

National Environmental Research Center

Corvallis, Oregon

QUARTERLY STATUS REPORT



JULY-SEPTEMBER 1974

OFFICE OF RESEARCH & DEVELOPMENT

This Quarterly Report summarizes the present status of progress toward achieving the milestones in each of the approved Research Objective Accomplishment Plans (ROAPs) assigned to NERC-Corvallis and its associated laboratories for the 1st Quarter FY 74. The report is divided into 4 parts. Part I summarizes the status of delays, the reasons for delays and the technical assistance provided to EPA, the Regions and other federal, state, and private organizations. Part II is the Laboratory Director's assessment of the problems, impact of delays, and accomplishments. Part III is a detailed report by ROAP on the status of tasks toward meeting task milestones and Part IV is a listing of the technical reports and papers published during the quarter.

Out of a total of 90 ROAPS and 720 active tasks approximately 80% are proceeding on schedule as of the end of the first quarter. The major delays encountered during the first quarter are in large measure attributable to the freeze in extramural funding which has caused disruption of ongoing grants and contracts and has delayed startup of new extramural projects.

Additional delays in industrial technology research have occurred as a result of many manhours being provided Headquarters in the development of effluent guidelines. This has resulted in delays in intramural as well as some extramural activities. In most cases, delays in funding will not have serious impact on the extramural research effort. However, if funding is not forthcoming in the early part of the second quarter, the delays in achieving research outputs will obviously begin to slip.

Your comments and suggestions on the contents of this report will be appreciated. Please direct all inquiries to the Director, Program Coordination Staff, NERC-Corvallis or call on FTS 503-752-4362.

A. F. Bartsch

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Director, NERC-Corvallis

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PART I

SUMMARY OF ROAP/TASK PROGRESS

TOTAL ROAPS ASSIGNED - FY 74

NERC - CORVALLIS

<u>LABORATORY</u>	<u>NO. OF ROAPS</u>
AERL	6
GBERL	3
GIL	9
NERL	5
NMWQL	7
NWQL	10
PNERL	20
RSKERL	18
SERL	<u>12</u>
	90

NATIONAL ENVIRONMENTAL RESEARCH CENTER - CORVALLIS
SUMMARY OF TECHNICAL ASSISTANCE
1st Quarter - FY 1974
(Manhours)

Laboratory	Current Quarter				% of Total Qtrly Res Manhours	Year-To-Date			
	Regions	EPA	Non-EPA	Total		Regions	EPA	Non-EPA	Total
PNERL	756	2492	292	3540	7.64	756	249	292	3540
NMWQL	100	200	80	380	1.58	100	200	80	380
NWQL	80	3273	205	3558	9.24	80	3273	205	3558
AERL	-	-	-	-	-	-	-	-	-
GIL	21	904	104	1029	24.08	21	904	104	1029
RSKERL	30	1221	136	1387	6.66	30	1221	136	1387
GBERL	391	547	648	1586	12.2	391	547	648	1586
SERL	188	693	214	1095	3.76	188	693	214	1095
NERL	40	70	107	217	2.31	40	70	107	217
TOTAL	1606	9400	1786	12,792		1606	9400	1786	12,792

NATIONAL ENVIRONMENTAL RESEARCH CENTER
CORVALLIS, OREGON
SUMMARY OF TASK PROGRESS BY ORGANIZATION

OCTOBER 1973

LABORATORY	TOTAL TASKS	NO TASKS COMPLETE	NO ACTIVE TASKS	* * * CURRENT QUARTER * * *			* * * YEAR-TO-DATE * * * *		
				NO TASKS ON SCHED	NO TASKS DELAYED	NO TASKS COMPLETED	NO TASKS ON SCHED	NO TASKS DELAYED	NO TASKS COMPLETED
NERC	0	0	0	0	0	0	0	0	0
PNERL	433	96	202	156	52	96	156	52	96
NWHL	112	6	61	46	15	6	46	15	6
HWOL	116	0	78	77	1	0	77	1	0
AFRL	17	6	8	5	3	6	5	3	6
GIL	81	3	79	73	6	3	73	6	3
RSKEPL	206	37	95	82	13	37	82	13	37
GBEPL	50	8	42	40	2	8	40	2	8
SERL	265	34	109	73	36	34	73	36	34
NERL	96	11	51	37	14	11	37	14	11
TOTALS	1491	201	725	589	142	201	589	142	201

NATIONAL ENVIRONMENTAL RESEARCH CENTER
CORVALLIS, OREGON
SUMMARY OF REASONS FOR DELAY BY ORGANIZATION

OCTOBER 1973

LABORATORY	TOTAL TASKS DELAYED	REASON FOR DELAYS											
		FI	FF	FC	FL	AF	AF	AO	AG	AO	DA	DO	O
NERC	3	0	0	0	0	0	0	0	0	0	0	0	0
PNREL	52	1	12	0	4	0	1	2	14	1	7	1	9
NWCL	15	0	7	0	0	0	0	4	2	1	0	1	0
NWOL	1	0	0	0	0	0	0	0	0	0	0	0	1
AERL	3	0	0	0	0	0	0	0	1	0	0	2	0
GIL	6	1	2	0	0	1	0	0	0	1	0	0	1
RSERL	13	1	1	0	0	0	0	2	2	2	0	3	2
GBERL	2	0	0	0	0	0	0	0	0	1	1	0	0
SERL	36	5	4	0	0	1	1	2	11	5	3	3	1
NERL	14	0	2	1	0	0	0	5	3	0	0	0	3
TOTALS	142	8	28	1	4	2	2	15	33	11	11	10	17

