section 6) and sections 4 and 5 of the RI report (nature and extent, and fate and transport). On other portions of the RI report, work is proceeding on schedule. The comment responses to the EE portion of the report were submitted for informal DOE review this week. The subcontractor will be submitting four additional sections of the revised report for EG&G input this week.

Modifications to two contracts are underway this week. The protracted discussions with regulators over the contaminant methodology has resulted in portions of work being redone, and other portions stalled. Procurement is working with the project manager to modify the contract for the EE work and for the RI report. The technical evaluation and cost evaluation will be done this week for the RI contract, and the Request for Proposals (RFP) will go out this week for the EE modification. Funding for both these modifications is coming from funds not previously committed (awards below the requisition amount) and a reallocation of some internal labor hours which were not utilized.

A meeting is scheduled for the end of this week with the three contractor teams revising the RI to discuss progress and schedule. All work is on schedule.

Feasibility Study/Corrective Measures Study (FS/CMS)

Change control Board this week will be presented with a change to the OU1 schedule. The change is the deliverable dates for technical memorandum 10 and 11. These deliverables are contingent upon completion of interrelated work, which was granted schedule extensions by agencies. The tech memos are not EPA and CDH milestone deliverables, so did not receive extensions.

The date revisions are: TM 10 from July 15, 1993, to Sept. 3, 1993
 Tm 11 from Sept 30, 1993, to Nov 15, 1993

Work on the FS was restarted last week with a re-evaluation of the list of remediation alternatives based on the revised interpretations of the nature and extent of contamination in the Final RI. The majority of the FS work could not be resumed until the revision of the risk assessment has progressed enough to determine the final contaminants of concern (COC) list. That resolution was reached this week and a meeting is scheduled next week to begin the revision of Technical Memorandum 10, *Preliminary Remediation Goals*.

Preliminary discussions are underway with ICF-Kaiser staff at Hanford to determine if OU1 is an appropriate site to proceed with an integrated demonstration of an innovative technology for remediation of the suspected dense non-aqueous phase liquids (DNAPLs) in individual hazardous substance site (IHSS) 119.1.

OU1, 881 Hillside Interim Measures/Interim Remedial Action (IM/IRA) Treatment Building 891

Effluent Tank T-207 is currently being filled. Approximately 7,000, 17,000, and 13,000 gallons from T206 was released into the wetland area on July 6, July 8, and July 9, respectively. This was performed by attaching 200 feet of firehose to the discharge pipe. The overflow from the wetland area drains back into the South Interceptor Ditch (SID). T205 has been sampled for discharge. Analytical results are pending.

Monthly sampling at the OU1 Treatment Facility of various sample points was performed on July 7, 1993. Results from the resin capacity samples sent to Sybron are still pending.

The new pump and motor to replace P-102 (French Drain Sump pump) have been received. An IWCP will be generated to perform the work. Work to replace the pump will begin on July 15, 1993.

On July 12, 1993, a lightning strike in the vicinity of Building 891 tripped breakers on two pieces of equipment, set off the leak detection alarms for 891 influent piping, and damaged the PA system. Steps are being taken to correct these problems.

Work on the second quarterly report for 1993 is currently underway.

Total Treated Ground Water for OU1

Treated Groundwater this week:	0 gallons
Total treated to date:	1,445,000 gallons

OU 2 - 903 Pad, Mound, East Trenches Area

Change control for the Subsurface Interim Measures/Interim Remedial Action (IM/IRA) and RI work packages was approved on July 16, 1993. Additional funds will be used to move contracting for the treatability studies into Fiscal Year (FY) 93, to complete the soil vapor surveys and to post the Americium Zone.

Remedial Assessment

TM 9, Contaminants of Concern, will be transmitted for joint DOE-EG&G review this week. TM 10, Toxicity Assessment, is anticipated to be available for review next week.

The drilling portion of the bedrock field program has been completed. Of the six A-series wells, three were clean, one contained 9 parts per billion (ppb) trichloroethylene (TCE) and two were dry. A B-series well was drilled next to the A-series well containing the low level of contamination. Slug testing has been completed for three wells. Development of the B-series well has begun.

Subsurface IM/IRA

A construction inspection of the Mobil Soil Vapor Extraction Unit (MSVEU) was held at the subcontractor. Delivery is scheduled for August 3, 1993.

A draft of the IM/IRA Implementation and Operation Plan for the Soil Vapor Extraction Pilot Test has been completed and is under review by EG&G.

