U. S. DEPARTMENT OF ENERGY
ROCKY FLATS PLANT
ENVIRONMENTAL RESTORATION PROGRAM WEEKLY REPORT
WEEK ENDING DECEMBER 25, 1992

Section I - Interagency Agreement

OU 1 - 881 Hillside

Assessment -- In October 1992, RFO petitioned the regulatory agencies for a 90-day extension on all deliverables. Only the Final RFI/RI report was granted a 90-day extension by the regulatory agencies. A second petition for a 90-day extension to perform work on the Feasibility Study (FS) was sent to the regulatory agencies. During the week ending December 18, 1992, a response from the regulatory agencies granted a 45-day extension, rather than the 90 days requested. It was decided to dispute this decision, and a letter requesting dispute resolution was informally delivered to the regulatory agencies. On December 17, 1992, an informal discussion among RFO and the regulatory agencies was held to resolve this dispute and hopefully avoid a formal request for dispute resolution.

The informal discussion lead to the following resolutions:

1 EPA and CDH concurred that DOE's analysis was correct, however there exists some finite (though small) possibility that saturated conditions sufficient to supply water for domestic use could return at some time in the future.

2 DOE shall provide a worst-case analysis in the Baseline Risk Assessment (BRA) that considers ingestion and dermal contact with contaminated groundwater. This case shall be clearly caveated as being provided in response to EPA and CDH requests.

3 EPA and CDH agreed that the worst-case shall not be used for determining remedial action requirements, rather, groundwater cleanup goals will be set on ARARs.

4 EPA and CDH agreed that the 881 Hillside compromise does not preclude DOE from advancing the same arguments (or similar rigorous pathway analysis) on other OU's.

5 EPA and CDH agreed to grant DOE's request for a 90 day schedule extension on all downstream milestones. The new milestone date for the draft and final CMS/FS reports are now June 29, 1993 and December 23, 1993, respectively.

In addition to the EPA and CDH worst-case, we have already performed the analysis to permit presentation of a more reasonable conservative-case for comparison.

These resolution appears to be a reasonable compromise. It maintains the verity of our technical analysis and limits EPA and CDH's application of the worst-case analysis. Additionally, it validates a major costing assumption in Work Package 12011; namely that the 90 day downstream schedule adjustment would come to fruition.

A-OU09-000120

Given the aforementioned resolution, Technical Memorandum (TM) #10, *Remedial Action Objectives*, will be revised accordingly and delivered to the regulatory agencies in mid January. This TM establishes remedial action objectives, preliminary remediation goals, and identifies applicable or relevant and appropriate requirements (ARARs). Technical Memorandum #10 is a key landmark in the development of the CMS/FS.

<u>IRA Operations</u> -- An acid tank overflow occurred in building 891 on December 21, 1992. The tank capacity is 2,540 gallons and the berm capacity is 2,540 gallons.

On December 21, 1992 at 1100 a.m. a hydrochloric acid shipment arrived by truck at Building 891 and the truck operator began pumping the acid from the truck into the tank. At 1145 a visual inspection of the tank and the tanker was conducted by an employee who smelled an odor. At 1230 the building manager noticed a strong acid fume odor coming from the east end of the building. A possible leak or spill was suspected. Due to the odor, entry into the building from the east side was not advisable so two employees entered from the west end of the building. The acid tank was overflowing into the containment area. It was noted that no more pressure was on the line from the truck because the truck operator had finished filling the tank and was rolling up the pressure line to be put away. The small amount of acid in the berm was being controlled and contained, but as the odor from the fumes increased, the manager had everyone evacuate the building and immediately called the Rocky Flats Fire Department. The tank continued to overflow into the berm. The Fire Department arrived on the scene at 1300. Pumps were obtained and the acid was pumped to tank 210. Remaining acid was neutralized by the addition of sodium bicarbonate and oil dry added to liquid for later disposal into waste drums. A fireman was treated at the scene for a minor sodium bicarbonate burn to his neck and lower face. The Fire Department estimated the total amount collected in the berm to be 2,200 gallons.

The manager noted that the bill of lading that day totaled 1008 gallons. A weigh scale at the truck fill station is the measurement device used. The standard is 9.88 lbs per gallon. A total of 1200 gallon already in the tank had been measured earlier in the day.

