CHEMICAL REMEDIATION TEAM

ETEC Asbestos: EH&S has continued to support the B/020 demolition activities by removing the asbestos-containing roofing materials. The first phase of three to remove the floor tiles and mastic at B/4013 is complete. The second and third phase has been scheduled. A schedule is being created by ATC Environmental, to survey all the ETEC buildings.

Canoga Asbestos: An OSHA required survey of the Canoga HVAC rooms is currently being performed by Environmental Management Consultants. OSHA requires that the materials found to contain asbestos fibers be labeled and a sign noting the location of the asbestos-containing material be posted at the entrance of the HVAC rooms.

Lead Abatement Program: A lead abatement program is currently being established for Rocketdyne. Consistent with OSHA's construction standard, the Rocketdyne painters will get a base line blood lead level and receive lead awareness training as well as training to the current OSHA lead-based paint abatement techniques. EH&S will be monitoring the painter's exposure levels for lead. These requirements are also required and enforced for Rocketdyne's outside contractors.

SSFL RCRA Corrective Action: Two meetings were held with the DTSC this month (5/1 & 5/17). The first meeting was to discuss and finalize the methodology field action levels (FALs) for soil sampling. The FALs were based on residential scenarios (most conservative), to be ground water protective and to determine the lateral extent of potential contamination at the selected Solid Waste Management Units (SWMUs). During this meeting, agreements were reached on the above stated methodologies and will be forwarded in a letter to the Department of Toxic Substances Control (DTSC) at the end of the month. A metals sampling plan was also submitted to the DTSC which discussed an approach to establish FALs for metals.

A meeting to discuss soil gas sampling criteria, soil sampling locations at the SWMUs and other RFI related field issues was held on 5/17. The field visit to locate and agree upon soil samples at the SWMUs was tabled until the next meeting (5/30). Since soil gas sampling is an investigative requirement with the DTSC, the 30th meeting will be held to discuss criteria for soil gas and to which sites it may apply to. Once this is finalized, soil gas sampling points will be located in the field.
DTSC did agree to approve the metals sampling plan and mutually agreed to specified sampling locations while at the site on 5/21. Field sampling for metals was completed on 5/24. A total of 55 samples were collected. This data will then be included into the RFI Workplan Addendum (WPA) so that FALs for metals will be approved for the RFI field sampling program.

A draft fact sheet for the RFI has been forwarded to Environmental Communications for review. Once this has been internally reviewed and approved, DTSC will review and approve prior to commencing the field work. This fact sheet will then be distributed to everyone on the mailing list. This written notice about the field work is a requirement for RCRA Corrective Action.

Field maps for the SWMUs proposing soil sampling locations are currently being revised to identify potential soil gas sampling points where applicable. Again, points will be finalized after the 5/30 meeting with DTSC.

Working on revising RFI/CMS budgets for the '97 fiscal year. The estimates will include the increased dollars for the field sampling program based upon the decisions made at the meeting held on 5/3 with Bradley, Lafflam, Corporate, and remediation staff.

DTSC/Rocketdyne Monthly meeting: The monthly meeting to discuss SSFL issues was held on 5/10 at the SSFL. Topics of discussion included the site-wide risk assessment, future land use (residential scenario) '96-'97 projects and B/886 closure status. All topics except for future land use will continue at the next meeting.

SSFL Groundwater Monitoring: Review of the draft of the SSFL groundwater monitoring report for 1996 First Quarter was completed. The final report will be ready by May 28 for the submittal to the regulatory agency (DTSC) by May 31, 1996. Field activities for 1996 Second Quarter (May) groundwater monitoring was completed on May 21. About 50 wells were sampled. Eleven wells (including 6 Shallow Zone wells) scheduled for sampling, were not sampled because of inadequate volume of water in the wells.