Field work was completed on the Baseline OU 2 Subsurface IM/IRA Soil Vapor Survey (SVS) and the field crew has been demobilized. The field report on the baseline soil vapor survey at the 903 Pad identified only one sample above 10 parts per million (ppm) (27 ppm of tetrachlorethane) south of the southeast corner of the Pad.

Efforts continue to subcontract the detailed portion of the SVS. The scope has been defined and will consist of detailed surveys at the previous IHSSs along with surveys at IHSS 109 and 111.1.

A letter will be written requesting decreased sampling frequency for the Field Treatability Unit based on results from the Draft OU 2 Interim Measures/Interim Remedial Action Plan (IM/IRAP) Treatability Study Report.

There will be no action on finalizing the Draft OU 2 Surface Water IM/IRAP Treatability Study Report until comments are received from the Agencies.

Surface water IM/IRA

A total of four 55-gallon drums of sludge were generated this week.

Eighteen sludge drums were transported to building 664 for Real Time Radiography (RTR) and final inspection. Twenty empty white drums (for radioactive use) were delivered by trucking.

A work control form was turned in two weeks ago for repair of the lighting in three of the four trailers. Since the facility operates 24-hours per day, adequate lighting is required for safe operations.

On Saturday, July 17, the Programmable Logic Controller (PLC) failed to operate after the garage turned the power back on from the generator that powers the facility. The subcontractor (RTG, Inc.) notified EG&G FOM personnel immediately of this problem. FOM requested assistance from Plant Power to troubleshoot the problem.

Plant Power personnel responded immediately and located the problem soon thereafter. The problem was a blown fuse located inside the PLC panel. Plant Power replaced the fuse and informed FOM that they did not have any additional spares. FOM responded by purchasing several from a local Denver electrical distributor and delivering them to the site in case of another incident that may have occurred during non-business hours. Due to Plant Power responding to the call quickly and providing qualified personnel to troubleshoot the problem, the OU-2 Treatment Facility did not fail to collect any water, hence no real downtime. The OU-2 subcontractor (RTG) followed all procedures for notification during off-normal incidents.

A total of three (3) Shift Orders were implemented in response to the high pH discharge occurrence on July 10, 1993. These Shift Orders are no longer in effect, as changes to the OU-2 Health and Safety Plan, and the OU-2 Operations and Maintenance Manuals superseded the Orders. The incorporation of the Shift Orders into these documents closes the two (2) action items for FOM and the one (1) action item for RTG.

Shift inspections have been made on every shift (including night and weekend shifts) by FOM personnel since Wednesday, July 14, 1993.

The acid metering pump in neutralization tank TK-11 was replaced with a smaller unit in order to keep the pH of the effluent as close to 7.0 as possible. The older pump was slightly too large for this tank, and produced pH swings when it injected acid into the tank.

Total Treated Surface Water for OU2

Treated Surface Water this week:	134,490 gallons
Total Treated Water @ FTU:	16,961,860 gallons

OU 3 - Offsite Areas

The Area of Concern (AOC) document has been revised based on Agency comments. This AOC document is under final review prior to submittal to DOE.

A presentation is scheduled for July 21, 1993, to Jefferson County Open Space on the results of the AOC report. This presentation was requested by Jefferson County to discuss the status of the RFI/RI and potential property purchase by Jefferson County.

OU 4 - Solar Evaporation Ponds Phase I RFI/RI Program

Vadose zone monitoring continues as required in Technical Memorandum (TM) # 1 in the form of lysimeter sampling, neutron probe analysis, and water level measurements.

EG&G and EG&G's subcontractor (Parsons Environmental/Engineering Science) observed a "sonic drilling" demonstration near Sacramento, California. The horizontal drilling may be utilized for various ponds to collect subsurface data. A brief report is in the developmental stages. Parsons is expected to provide copies of the report for DOE-RFO by Friday July 23, 1993.

Data evaluation and report writing continues for the OU 4 Phase I RFI/RI Program. Approximately 80% of the data is in for all analytes except metals. Approximately 50% of the data is in for the metals.

EG&G is developing a horizontal drilling technical memorandum. The draft TM is expected to be complete around July 23, 1993.

OU 5 - Woman Creek

Three wellpoints will be installed within the magnetic anomaly west of the 133 series of IHSSs; if water is encountered it will be collected. Soil samples will be collected using the Kansas sampler.

Observation well points will be installed adjacent to groundwater monitoring wells in advance of the aquifer testing schedule to start Thursday, July 20, 1993.

Draft TM 12, Exposure Scenarios is currently at the regulatory agencies for review; they received copies of the TM on July 7.