It was determined that all procedures as written were properly followed by the building residents. When the all clear is given by the Fire Department to reenter the building, the tank will be stick tested and the total amount of acid overflowed will be calculated. The tank, the overflow alarms, and all connections on the tank will be checked. A plan will be determined for the waste drums. An investigation into the cause of the overflow will be conducted by ER Facility Operations Management (FOM).

The Colorado Department of Health (CDH) will be conducting an inspection of Building 891. The inspection should be conducted in accordance with the Hazardous Waste Requirements Manual, Sec. 22.0, "Interaction with Regulatory Agencies."

CORRECTIVE ACTION:
After an investigation into the cause of the overflow, a second meeting for corrective action will be called.

OU 1 IRA Operations total treated ground water to date is approximately 769,000 gallons; and total discharged treated ground water is approximately 602,500 gallons.

OU 2 - 903 Pad, Mound, East Trenches Area

Phase II RFI/RI Bedrock Work Report -- The December 16, 1992, meeting with the regulatory agencies to present the revised OU 2 RFI/RI schedule was postponed to December 17, 1992 at CDH headquarters in Denver. RFO, EG&G and a subcontractor discussed the OU 2 Surficial Soil Sampling Plan for the Human Health Risk Assessment (HHRA). A revised schedule was not presented to CDH as originally planned since RFO and EG&G decided to coordinate a more practical compressed "Face the Facts" schedule.

The agencies did not like the approach being taken in the surficial soil sampling plan because they felt it did not properly sample the entire lateral extent of the OU. The Surficial Soil Sampling Technical Memorandum is being revised to accommodate CDH comments. The Surficial Soil Sampling Technical Memorandum is in progress and will be received by RFO on January 8, 1993. This TM will address the collection and analysis of the surficial soils in OU 2 for the HHRA.

The Exposure Scenario and Modeling TMs will be submitted to the regulatory agencies by January 15, 1993.

Subsurface Interim Measure/Interim Remedial Action (IM/IRA) -- Engineering and tabletop review of the specification for the procurement of a Mobile Soil Vapor Extraction System was completed on December 14, 1992. The procurement package was completed and sent to Procurement on December 21, 1992.

The statement of work of the Soil Vapor Survey work is almost complete and will be ready for delivery to Procurement by January 1993.

Field Treatability Unit (FTU) -- The FTU collected, treated and discharged 197,540 gallons of surface water during the week ending December 23, 1992. Operation has been normal and without problems.

Four drums of sludge were processed on December 17, 1992, and 5 drums on December 18, 1992, bringing the total number of drums stored at EM-1890 to 21.

The membrane filter was cleaned December 16, 1992. The pH in Tank 2 has been reduced to between 10.5 and 11.0 to provide adequate solids concentration for membrane scouring.

OU 3 - Offsite Releases -- Offsite landowners are still being contacted for surface soil sampling sites. Several landowners have denied access to their property. When access is denied, it is necessary to identify a new sampling location and to contact a new landowner for access to that property.

The CDH Health Advisory Board held a technical work session from December 15-17, 1992, in Denver. Of concern to the OU 3 Project is the continual discussion by the Board of collecting their own environmental samples because "the public has no confidence in the DOE data". If the Board accepts this argument, they will be contributing to the negative perception. An offer was made to the CDH Project Manager, to split samples with OU 3 if they are concerned about data quality. CDH is considering this offer.

<u>OU 4 - Solar Evaporation Ponds</u> -- Drilling activities began in the Protected Area (PA) on December 14, 1992. Borehole number 44593, approximately 100 feet south of Pond 207 B South (Southeast corner), was drilled to a total depth of 14.2 feet. Ground water was detected at 10.7 feet and recovered to 5.4 feet twenty-four hours later. Bedrock was encountered at 11.7 feet. Borehole number 40893, directly north of B-series Ponds was drilled on December 15, 1992 to a total depth of 11.2 feet. Ground water was not detected at this borehole. Two samples were collect from borehole 44593 and from 40893 for analytical purposes. Both boreholes were grouted December 17-18, 1992. The staking of borehole locations in the Buffer Zone was initiated on December 18, 1992.

<u>OU 5 - Woman Creek</u> -- The geophysical survey at IHSS 133 was completed during the week ending December 18, 1992. The IHSS 115 geophysical data was processed, and the information was incorporated into Draft TM #3, *Surface Soil Sampling at IHSS 115*. The Draft TM #3, *Surficial Soil Sampling at IHSS 115*, was delivered to the regulatory agencies on December 4, 1992. Comments are expected back from the regulatory agencies by December 18, 1992.