Extraction And Treatment Of Groundwater From RD-63 Well, Area IV, SSFL: Since the resumption of extraction and treatment of VOC-contaminated groundwater from RD-63, west of RMHF, on April 26, 1996, more than 55,000 gallons of groundwater were treated, and the clean water was discharged to the SSFL storm drain near RMHF. The extraction was at 1.5 to 2 gpm. The treatment was by 2 carbon drums, placed onsite near the well. The effluent samples were analyzed periodically for VOCs and tritium. This test activity, designed to contain VOC contamination in the groundwater within or close to the SSFL boundary near RMHF, Area IV and approved by DTSC, will continue till further evaluation.

Meeting With DTSC: A meeting to discuss the issues of sampling for soil and bedrock vapors (chlorinated solvents) at FSDF and sitewide was held at SSFL on May 10. Support
was provided to the Rocketdyne team at the meeting. Both of these studies at Former Sodium Disposal Facility (FSDF) were opposed by Rocketdyne. The impracticality of the application of the bedrock vapor sampling in a fracture controlled, heterogeneous groundwater medium, as at SSFL, was stressed by Rocketdyne at the meeting.

Canoga Groundwater/Soil Investigation Project: Revisions to the Soil Cleanup Level and soil investigation workplan were completed. Both plans will be submitted to the Water Board during May for final approval. Field work is anticipated during June.

During June, J C Penney will send Rocketdyne a check in the amount of $52K as part of the cost sharing agreement for 1994 groundwater treatment system costs. 1995 groundwater costs are currently under review.

Sodium Tank Cleaning: The contractor mobilized their equipment to the SSFL on May 6, 1996. Tank cleaning activities began on on May 24, 1996.

Sodium Tank Draining: The transfer of Rocketdyne/DOE sodium from 5 storage tanks into a DOT approved ISO-Container is scheduled for June 17, 1996. The company receiving the bulk sodium, Callery Chemical (Division of MSA), was visited on May 16. The purpose of the visit was to verify that Callery’s use of the sodium is permissible, pursuant to excluded recyclable requirements. The conclusion is that Callery may accept our sodium because it will be used as a product, and will not be “reclaimed”

B006 Sodium Loop Demolition: The B006 loop was size reduced and removed during May. The project was completed ahead of schedule and approximately $20K under budget.

Hot Lab Demolition Support: Environmental Remediation personnel have provided support to the Hot Lab Demolition by determining the conditions necessary to manage water resulting from concrete cutting operations. It has been determined that the non-hazardous water may be managed using on-site capabilities following pH adjustment. The approach saves both time and money for the project.

Procedure Revisions: Two procedures currently located in the Environmental Control Manual have been evaluated. Staff have made the determination that neither Rocketdyne or ETEC personnel use the "Mixed Waste" or "National Environmental Policy Act (NEPA) Determinations for the U.S. Department of Energy (DOE)" procedures. (ETEC personnel maintain their own procedures.) A proposal to merge the Mixed Waste procedure with the Hazardous Waste Management procedure and the outright deletion of the NEPA procedure have been generated. Wide support to delete the procedures exists and the formal paperwork will be forwarded in the near future.
RADIATION SAFETY TEAM

RMHF: In an effort to reduce the source inventory, a number of radioactive check sources were inventoried, consolidated, and packaged as radioactive waste.

The container with 102 mCi of Co-60 irradiated foils arrived from Hake, Inc in a DOT 7A container. The material will be placed in storage until a repackaging procedure is prepared.

RIHL: Approximately sixty-nine concrete blocks from the decon rooms were removed and surveyed. All sixty-nine blocks have fixed contamination from 50cpm to 6000cpm. Five blocks have been decontaminated and released. Approximately six blocks remain to complete the removal of the decon rooms, should be completed by today.

Four waste containers have been filled with materials removed from various parts of the facility; all have been surveyed and released.

The removal of the asbestos/ radioactive outer roofing material has started and should be completed in approximately nineteen days. This material will be stored at the RMHF and repackaged at some later date.

The building perimeter was expanded to the Building 55 fenceline. The expanded area is needed for storage of decon blocks.

Two trailers are being installed as health physics and operations offices. The phone numbers will remain the same.