OU 6 - Walnut Creek

DOE comments are being incorporated into the Draft Final Modeling TM for agency review. The TM should be delivered to DOE for submittal to the regulatory agencies by the end of the week. Agency comments are due on the Exposure Scenarios TM by July 28, 1993.

An extension request for the August 4, 1993, Draft RFI/RI Report Interagency Agreement (IAG) milestone has been delivered to DOE for submittal to EPA. The requested extension due date is July 11, 1994.

OU 7 - Present Landfill

Written concurrence was requested June 17, 1993, from DOE, Rocky Flats Office (RFO) to pursue the renegotiation strategy. The initial response has been favorable and a meeting has been requested to finalize this effort. A meeting will be scheduled to begin negotiations with the agencies regarding re-scoping the OU 7 IAG schedule. Written concurrence from DOE, RFO is necessary to implement this.

The DOE project lead has informed the OU 7 project manager that guidance to implement the background comparison/COC process flow was transmitted July 19, 1993, to EG&G.

OU 8 - 700 Area

Meeting with DOE, RFO on July 22, 1993, to discuss initial implementation of field work for OU 8. This meeting will be the initial project update meeting with EG&G and DOE, RFO concerning implementation of non-intrusive field work. Subsequent weekly meetings DOE, RFO are being scheduled for every Thursday and will continue through field work implementation.

OU 9 - Original Process Waste Lines (OPWL)

A letter subcontract with Jacobs Engineering was opened up for all tasks on July 13, 1993. RFP began work on Additional Data Compilation tasks on July 14, 1993. Work is being prioritized as follows:

1. "Tech Memo #1 Field Sampling Plan, Part 1, Tanks" can be written after the site walks and cross-referencing existing information in OU 9 Work Plan and Appendices. The contractor will 'fast-track' this section of TM#1.
2. "Tech Memo #1 Field Sampling Plan, Part 2, Pipelines" will require gleaning data from engineering drawings and other sources, posting proposed test pit locations on the maps, and verifying accessibility in the field by site walks. This section of the Field Sampling Plan (FSP) is the second priority.
3. FSP sections dealing with soil contamination by sub-surface injections, Under-Building Contamination (UBCs), and the Sanitary Sewer System are lowest priority.

DOE, RFO has notified CDH that OU 9 will not meet IAG Milestones. On July 16, 1993, Bruce Thatcher, DOE, RFO wrote a letter (which James Hartman signed) to Gary Baughman, CDH, which includes:

The reason that surface radiation survey, tank sampling/inspection and additional data compilation tasks have not been completed is due to limited funding in FY93. Pending the finalization of funding for FY94, we plan to initiate as much RFI/RI field work as possible at OU 9. However, we expect FY94 funding to be inadequate to meet all of our IAG commitments and we welcome the opportunity to discuss priorities of work with you.

OU 10 - Other Outside Closures

As reported last week, high purity germanium detector (HPGe) surveys for OU10 and OU12 IHSSs located within the 400/800 area building complex began on Tuesday, July 13, 1993. However, the HPGe equipment malfunctioned due to excessive moisture which affected the crystal detectors on the system. On Monday July 19, 1993, the entire sensor array had to be disassembled and dried out before data collection could proceed. It is anticipated that data collection using the HPGe will resume on Friday, July 23, 1993.

The Colorado Department of Health project representative for OUs 9 and 10 were on plant site on July 14, 1993, to observe the HPGe system in use. Unfortunately, due to the condensation in the sensor arrays of the HPGe, the system did not perform as expected while CDH was present. However, representatives from Environmental Science and Engineering (ES&E) were able to answer all of CDH's questions regarding the HPGe system, and they were very impressed with the capability of the device.

Waste Removal Status for IHSSs 170/174 and 176

A detailed schedule and scope for ER field activities for FY 94 was delivered to Maintenance and Plant Support on Tuesday, July 20, 1993. This information outlines the scope and time frame that ERM will be performing restoration activities in the Industrial Area IHSSs. ERM will be working closely in the next two weeks in order to assist Maintenance and Plant support in outlining required waste removal activities. The scope and schedule information provided to Maintenance and Plant Support will aid in developing the action plan for waste removal activities, as requested by RFO.

OU 11 - West Spray Field

OU 11 Project Management met with Kaiser personnel to discuss the revised Surface Soil Sampling Plan for the proposed Combined Phases RFI/RI Investigation. It was proposed that no further surface soil samples needed to be taken due to the low levels of contamination (lower than background) at the West Spray Field demonstrated from 1988 test pit data. However, hot spots may be a regulatory agency concern, and the HPGe was the recommended method to determine if there are any.