Eight borings for IHSS 115 were started on December 3, 1992. Six holes were completed by December 15, 1992. The first drill rig could not access all areas, so a second all-terrain vehicle (ATV) drill rig was brought on plant site to replace it. The first rig was demobilized from the site. After the ATV drill rig completes the two remaining holes at IHSS 115, it will be moved to the well located below Pond C1.

The closed circuit TV camera survey of the storm sewer in IHSS 115, was delayed because the required permits from Safeguards and Security (SS) were not obtained. SS is presently addressing this issue of welded shut manhole covers in the 400 area. The survey is now scheduled to start during the week ending January 8, 1993.

A preliminary draft of TM #5, *Soil Gas Survey*, including the results of the electromagnetic (EM) and magnetic surveys, was completed on December 8, 1992. TM #5 was reviewed and it was noted that the 1300 proposed soil gas sampling points far exceeded the 370 sampling points originally envisioned. The TM was returned for revisions, and TM #5 will be resubmitted after revisions are completed.

A meeting was held on December 8, 1992, among RFO and EG&G personnel to discuss a progress update of OU 5 activities.

A meeting has been scheduled for December 28, 1992, among RFO, the regulatory agencies, and EG&G to give the regulatory agencies an OU 5 progress report on work performed.

OU 6 - Walnut Creek --RFO completed review of TM #1, *Addendum to Final Phase I RFI/RI Work Plan*, and forwarded the document to the regulatory agencies for their review and comments.

Borings are in progress in the Trenches (IHSS 166). RFP Industrial Safety has denied drilling under the high voltage power lines that are directly overhead of Trench B, IHSS 166.2, unless there is a 30 foot clearance. The OSHA clearance requirement is 13 feet. The height of the wires will be surveyed to determine if any type of drilling rig can be used in Trench B.

Soil borings were completed in the East Area Spray Field (IHSS 216.1). Soil borings are in progress in the Soil Dump Area (IHSS 156.2).

A meeting was held at EPA offices on December 21, 1992, to discuss the surface water management of the ponds along Walnut and Woman Creeks and the Landfill Pond. The meeting was attended by several representatives from RFO, EPA and CDH. Additional meetings are planned to discuss managing the ponds under CERCLA requirements. It is doubtful that any Interim Measure under this "CERCLAZATION" of the ponds will effect the RFI/RI investigation underway for OU 6.

OU 7 - Present Landfill -Surficial soils sampling has been completed around the East Landfill Pond. The cone penetrometer testing (CPT) rig is now working within the landfill. The first north-south transect line through the middle of the landfill is now complete. All penetrations went to bedrock.

Drilling continues on upgradient monitoring wells. Work was shut down December 21-22 due to high winds and RFP security target practice. The upgradient site that the drill rig was on was determined to be in the "fan" of the firing range.

The regulatory agencies' oversight personnel were onsite on December 14, 1992. No major issues were discussed, and the regulatory agencies seem to be satisfied during their visit.

The TM for surficial soils sampling and asbestos pits investigations was received by RFO on December 18, 1992 for review and comment.

OU 8 - 700 Area -- The regulatory agencies are reviewing the OU 8 Final Phase I RFI/RI Work Plan comment responsiveness summaries that were delivered on December 1, 1992. The regulatory agencies are scheduled to deliver their comments on the Work Plan to RFO on January 15, 1993.

FY93 work packages are being rebaselined, and OU 8 tasks have changed slightly. OU 8 will be part of an overall integration of Industrial Area (IA) OUs (8,9,10,12,13,14) and will be integrated through the work package rebaselining. The tasks for all the IA OUs will be limited to the initial nonintrusive field work in FY93 according to each Work Plan.

OU 9 - Original Process Waste Lines -- The draft of the FY93 work package revisions was completed. The revised schedule proposes that RFO submit the Draft TM #1, *Field Sampling Plan*, in the fourth quarter of FY93. This would allow OU 9 Phase I RFI/RI Stage 1 Sampling and Analysis to take place in FY94. A work package that integrates the industrial area OUs has been completed for OU 9. The integrated approach will allow six OUs to jointly perform preparatory activities such as procurement and permitting.

Work Package tasks specific to OU 9 include a review of engineering records and interviews with appropriate personnel to clarify historical OPWL operating practices and confirm locations of pipes, tanks, and other structures. Information gathered in this additional data compilation will be used in the fourth quarter FY93 to prepare the Draft Technical Memorandum #1, *Field Sampling Plan.*

OU 10 - Other Outside Closures -- A schedule has been developed which incorporates all the Industrial Area OUs into one integrated project. OU 10 is tentatively scheduled to begin Phase I Assessment activities in the second quarter of 1993.