The interior walls of the facility are seventy-five percent removed and surveyed clean. To date, no personnel contamination has occurred. By using engineering controls and respiratory protection factors, no internal contamination has occurred. All air samples were <0.1 DAC.

Internal Dosimetry: Additional programming was completed for the internal dosimetry calculation system. The programming has streamlined the use of the system, reducing the need for operator “hand calculations” and other interventions. Further work regarding the correctness of the basic calculation program being used (Radiological Biological Dose from Oak Ridge National Laboratory) is underway. Evaluation of alternative commercial programs will be started in the near future.

Laser Safety Program: The Laser Safety Officer reviewed a planned laser operation due to start in building 203 in the near future. It will be an environmental (outside) application. The LSO provided technical guidance to be incorporated into the facility operating procedures.
The final drafts for procedures C-401.001, "Rad. Safety for Radiography" and C-317, "Laser Safety," have been completed. The procedures will be circulated for review, and should be submitted for signatures by early next week.

**Calibration Facility:** Normal operations were conducted in the new Calibration Facility in Building 100. Upon completion of a trial period, procedures are due to be written to formalize the operation.

**Radiation Safety Team:** Radiation Safety Team mailed one hundred and forty Radiation Safety Customer Surveys. Two product flow charts are given to the Team Leader for review. The external product flow chart in the process of being revised.

**RADIOLOGICAL REMEDIATION TEAM**

**Annual Site Environmental Report (ASER):** Work on the 1995 ASER was continued. A draft report was completed on 5/16 for internal review by EM and ER management. Target date for delivery of the draft report to the DOE site office is May 31.

**T012 and T363 Survey Reports:** Work was continued on the final survey reports for both facilities, with manpower help from Environmental Management (EM). A draft final report for T012 was delivered to Environmental Remediation (ER) and EM management for review on 5/24. Target completion date for both reports is 5/31.

**Sitewide Release Criteria:** Suggested revisions to our recent request for approval of sitewide release guidelines for the SSFL were transmitted to Phil Newkirk in response to comments received earlier from DOE. DOE responses to these suggestions were received from Mike Lopez (DOE-OAK) on 5/23. Preliminary review of these comments indicates that DOE and Rocketdyne are still in disagreement in two remaining areas; 1) the role of ALARA in determining an acceptable release radiation limit (in mrem/year), and 2) the use of our own sampling and statistical methods for the interpretation and validation of release survey data. Further discussions on these two topics are expected during a site visit by DOE-HQ personnel on 6/4 and 6/5.

**Helium Analysis Laboratory D&D:** A second site visit to Battelle - Pacific Northwest National Laboratories (PNNL) was conducted from May 1 through May 3 to assist in the re-setup of the helium analysis equipment. Significant progress was made in the reconnection of the three system tables and in the connection of utilities (electrical, gas and water). Continuing work is still required to repair and modify the vacuum system lines. Assistance to PNNL is being funded under an existing time and materials contract with Battelle.
Building 064 Sideyard Support: The bounding soil sampling survey for the contaminated area around T064 has been essentially completed. Samples taken at 59 locations have been used to provide an indication of the significantly contaminated regions. The drainage path has been eliminated from further consideration on the basis of several low results and no high results. The boundary at the asphalt between the building and the yard will be investigated and set during the excavation process. The boundary includes roughly 20,000 square feet of area that will require removal and disposal. For a 2-foot removal, this is 40,000 cubic feet, or 1,500 cubic yards. The leach field is in addition to this.

The septic tank sludge was sampled and both inlet and outlet were contaminated, with the outlet being 23 times higher in activity than the inlet. The restroom sink trap in T064 was removed and scanned, and found to be contaminated with Cs-137 and enriched U. The sink exit and scale from the main pipe showed some gross alpha and beta activity. These will be remediated during the excavation of the adjacent side yard. Investigation of one soil hot spot showed that the activity was not coming from the soil, but from a small rock which read 150 µR/hr. A gamma scan of the rock indicated 0.57 µCi of Cs-137.