OU 11 Project Management also met with Geosciences personnel to discuss the monitoring well installation and borehole sampling revised programs. Possible approaches were discussed and a proposal will be developed by the beginning of next week.

Risk Assessment personnel are developing a list of analytes of concern, and personnel from the Ecology & NEPA Division (END) are working on revision and proposal for the environmental evaluation.

OU 12 - 400/800 Area

The OU 12 FY94 Draft Work Package funding levels are under the target amount due to intrusive activities being tied to Decontamination and Decommissioning (D & D)/Transition activities. Development of an FY94 integrated resource-loaded schedule and an evaluation of integrating the work packages is scheduled to be developed over the next month. Acceleration of intrusive activities into FY 94 is being investigated.

Informal discussions amongst the Project Managers for the Integrated OUs regarding the estimate of work that will be completed at year's end and IHSS intrusive activities that could be performed during 1994 have been in progress. Different costing and scheduling scenarios continue to be developed.

HPGe radiation surveys planned to begin on July 27, 1993, began ahead of schedule on July 13, 1993, in the 400 Area.

OU 13 - 100 Area

OU 13 Project Manager completed Conduct of Operations training this week.

Revisions to the OU 13 work plan were forwarded DOE for comments. Formal transmittal of the work plan was on Friday.

OU 14 - Radioactive Sites

The activities for FY 94 continue to be entered into a software scheduling program, along with the logic ties, to facilitate the integration of activities with the other Integrated Operable Units (8, 9, 10, 12 and 13). This exercise will lead into development of the scope and schedule for activities beginning in FY 95 and beyond.

The monthly cost and schedule variance analysis report was prepared, submitted to EG&G Central Planning & Budgeting and reviewed with the ER management.

The DOE OU 14 Project Manager attended the weekly Integrated OU Project meeting for an update and status on the progress of the project.

OU 15 - Inside Building Closures

The OU 15 work plan went to Document Control this week for distribution. EG&G is experiencing difficulties with the non-routine waste form of the Integrated Work Control Package (IWCP).

The OU 15 Project Manager completed Conduct of Operations training this week.

OU 16 - Low Priority Sites

The proposed release date of July 6, 1993, will be rescheduled to allow further review time for EG&G, DOE, RFO and DOE Headquarters. The EPA project manager continues to incorporate comments being provided from within that agency.

The monthly cost and schedule variance analysis report was prepared, submitted to EG&G Central Planning & Budgeting and reviewed with the ER management.

Integrated Operable Units - OUs 8, 9, 10, 12, 13 and 14

Based on the second subcontract negotiations meeting for the IA OU contract on July 9, 1993, a revised cost evaluation is being performed by EG&G Procurement. The letter subcontract initiated on May 13, 1993, was expanded on July 13, 1993, to allow the subcontractor to begin work on all tasks for the IA OUs. Official contract award will follow completion of the cost evaluation.

The statement of work (SOW) for implementation of the Industrial Area environmental evaluation (EE) has been developed. Quality assurance personnel are reviewing the SOW. Signatures are in process of being obtained. Submittal of the entire procurement package is scheduled for July 23, 1993. One EE will be conducted for the entire Industrial Area but will support the information required in the Phase I RFI/RI Work Plans for OUs 4, 8, 9, 10, 12, 13 and 14. The implementation will be conducted by using the OU 9 EE technical memorandum.

The revised Health and Safety (H&S) Plan for implementation of non-intrusive field work for the Industrial Area Operable Units (IA OUs), OUs 8, 9, 10, 12, 13, 14, was delivered to EG&G on July 1, 1993. EG&G completed the internal review of the Health and Safety (H&S) Plan on July 13, 1993. Comments have been delivered to the subcontractor for revision prior to delivery for a final draft to RFO. Two complete copies of the H&S Plan will be delivered to DOE, RFO when EG&G's review is complete.

Data compilation tasks for OU 8 and OU 9 were initiated on July 14, 1993, under the new letter subcontract authorized on July 13, 1993. EG&G is working to integrate OU schedules for the IA OUs for FY 94. Each IA OU schedule for FY 94 will be linked together via the work package system.

Interim Measures/Interim Remedial Action Plan (IM/IRAP)

The revised scope for the FY 93 IA IRAP work package was presented to the plant change control board and accepted. RFO has been briefed on the new scope as well as the regulators. A meeting is scheduled for July 20, 1993, with the regulatory agencies to discuss the schedule for developing the IA IM/IRA decision document. Much of this new scope is being coordinated with the Surface Water group and they have shown interest in supporting this project.