The OU 10 Final Phase I RFI/RI Work Plan was submitted to the regulatory agencies on May 1, 1992, and the final approval status is still pending.

OU 11 - West Spray Field -- A draft outlining a proposal to rescope OU 11 field activities is at RFO for review. The proposed scope change requires funding shifts within the work package, but doesn't impact FY93 funding. CDH supported the planned proposal outline and agreed to participate with the rescoping. RFO approved the transmittal of the rescoping proposal outline.

OU 12 - 400/800 Areas -- Delivery of the OU 12 Final Phase I RFI/RI Work Plan to the regulatory agencies occurred on December 18, 1992. Final comment resolution and document preparation are complete, and the regulatory agencies are scheduled to grant final approval for the OU 12 Work Plan in January 1993.

A schedule has been developed which incorporates all the Industrial Area OUs into one integrated project. OU 12 is tentatively scheduled to begin Phase I Assessment activities in the second quarter of 1993.

OU 13 - 100 Area -- There are several issues associated with OU 13 at the present time that may affect the start of field activities.

Issues

A. The OU 13 Work Plan was submitted to the agencies per the IAG schedule, but the Work Plan has not not approved pending the resolution of three issues:

1. Settlement of the ARARs/Chemical Benchmark Issues
2. Receipt and approval of HPGe SOPs by the agencies
3. Approval of a more comprehensive surficial soils component to the FSP

B. Budget status. This package is integrated with the other industrial area OUs and has had

analytic costs added back in. This will allow the non-invasive field activities in OU 13 to begin this FY.

C. A new issue may develop with several of the industrial area OU's including OU 13. Several of the IHSSs within OU 13 (IHSS #s 117.1, 117. 2, 158, 186, 197) are used as storage areas for a variety of materials, such as scrap metal, building supplies and other various and sundry items. These items will need to be relocated out of the IHSS in order for remedial investigations to begin. We are hoping to be able to move the items in storage around during the non-invasive activities.

2. Corrective Actions

A. Two policy issues are pending:
Settlement of the ARARs/Chemical Benchmark Issues
Approval of a more comprehensive surficial soils component to the FSP

A schedule and scope of work has been developed. The goal is to have a corrected table delivered to the agencies as soon as possible. A meeting was held on Wednesday November 25, 1992 with the subcontractor to discuss progress. The revised tables were completed on December 18, 1992. A draft of the revised tables will be delivered to the agencies.

The second issue is under discussion. Because soil sampling is not required in the IAG, this is additional scope. The Work Plan as submitted contains 54 surface soil samples which are enough to do a baseline risk assessment. The cost of these samples is estimated to be $250,000. CDH has requested that a surficial soil sample be taken at every fourth HPGe or soil gas sampling location. This would expand the proposed sampling effort by about 130 -150 samples. Analysis of each additional sample will cost approximately $3800—hence could cost an additional $570,000. A meeting with the agencies will be scheduled in early January.

Preparation of the Statement of Work (SOW) can begin as soon as the Work Plan is approved. (Some preliminary work on the SOW has already been done, but until the details of the FSP in the Work Plan are finalized not much more can be accomplished).

B. Even the revised budget for FY 93 is not fully adequate to meet the next IAG milestone which is August 8, 1994—delivery of the Phase I RFI/RI Report, however considerable progress can be made on the non-invasive activities. These activities include a visual inspection of the OU, surveying and grid location, HPGe, soil gas, groundwater and surficial soils sampling. All of these activities are being coordinated with the other industrial area OUs. A new work package is being prepared. Several meetings were held the previous week to coordinate this effort. The first draft of the new work plan was completed on December 12, 1992. New proposed milestones were forwarded to RFO for their consideration and comment. These milestones will update RFO on a quarterly basis and are an integral part of the coordinated effort on the industrial area OUs.

C. Resolution of the HPGe SOP issue appears to be at hand. Comments on the revisions to the SOP as a result of the comments received from EPA and CDH are being reconciled by a subcontractor and a final revised SOP is forthcoming. The revised SOP should be ready to send to EPA and CDH in early January.

D. A letter will be prepared to the responsible manager seeking cooperation in removal or relocation of materials from the IHSSs during remedial activities.