T011 Final Survey: Most of the furniture was released and has been removed from the building. A preliminary survey was performed in the affected areas. Approximately 80% of the grid locator diagrams have been produced. Gridding of the affected areas is in progress.

Sampling and Analysis of Soil and Rock at T886: The report on sampling and analysis of soil and rock at T886 (the Former Sodium Disposal Facility), and the final report on gamma exposure rate measurements for residual radioactivity, was sent to the State of California Department of Health Services, Radiologic Health Branch, to request release of the area from radiological restrictions.

T019 D&D: Initial discussions were held with EM management to plan for a preliminary radiological survey of the T019 pit area prior to generating a D&D and final release survey plan for the facility.

T040 Final Survey: Final survey of the concrete pad in Rooms 100, 101, 103, and adjacent hallway still awaits the removal of the asbestos-containing floor tiles by an outside contractor.

Gamma Spectroscopy Support: Forty-five samples were submitted and analyzed for the month. Average turnaround times continue to be 0-4 days with 7 sample results submitted within 24 hours to support building T020 operations and RMHF waste characterizations. No significant findings in the samples were observed. The DOE Environmental Measurements Laboratory samples (used for Quality Control) have been counted and results will be complied and sent by June 1.
Building 059 D&D: Project activity has subsided to a point acceptable for placing the routine surveillance back under the Orphan Facility procedure schedule. The facility survey diagrams were upgraded to computer generated versions.

Waste Box Characterizations: Packages of contaminated steel remaining from the disassembly and decontamination of lead shielding at Hake Associates were characterized for radioactivity so that they can be returned to RMHF for subsequent disposal as radioactive waste. A hazardous waste stream was characterized, in general, for application to a waste disposal site.

Environmental Monitoring: A set of aluminum-oxide thermoluminescent dosimeters (TLDs) was sent to the DOE/Environmental Measurements Laboratory for exposure in the 11th International Intercomparison of Environmental Dosimeters. Results are expected in October.

Interpretation of Air Sample Results: Final results from the radiological analyses of ambient and exhaust air samples, performed by DataChem Labs, were received and have been used for the ASER and NESHAPs (EPA's National Emission Standards for Hazardous Air Pollutants, for radionuclides) reports. All regulatory limits were met. A remaining minor problem involves the detection of Pu-241 in amounts that are considerably higher than would be expected. The DataChem lab manager reviewed the analytical reports at our request and found that there was an uncorrected interference that caused these results to be high. The data will be re-run to produce more accurate results.

NRC License: In a teleconference with the NRC, State DHS, DOE/OAK and Rocketdyne, resolution was reached on remaining facilities on Rocketdyne land. The NRC concurred that all remaining facilities on Rocketdyne land (including OCY, Decon Trailer, AE6L-85, B/055, B/011, B/172, B/373, B/055, B/886, B/009 and B/100) have either been released for unrestricted use or are currently on the State Radioactive Materials license. The NRC now see no reason to delay any further the SNM-21 license termination.

MISCELLANEOUS

Shareholder Derivative Lawsuit: EH&S plans, procedures and correspondence for the last six years were collected to support the shareholder derivative lawsuit. Corporate, defendants counsel and plaintiff’s counsel met with Rocketdyne personnel for several days the week of May 20th to review the documents and identify those which plaintiff’s lawyers require. Plaintiff’s counsel will return the week of May 27th to review additional ETEC plans and procedures. In addition, pre May 1995 correspondence with certain agencies will be provided to plaintiff’s counsel by the Seal Beach Litigation Center who have cataloged EH&S records as part of the Aetna Insurance lawsuit.

Brandeis-Bardin Lawsuit: A response to the second amended complaint from Brandeis was prepared and submitted to corporate legal. The items at issue are past radiological incidents
at Rocketdyne and EPA comments on environmental monitoring procedures. These are old issues and have been addressed in past correspondence hence a reply to the complaint was relatively straightforward.

Phil Rutherford

Phil Rutherford, Manager
Environmental Remediation

cc: Environmental Remediation Staff E-Mail
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    Lori Circle E-Mail
    Marty Robertson E-Mail
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