Sitewide Activities

Treatability Studies Meetings

A meeting was held on July 15, 1993, with EPA, CDH, DOE and EG&G attending. The purpose of the meeting was to review and discuss streamlining the content of current work plans and how future work plans and reports might be improved. All parties agreed to reconsider the treatability project schedule as shown in figure 7-2 of the Final Treatability Study plan. EG&G and DOE will re-evaluate the activity durations shown in the figure and determine if modifications need to be made, based on recent experience.

Baseline Change Proposals

Two baseline change proposals were presented to the Change Control Board on July 16, 1993. One change was to "capture" the Cost Improvement Savings generated by substituting the Plasma melter project for the magnetic separation project. This change was not approved by the change control board. The second change was to provide funding for the staff augmentation required to support the risk analysis group. This change was approved by the change control board.

Colloid Polishing Filter Method (Techtran)

This process uses a proprietary chemical complexing agent to remove heavy metals and/or radionuclides contaminants from waste water or ground water. The contaminants are removed from the water by precipitation and filtration. Ultimately, the contaminants are contained in a dried filter cake and the treated water is returned to the environment. Results of preliminary tests carried out at RFP in 1991 were favorable. EPA's Risk Reduction Engineering Laboratory (Cincinnati) is interested in supporting a demonstration of this technology at Rocky Flats through their Superfund Innovative Technology Evaluation (SITE) program.

DOE-RFO has issued guidance (letter, from Hartman to Benedetti dated May 14, 1993) to EET that the EPA SITE project will have highest priority in the site wide treatability program. Further, every effort should be made to have this project completed by the end of August 1993. EPA has promised to fund the study, but some period of time may elapse before their funding arrives. In light of this guidance plans are being made to divert funds from other tasks in the site wide work package to begin the necessary preparation work for the project. (This will require approval from the change control board before the funds can be diverted to support the project.) This will allow the preparation for the SITE project to begin in a timely fashion. The impact is that several of the tasks within the work package will be delayed until the SITE project is completed.

Samples from each of the temporary modular storage tanks were requested on July 13, 1993, to insure that the tank contents would be appropriate for the proposed test work. Sampling was scheduled for July 20th with a 2 week sample analysis turn around expected from the lab.

A memo was sent from RFO on June 24, 1993, to the Colorado Department of Health and EPA Region VIII requesting written approval for the EPA SITE Demo. It was agreed during a discussion with CDH and EPA on July 15, 1993, that this project fell under CERCLA jurisdiction. The EPA representative agreed to summarize his comments in a letter to DOE.

A meeting was held with PRC and EEG on June 28 to discuss the Health and safety plan. PRC has incorporated review comments into a final plan which will be available on July 21, 1993, to begin the approval process. Final approval is expected within one week.

A meeting was held on July 15, 1993, with representatives of sample management to discuss a pathway to send samples off-site for laboratory analysis. Services were offered by sample management to have project samples scanned and packaged for off site shipment. It was also discovered that the labs which had been proposed for use by EPA's contractor, PRC, were not approved for use by EG&G. EPA was made aware of this lack of approval and is currently reviewing their decision with PRC.

The technology vendor, Filter Flow Technology (FFT), will be arriving on plant site on July 21, 1993. The purpose of the visit will be to review the site where the test work will take place and hold discussions with representatives of radiological engineering to consider ways to insure that FFT's equipment will be capable of being decontaminated and transported off site.

Sitewide Treatability Studies On Ion Exchange And Adsorption

Ion Exchange and Adsorption are two of the technologies identified in the Final Site Wide Treatability Plan for further test work and evaluation to determine how effectively they might remove various contaminants from surface and ground water at Rocky Flats.

Adsorption capability testing began on Monday, July 12, 1993. Six different materials are being tested to determine their adsorption characteristics for radionuclides and heavy metals from Rocky Flats waters. Water samples were obtained from three different wells on plant site and combined to form the sample for the test work. The test work is anticipated to take 1 to 2 weeks to complete and the analyses of the test products an additional 3 to 6 weeks.

The laboratory portion of the adsorption treatability study was completed by J.C. Laul, Environmental Technology (ET), on July 17 - two weeks ahead of schedule. The laboratory work was scheduled to be completed July 30. Samples were transported to ACCU-LABS on June 19 for analyses. The metals results are expected in approximately 4 weeks and the radio-nuclides in 6 weeks, barring any problems.