<u>OU 14 - Radioactive Sites</u> -- The FY93 work package is complete in draft final form and reflects the integrated schedule and scope for non-intrusive field work, including radiological surveys, surficial soil sampling and soil gas surveys. This integration involves OUs 8, 9, 10, 12, 13, and 14.

The Final Phase I RFI/RI Work Plan was scheduled for EPA and CDH approval on November 17, 1992. RFO was notified in writing by EPA that approval is being withheld until a scope and schedule for performing the Industrial Area Interim Remedial Action Plan is agreed upon by EPA, CDH and DOE. Previously, EPA and CDH confirmed that the Final Work Plan did adequately address comments on the Draft Work Plan.

<u>OU 15 - Inside Building Closures</u> -- Revision of the FY 93 Work Package for OU 15 Inside Building Closures Assessment is continuing. We are currently addressing EPA's and CDH's comments on the Final Phase I RFI/RI Work Plan for OU 15. January 15, 1992, has been set by CDH as a tentative date for responses to comments on and revisions to the Final Phase I RFI/RI Work Plan for OU 15 to be completed.

According to the IAG Schedule, the Final Phase I RFI/RI Work Plan for OU 15 was to approved by the regulatory agencies on November 24, 1992, and field work was to begin on November 25, 1992. Conditional approval pending the resolution of regulatory agency comments on the Final Phase I RFI/RI Work Plan for OU 15 and the EPA's and CDH's comments were received on December 11, 1992.

EPA's comments on the Final Phase I RFI/RI Work Plan for OU 15 indicated that the DOE "will ultimately need to issue a CERCLA decision document closing the unit." This comment is in conflict with CDH's comments on the Draft Work Plan for OU 15. CDH's comments on the Draft Work Plan indicated that IHSS 212 (RCRA Unit 63) "will be removed from the OU 15 schedules of the IAG and not be addressed in the Work Plan" and that Part VIII of the Mixed Residues Permit Modification for RFP will include closure plans for Unit 63, which will specifically address radioactive contamination and cleanup. From EPA's comment it can be interpreted that implementation of the Work Plan for OU 15 and IAG Schedule for OU 15 are dependent upon approval of the RCRA Permit Modification by CDH. This could significantly impact the current IAG Schedule for OU 15 and result in a missed Milestone for submittal of the next IAG Milestone of August 1, 1994 (i.e., submittal of the Phase I RFI/RI Report for OU 15).

OU 16 - Low-Priority Sites -- The Final No Further Action Justification (NFAJ) Document for OU 16 is still pending approval despite an expected approval date of November 20, 1992. The period of performance for the contract expires December 31, 1992. An extension of the contract period is not anticipated. CDH has been notified that the period of performance expires this year. CDH responded by stating that due to CDH manpower constraints, their review would not be completed until January 1993.

Correspondence was received by RFO from EPA on the Final NFAJ Document. EPA acknowledged that the Final document adequately addressed comments on the Draft document. However, EPA takes the position that "the close out of OU 16 can only be achieved by following the administrative process through to the Proposed Plan (PP) and the Record of Decision (ROD)". (ltr: G. Baughman, Colorado Department of Health from M. Hestmark, Environmental Protection Agency, December 2, 1992. RE: Approval of the OU 16 Final No Further Action Justification Document). RFO is expecting a response from CDH on this subject in January 1993.

Sitewide Activities

Sample Management Office (SMO) -- The SMO is the system that tracks the sample from collection to archive. This includes the technical interfaces, laboratory audits, contracting with laboratories, and data validation. SMO priorities are to provide adequate quantities and quality of samples to the laboratories, track and report on sample status, and provide technical support to ER Management on analytical issues.

Field crews are currently working on 23 sampling projects under 15 programs at RFP. As of December 22, 1992, 327 soil/sediment, 0 water, and 250 biota samples were in the queue for radiochemistry analyses. An additional 50 fish, and 41 biota are on hold for requisite contract modifications.

Lab Capacity/Performance - We are processing approximately 121 OU 3 core samples for radiochemistry over the next two weeks. Eighty nine of these have been on hold in the labs effectively reducing capacity to 32 soils for the next two weeks. We are sending out 32 additional core samples from OU 3 thus, no soil samples will be shipped over the holidays for other programs. Samples taken by field crews who are working over the holidays are being coordinated with labs who are also on a holiday schedule, so no program should be negatively affected by the holiday schedule.

Laboratory capacity coordination is daily and sometimes hourly due to heavy sampling volume from RFP. Samples shipped during the week ending December 18, 1992, are as follows:

OU 1	1 water
OU 2	30 water
OU3	32 Core
OU 6	8 water
OU 7	8 water
GW	26 water
SW	7 water

Occurrence Reporting Process System (ORPS) Working Group

The RFO Operations Support Branch is discussing Environmental Restoration involvement in the RFP Occurrence Reporting Process System (ORPS) Working Group Tasks.

Rocky Flats appears to have more stringent and conservative reporting requirements compared of the rest of the complex due to a disproportionate share of reports on the system, especially in the category of unusual occurrences. Part of the cause is due to the way Operational Safety Requirements (OSRs) are written at Rocky Flats in that the focus of OSR surveillances are primarily on individual components versus the entire system. Another part of the cause may be that Rocky Flats has been under heavy scrutiny from the defence Nuclear Facility Safety Board (DNFSB) and other oversight organizations and thus has taken a more conservative approach in its safety analyses such that the "safety envelope is more rigidly defined".

ER will compare implementation procedures from around the complex to identify where the commonalities and inconsistencies exist in detail. This report is due at the next ORPS Working Group Conference in March of 1993.

Drum Management

RCRA Unit 18.03 has sixty six OU 1 and twenty five OU 2 drums stored in it with 11 of the 91 having detectable water. At the present time there are 75 drums from OU 2 awaiting shipment to building 664. The shipments have been delayed due to inclement weather, the Material Balance Account Audit, and the Real Time Radiography unit being down. At the present time there are 1,470, 55-gallon and 992, 30-gallon drums for a total of 2,462 environmental gray drums in the field.

Protected Area Decontamination Pad

Work is progressing towards getting the Protected Area (PA) Decontamination Pad on-line. A subcontractor submitted their proposal to EG&G Procurement on December 7, 1992. A Technical Evaluation on the proposal is in process.

A letter was submitted to Procurement to allow the subcontractor to continue work until negotiations on their proposal are complete. Along with the Technical Evaluation, a revision to Modification No. 1 to the Statement of Work and a purchase requisition for the additional funds are in progress. The Main Decontamination Facility (MDF) is supporting all field activities inside and outside the PA.

903A Decontamination Pad Operation Status

Operations of the MDF were normal through the work week. Environmental and radiological readings of the MDF were found to be at background levels.

High winds and freezing temperatures delayed opening the MDF throughout the week. Delays were minimal and normal operations were ongoing.

On December 15, an attempt was made to sample sediment/sludge drums from the MDF. Due to the extreme cold weather conditions it was not possible to sample drums because the sludge was frozen. A propane heater adapting apparatus was procured to thaw out the drums for sampling. MDF personnel will attempt to sample after the holiday shut down.

The analytical results for holding tanks 4 and 5 at the MDF were received and were within acceptable levels. The water was shipped to Building 374.

Sitewide Treatability Studies

Sitewide Work Packages

This work package supports Sitewide Treatability Studies. The work package is undergoing revisions to meet the new target budget. Additionally, guidance provided by RFO will help to redirect the emphasis of the work package for the remainder of FY93. RFO has requested that the following projects be put on hold: Oxidation-Reduction, Wetlands Study, and Colloid Polishing Filter Method (formerly Techtran). Funding from projects that were on hold will be used to purchase and install an Inductively Coupled Plasma Mass Spectrometer (ICP-MS) in the Treatability Laboratory in Building 881.

The revised work package was reviewed by management on December 18, 1992, revised and corrected per management comments, and resubmitted to management on December 24, 1992.

ICP-Mass Spectrometer

The revised work package for the Sitewide Treatability Studies Program now contains funding to purchase and install an Inductively Coupled Plasma Mass Spectrometer (ICP-MS) in the Treatability Laboratory in Building 881. The addition of this equipment will significantly increase the analytical capability of the laboratory and will result in lower analytical expenses and faster turnaround time for treatability studies conducted in the future. The procurement package for this equipment has been prepared and will be sent to Procurement as soon as the revised work package has been approved.

TRU/Clear

TRU/Clear is the brand name for a proprietary precipitating agent based on the use of ferrite ions. Preliminary test work carried out at RFP has shown favorable results. Additional test work is planned to begin in January 1993 pending the outcome of the work package revision. All Procurement paperwork will be completed by the end of December for this project so that test work can start in January.