During a meeting held July 15, 1993, among representatives from RFO, EG&G, EPA, and CDH; EG&G informally proposed that an additional adsorption test be performed by Harrison-Western (HW). HW has a proprietary membrane technology for removal of hazardous contaminants. HW uses the membrane in conjunction with peatmoss that has been processed into resin beads. Michael Harris and Bill Roushey visited HW's pilot plant located at ASARCO's Globeville Plant on July 14, 1993. Based upon their visit and reports on the effectiveness of the process, EG&G made the test proposal. All parties agreed and a formal letter from DOE/RFO to the regulators has been prepared to advise them of the action.

Lockheed Plasma Melter

Lockheed Environmental has asked EG&G Rocky Flats to participate in a plasma melter demonstration project along with EG&G Idaho. The purpose of the project is the investigate the performance of plasma melting technology for the destruction of hazardous organic compounds in soils and to determine the characteristics of the vitreous waste form produced by the process. EG&G Rocky Flats will contribute plutonium contaminated soil for bench scale testing.

A short "briefing" memo is being prepared to be sent to the agencies describing this project and the test work that will be carried out at Lockheed on the soil sample. This memo will detail the testing procedures and provide other relevant information.

Lockheed Environmental has experienced public relations problems that may prevent them from performing the Pu contaminated plasma melter testing at the Las Vegas facility. If they are unable to perform the testing at Lockheed they will transfer that phase of testing to Argonne Labs in Idaho. Lockheed is waiting for a decision from the State of Nevada before proceeding. This decision is expected by August 1, 1993. R. Madel will visit a plasma melter facility operated by ReTech, in Ukiah California, in August.

Other Activities

Buffer Zone

Facilities Operations Management (FOM) is attempting to acquire at least three more vehicles to support the various ongoing environmental projects.

Land Use

Land Use Requests have increased in the last week, with three in progress; including the Wetland Characterization Study by the Army Corps. of Engineers. A recent meeting of the Design Review Committee was addressed by the NEPA Division. Many people who request Land Use Requests and Soil Disturbance Permits do not know that their projects (in many cases) need a NEPA clearance. Project managers requesting these permits will be made aware of NEPA concerns in the future.

Managing Drums

The Strategic Planning Group within ERM is conducting a study of the cost for managing drums categorized as RCRA waste. The study includes a comparison of RCRA waste management costs incurred at the Rocky Mountain Arsenal in comparison to that at the Rocky Flats Office. FOM will support this study in the determination of what costs are incurred to transport and manage one drum of RCRA waste.

Investigative Derived Material (IDM) Management

RCRA Unit 18.03 has 42 OU1, 124 OU2, 4 well abandonment and replacement program (WARP), 214 OU5-OU6, 92 OU7, 167 Decon Pad, 294 OU2 bedrock (BR) and 2 underground storage tanks (UST) drums for a total of 939 drums stored in it with 30 of the 166 that were RTRd have detectable water. One hundred sixteen drums from RCRA Unit 18.03 with no exceedances were shipped to the contractors yard and the soil is being readied to be disposed of in the landfill.

Two hundred sixteen drums with potential exceedances from the OU1, OU2, and Site-Wide drilling programs have been marked and are being monitored by EG&G Radiation Protection Techs. The drums are being painted by EG&G painters in preparation for transport to RCRA Unit 18.03. One hundred eighteen drums from OU2BR were shipped to Real Time Radiography and then to RCRA Unit 18.03. Eighty-eight drums from OU2-BR, 32 drums JE WARP and 34 drums from OU5 are presently being stored at RCRA Unit 1940 and are being readied to be shipped to RCRA Unit 18.03.

At the present time there are 1769, 55 gallon drums and 1652, 30 gallon drums for a total of 3421 environmental gray drums. Weekly RCRA inspections were completed. Monthly and weekly drum inspections are continuing for the month of July.

A battery inventory for all personnel in the Facility Operations Yard is continuing, so that a battery recycling or disposal program can be started.

Five hundred fifty-one drums in the field with no exceedances are being marked with yellow tape and monitored by EG&G Radiation Protection Techs in preparation of removal from the field and disposal in the landfill. Four drums of waste oil from OU2 Field Treatment Unit were sent to PU&D for offsite disposal.

Section II - Solar Ponds Remediation Project (SPRP)

Regulatory

A crucial factor resolving the DOE dispute with the regulators over OU 4 IAG milestones is the plant's ability to store Solar Ponds sludge outside of the surface impoundments. Prompt, acceptable permitting of a storage area is, therefore, important to successful dispute resolution. CDH has informally considered EG&G's suggestion for use of interim status as a framework for storage under interim status, though a formal application and determination must be made. The use of interim status may support the schedule goals for removal of the sludge from the ponds. A Part B Permit Modification could then be requested under less schedule pressure to ensure long-term storage operation would be properly documented.