Other Activities

Program Management

IAG Amendment

The following changes were incorporated into the *Discussions With The Regulators Document* in support of the December 22, 1992 IAG negotiation meeting among DOE, EG&G, EPA, and CDH regarding the current conditions schedules.

HQ review protocols were modified to reflect parallel document reviews by HQ and RFO. These modifications resulted in substantial schedule duration reductions.

The procurement process was modified to represent the current position on the "bundling" of the SOWs to cover contractual obligations through the Record of Decision process. This eliminated approximately 80 days of duration previously required for each of the hammock level sections(e.g. FS, TS, Proposed Plan, etc.). In addition, new procurement turnaround durations were incorporated based on further streamlining efforts made by both EG&G Procurement and EG&G Remediation Programs Division.

The Proposed Action Plan (PAP) will be developed by EG&G personnel, eliminating the need for a subcontract. This has allowed approximately a 60 day acceleration in the PAP preparation schedule. Utilizing in-house resources to prepare the PAP has allowed for streamlining of the comment incorporation and finalization activities eliminating approximately 113 days from the schedule.

The resource leveling of analytical sampling capacities was modified to reflect the current lab capacity of 22 solids samples per day. The network had previously been leveled on the capacities experienced in OUs 1 and 2 which were 10 samples per day.

During the December 22, 1992 discussions between DOE/EG&G and EPA/CDH, the continued walk-through of the schedules turned up specific concerns by the regulators regarding the activity durations for procurement, review protocols, Feasibility Studies, and other activities. These concerns will be addressed by RFO and EG&G prior to future meetings with the regulators.

RFP ER Baseline

The draft EM-40 Baseline review by RFO, HQ, and EG&G required that revisions be made during the week of December 21, 1992. The revisions included the addition of the WBS Dictionary, changes regarding the approval level required for the IAG milestones, and inclusion of a breakout of labor hours by labor classification. The baseline funding requirements reflect the October 1, 1992 work packages for FY93 and teh Five-Year Plan request of $199.9M for FY94. The outyears' funding was unconstrained.

Response to OMB Questions

The OMB Comment Response document was compiled and reviewed by RFO/HQ and EG&G. Revisions were incorporated and copies were submitted to RFO/HQ and EG&G for transmittal to OMB on December 17, 1992. Additional refinement of the comment response regarding EG&G subcontractors (comments #1.a, b, c, and #7) will be supplied to HQ by December 24, 1992.

Site-Specific Plan

The release of the FY93 Site-Specific Plan (SSP) is still on hold pending the release of the National Five-Year Plan.

Roadmaps
Formal notification to EG&G to proceed with Integrated Roadmaps is pending resolution of internal issues at RFO.

Section II - Pondcrete Activities

Program Management
Solar Pond Remediation Program (SPRP) management prepared a program status brief for presentation to HQ. The SPRP program manager presented a pre-brief to RFO and a representative of HQ on December 18, 1992.

Issues:
The PA decontamination pad is not complete/operational. Consequently, a cost and schedule impact will be incurred. Project management assumed that the PA decontamination would be functioning no later than December 1, 1992.

Ice/water continues to accumulate in Pond 207 A and could have an impact on drilling activities within the pond.

Pondsludge (Halliburton effort)
Halliburton-NUS (HNUS) completed demobilization of equipment and field crew. This effort was completed four days ahead of schedule.

Received verbal approval from DOE on the HNUS Mod 11 contract package December 18, 1992.

ICF Kaiser identified approximately five projects nationwide from which to draw cost comparisons for the C Pond/Clarifier sludge processing.

Pad Operations/Storage
The Pad Ops/Storage project manager met with Facilities Project Management to discuss problems associated with project budgets. Two packages are overspent (12049, Tent 12 and 12212, Pad Sealing) and one is underspent (12046, Remove Excess Equipment). Overspending is a result of poor project estimates and adverse field conditions which violate initial assumptions. Adverse conditions include a sink hole between tents 3 and 4 and unanticipated surface repair in tent 6 under the removed permacon unit. Underspending on the equipment removal work package is the result of an excessively conservative estimate. Approximately $101K is available to be applied to the other packages leaving a net deficiency of $27.6K.

A revision of the scope of work for work package 12046 (Equipment Removal) to exclude removal of the equipment from tent 10 is underway. At the request of Waste Storage (WS), the scope was modified to leave the permacon unit in place so that a RCA would be available outside the PA to handle contaminated equipment. Discussions with the RFP senior management, prior to the tent 10 scope revision, indicated that it may be less expensive to install new storage and abandon the tent 10 permacon in place, than to remove this equipment. Until recently (12/18/92), SPRP project management was unaware of any immediate plans for this facility.

In response to management's comment and in an attempt to conserve FY93 budget, FPM was directed to postpone removal of the equipment pending further direction. SPRP project management was recently informed that plans for tent 10 permacon include repackaging valve vault containers. While justified and productive from a global perspective, this work exceeds the scope of the work package and indeed is beyond the immediate interests of ER. SPRP program/project management will determine what the functional and budget requirements for this work are and make a final recommendation as soon as practical.

Water Management

Two of the Temporary Modular Storage Tanks (TMSTs) have shown evidence of leakage after partial filling with potable water for testing and ballasting purposes. Water has been observed in a portion of the leak detection systems which collect liquid between the primary and secondary containment membranes of each tank. The current hypothesis holds that the source of the water is rainwater that became trapped between the primary containment membrane and a ultraviolet (UV) protection membrane at the time damage was done to the UV membrane during a storm earlier in the year. The hypothesis further holds that the primary containment membrane has been breached, thus providing a path for the rainwater to the leak detection system. Failure of one or more seams in the membrane is the most likely cause of the breach.

This overall theory has been developed from review of historical information documenting the events which occurred during the storm and subsequent repair, and from observation of the behavior of the liquid in the leak detection system. Static water level in the system is significantly below the water level in the tank. This fact indicates that the water reservoir which is leaking is not the main tank contents but rather the trapped rainwater which occupies a lower level.

The tank vendor has been contacted, and a schedule for representatives of the vendor to arrive on site to begin repair is being developed. It is expected that repairs can commence during the week of January 4, 1993. It is reasonable to assume that the entire bottom of the UV membrane must be removed so that the breach in the primary membrane can be located and repaired. Additionally, all water presently in the tanks must be removed prior to execution of those actions. Assuming that no leaks develop in the third tank, water will be transferred from the leaking tanks to the functional one. Retention of water at the site will eliminate re-execution of the filling operation which required physical system modification. It is expected that repair of each tank will require a minimum of one week, but that schedule is subject to unknown impact due to general weather conditions and freezing temperatures. According to the current schedule for expedited diversion of Interceptor Trench System effluent, repair of the TMSTs would have no negative impact on that effort unless it was not accomplished by February 10, 1993.

A frozen pipe incident report occurred when a pipe in the modular tanks froze. The pipe was filling the tanks with clean water prior to testing. This pipe would not be full of static water during normal operations and is therefore not heat traced. However, the pipe is being re-engineered to make it more serviceable in cold weather.

The building 910 number one engine, generator, vapor compression unit and Multi Effect Multi Stage (MEMS) unit were run with water and produced acceptable low conductivity distillate.

Section III - Surface Water Management

Shift in Control of RFP Surface Waters to Superfund
RFO, EG&G, and regulatory agency meetings continued over the ongoing proposal to shift regulatory control of RFP surface waters from the Clean Water Act program to Superfund. RFO has agreed in principle to go forward with the development of the IM/IRA for surface water management at RFP. The first technical meeting between RFP personnel and the agencies is scheduled for January 14, 1993. EG&G is currently assembling existing water management documentation which will form the basis for the IM/IRA.

Section IV - Transition/Decontamination and Dispositioning

Section V - Meetings

Section VI - Future

January 14, 1993 surface waters meeting with DOE/EPA/CDH

Community Relations --The next meeting of the TRG will be January 19, 1993, at the Westminster City Hall, at 1 p.m. to 4 p.m. Two EG&G employees will talk about Background and OU 16.

Official Visits
June 1 - December 31, 1992 Rocky Flats Transition Standards Pilot Program (TSPP)

Near-Term FY93 IAG Table VI Milestones Scheduled for Delivery from RFO to EPA/CDH:

OU	Milestones	Date Due to EPA/CDH
02	Submit Final Test Plan	Jan 12, 1993
Sitewide	Annual Treatability Study Report	Mar 8, 1993
02	Draft Phase II RFI/RI Report	Mar 12, 1993
01	Draft CMS/FS Report	Mar 31, 1993
01	Submit Final Phase III RFI/RI Report	April 2, 1993

NEPA-- A request for a determination of the level of NEPA documentation that should be integrated into the RI/FS for OU 1 will be forwarded to HQ by February 1, 1993. A project description will be forwarded to HQ at that time.