Pondsludge Status and Issues

The Partial Draft of the Accelerated Pond Sludge Options Report was issued to the DOE and CDH for initial review on Wednesday, July 14. Comments are being incorporated for a Final Draft issue for review on Monday, July 19.

The Technical Evaluation, Rev. #2 has been issued against the Halliburton-NUS Subcontract Modification #6 Proposal. This final revision of the Technical Evaluation clears the way for negotiations of the outstanding fee, G&A and Overhead costs due HNUS for the period up to November, 1992. The negotiations have been slowed by DCAA audit delays and delays on HNUS providing requested back-up data to EG&G for review.

All four of the Pond Reline Work Packages were 'scrubbed' and prepared for further review. The packages will form the 'template' for the design activities of either relining 'A' Pond or containerizing the Sludge.

A request for estimate was transmitted to the FPM Estimating Group for evaluating the costs of removing unneeded HNUS equipment from the 'C' Pond Process Train. Construction Management was also solicited to provide input to the equipment removal planning process. At this juncture, we anticipate removing the initial block of HNUS rental equipment in September.

The Subcontract Administrator, Steve Heiman was interviewed by the DOE Inspector General's Office this week. Questions revolved around the amount and type of HNUS equipment being rented and apparently 'not used' for Sludge Processing. Steve described the reason for holding equipment 'ready to process in '94' as part of the baseline for the Program. He also defined plans to demobilize HNUS equipment in accordance with Sludge Removal plans and Subcontract requirements.

Pad Operations/Storage Status and Issues

Because of delays associated with training subcontractor personnel, the Fixed Fee construction contract with Marquez for pad sealing has been terminated. J.A. Jones will be authorized to perform all remaining work. The duration of remaining work afterward of contract is estimated to be 28 days. FPM is waiting for J.A. Jones to submit their bid for this work. The bid is expected on or before July 19. The tech evaluation and subsequent authorization to proceed is expected to take less than one working day. This work must be completed before September 30, 1993. RFO staff has expressed their extreme concern regarding the potential failure to complete this work. The scope of this work is neither technically demanding or especially large.

Additional requirements for storage pad improvements beyond the scope of the Pad Sealing Project have been identified. This work includes raising the grade of a small portion of the 750 Pad in South West corner, repairing the berm on the 905 Pad and other activities. These activities were not anticipated in scoping the Pad Sealing project and it has been decided to avoid unnecessary complications that this work could be most effectively handled in FY 94 under the plant blanket repaving contract. A written scope and cost estimate is being prepared for inclusion in the FY 94 work packages.

Water Management Status and Issues

The Building 374 evaporators were taken down for maintenance starting July 3 and are expected to be back on line about July 16. However, some problems have been encountered during reassembly which places this goal in jeopardy.

The Building 910 evaporators were run 2 shifts daily this week to generate distillate to SO test the 215 D tank and the associated pumping and control system. Sufficient distillate should be available by July 20 to complete this test. In addition, samples of the water will be analyzed to confirm the cleanliness of the 215 D tank.

There is still a little too much water in North pond to accurately judge the volume of sludge present. Sludge pumping from North to South pond was started on July 8. Additional water will be pumped to Building 374 when they are able to receive.

	This Week	Total(since 4/1)
Pond Water to Bldg. 374: (gal)	0	1,405,000
Modular Tank water to Bldg. 374: (gal)	0	331,000
Pond water excess volume: (gal, Approx.)	0	NA
Total Pond Freeboard: (inches)	210	(desired 210)
Available Modular Tank Volume: (gal)	548,500	(926,500 ax)

Section III - Surface Water Management

Pond Water Management IM/IRA

A meeting was held with RFO, EG&G/Surface Water, Wright Water Engineers, and EG&G/ERM on July 6, 1993. The topic of discussion was the revised IM/IRA schedule. EG&G was unable to meet RFO requests to shorten the schedule without impacting document quality. RFO may request an update on the schedule by EG&G AGM level management. The final schedule were transmitted to RFO July 9, 1993.

Bi-weekly working meetings will be held with Wright Water Engineers and EG&G to review progress and resolve issues. This meeting will be held on alternate Wednesdays. Bi-weekly update meetings will be held with RFO and EG&G. The update meetings will be held on alternate Thursdays following the working meetings. These meetings are designed to insure that the IM/IRA is on schedule and RFO is apprised of current status, issues, and events.

The EG&G Ecology and National Environmental Policy Act Division (END) is pursuing a Finding of No Significant Impact (FONSI) for the IM/IRA .

Section 2.4, Water Quality Data Summary, has been reassigned to the EG&G Statistical Applications Group and Surface Water Division personnel to replace personnel lost by voluntary termination. This could cause a one week delay in completing this section. The EG&G Risk Analysis group has intensified their efforts to recover this delay. There should be no overall impact on scheduled delivery of the IM/IRA.

Section IV - Future

Community Relations

The ER Community Relations Plan is scheduled to be updated sometime in December 1993. A questionnaire is being developed to send to 35 citizens who will compose a focus group to help revise the plan.

Upcoming Events

July 27, 1993 Environmental Surveillance Exchange of Information Meeting, 1:30 p.m., Broomfield City Council Chamber, No.6 Garden Office Center, Broomfield

IAG MILESTONES THROUGH FISCAL YEAR 1994

<u>OU#</u>	<u>Milestone Description</u>	<u>Due to EPA/CDH</u>	<u>Status</u>
2	Submit Draft Phase II RFI/RI Report	12 Mar 93	Delinquent
2	Submit Draft Treatability Test Report	18 May 93	extended to 13 Jul 93/Complete
4	Submit Draft Phase I RFI/RI Report	21 May 93	in dispute
2	Submit Site 2 Draft Test Plan	24 Jun 93	complete
2	Submit Final Treatability Test Report	13 Jul 93	extended to 8 Sep 93
3	Submit Draft Phase I RFI/RI Report	16 Jul 93	extension request submitted
6	Submit Draft Phase I RFI/RI Report	4 Aug 93	extension request submitted
2	Submit Final Phase II RFI/RI Report	9 Aug 93	*
7	Submit Draft Phase I RFI/RI Report	12 Oct 93	*
4	Submit Final Phase I RFI/RI Report	18 Oct 93	in dispute
2	Submit Draft CMS/FS Report	4 Nov 93	*
1	Submit Final Phase III RFI/RI Report	4 Jan 93	extended to 15 Nov 93
5	Submit Draft Phase I RFI/RI Report	30 Nov 93	*
3	Submit Final Phase I RFI/RI Report	13 Dec 93	extension request submitted
1	Submit Draft Proposed Plan	27 Sep 93	extension request submitted 9 Jun 93
1	Submit Final CMS/FS Report	27 Sep 93	extended to 3 Aug 94
1	Submit Final Proposed Plan	4 Jan 94	extension request submitted 9 Jun 93
6	Submit Final Phase I RFI/RI Report	7 Jan 94	extension request submitted
1	Submit Draft CMS/FS Report	31 Mar 93	extended to 11 Feb 94
8	Submit Draft Phase I RFI/RI Report	14 Feb 94	*
7	Submit Final Phase I RFI/RI Report	16 Mar 94	*
9	Submit Draft Phase I RFI/RI Report	11 Apr 94	*
4	Submit Draft Phase I Proposed IM/IRA Decision Document	14 Apr 94	*
12	Submit Draft Phase I RFI/RI Report	20 Apr 94	*
4	Submit Draft Phase II Work Plan	22 Apr 94	*
5	Submit Final Phase I RFI/RI Report	3 May 94	*
1	Submit Draft Responsiveness Summary	6 May 94	extension request submitted 9 Jun 93
2	Submit Final CMS/FS Report	10 May 94	*
2	Submit Draft Proposed Plan	10 May 94	*
8	Submit Final Phase I RFI/RI Report	12 Jul 94	*
15	Submit Draft Phase I RFI/RI Report	1 Aug 94	on schedule
1	Submit Final Responsiveness Summary	3 Aug 94	extension request submitted 9 Jun 93
1	Submit Draft CAD/ROD	3 Aug 94	extension request submitted 9 Jun 93
13	Submit Draft Phase I RFI/RI Report	8 Aug 94	*
2	Submit Final Proposed Plan	9 Aug 94	*
10	Submit Draft Phase I RFI/RI Report	25 Aug 94	*
9	Submit Final Phase I RFI/RI Report	6 Sep 94	*
4	Submit Draft Phase I Proposed IM/IRA Decision Document	14 Apr 94	*
7	Submit Draft Phase II RFI/RI Work Plan	13 Sep 94	*
12	Submit Final Phase I RFI/RI Report	15 Sep 94	*
4	Submit Final Phase II RFI/RI Work Plan	19 Sep 94	*
11	Submit Draft Phase I RFI/RI Report	20 Sep 94	*

*Behind original IAG schedule; extension required.