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical
Assistance
DO - Diversion of Staff for Other Than
Technical Assistance (specify)
O - Other (specify)

NATIONAL ENVIRONMENTAL RESEARCH CENTER
CORVALLIS, OREGON
SUMMARY OF MONTHS DELAYED BY ORGANIZATION

OCTOBER 1973

LABORATORY	TOTAL TASKS	NO TASKS DELAYED	- - - - - 1-3	- - - - - 4-6	- - - - - 7-9	- - - - - 10-12	- - - - - OVER 12
NERC	0	0	0	0	0	0	0
PNERL	202	52	9	27	9	3	4
NMNL	61	15	6	7	2	0	0
NWGL	78	1	0	0	1	0	0
AERL	8	3	0	3	0	0	0
GIL	79	6	2	4	0	0	0
PSKFL	95	13	4	7	1	0	1
GBERL	42	2	1	1	0	0	0
SERL	109	36	9	19	8	0	0
NERL	51	14	7	3	4	0	0
TOTALS	725	142	38	71	25	3	5

PART II

LABORATORY DIRECTORS REPORT

GROSSE ILE LABORATORY

Quarterly Status Report, 1st Quarter FY 74

I. Impact of Delays:

1BA028

There have been some delays in starting up new grant programs because of late funding and, consequently, there will be some slippage in the reporting schedules from the grantees.

II. Issues:

The problems consequent upon the freezing of extramural grant funds in four ROAPs in the Large Lakes Program are relatively obvious. Some preview of the possible timing of the release of these funds would help particularly in multi-year programs which are now being interrupted.

III. Accomplishments:

The Chemistry-Biology Program of the International Field Year on the Great Lakes is on schedule and a progress report will shortly be published describing the individual investigations. A brief State-of-the-Lake Report is also being prepared. Studies made in collaboration with Region V, Great Lakes States and various Canadian Agencies have been initiated for the Upper Lakes Reference Study mandated in the U.S.-Canada Agreement.

IV. Administrative/Management Problems:

There are no Administrative/Management problems to report at this time.

NATIONAL MARINE WATER QUALITY LABORATORY

Quarterly Status Report, 1st Quarter FY 74

I. Impact of Delays:

Six ROAP's at NMWQL have been approved for FY 74. A total of 54 tasks are scheduled to be active. Of these, 14 are delayed and none have yet been completed.

1BA022

16AAR - This ROAP, marginally funded in the previous FY has been terminated and the effort has been consolidated at GBERL. We continue to monitor one contract which is scheduled for critical review and possible termination in October.

16AAS - Delay in award prolongs the period during which EPA will not know the effects of chlorination procedures being recommended.

16AAT - Knowledge of potential effects of intraspecies variation on criteria has been further delayed. Fewer short-term tests will be run than had been hoped. Available effort has been productively used in field and community studies.

16AAV - The impact of these delays will probably not be too severe unless extramural funds do not materialize. Some of the delay shown reflects a correction of the distribution of effort between ballast and waste oils.

21AKF - A firm basis for temperature and salinity standards will not be available as scheduled although improved estimates based on the literature are being developed. The total impact of extramural funding delays is likely to be even more severe than indicated as more continuations come due. This ROAP is unusually heavily dependent on extramural support.

21BBG - Delays estimated at this point may be made up during the year. This is, again, a heavily extramural ROAP

II. Issues:

It will not be news to anyone that the current freeze on extramural funds will be most damaging to current projects due for continuation. It is also adding to the difficulty of obtaining qualified investigators who are often unwilling to accept the legendary uncertainty of EPA funding.

III. Accomplishments:

A document setting forth defensible criteria for dissolved oxygen in marine waters is in the final stages of preparation. It represents the culmination of several years of effort.

Internal renovation of the wet lab has been nearly completed and the teams are installing their test systems now. The contractor is progressing well on fabricating the new seawater intake structure but reliability is still limited by the old pumps.

The laboratory has at least obtained computer capability. This much needed tool will permit significant improvements in experimental design.

IV. Administrative/Management Problems:

The move of staff to the Narragansett facility is proceeding smoothly. Although this has necessarily caused some delays, it is difficult to gauge the extent. The current division of staff between the two facilities has seriously interfered with communication and cooperative effort. I recommend moving the NERC-Cincinnati group to West Kingston and consolidation of the seawater users by the bay--although the quarters will be extremely cramped. This will increase our effectiveness while still providing for the needs of the bacteriologists and will considerably reduce travel and lost time.

NMWQL has been requested by Headquarters to provide oxygen and temperature criteria on a crash basis to support the forthcoming revised water quality criteria document. It appears that this will require about two man-years of effort and will necessarily cause some program delays. We will be submitting program revisions to reflect this commitment.

PACIFIC NORTHWEST ENVIRONMENTAL RESEARCH LABORATORY

Quarterly Status Report, 1st Quarter, FY 74

I. Impact of Delays:

1BA025

Impact of delays will be mainly in delaying completion of the milestones. In the case of Task 36 of ROAP 21 AIS, it will delay the starting date of Task 69.

1BA031

Minor grant processing delays which cause concomitant delays in the completion of milestones. The freeze of ROAP 21 AJE will result in delay of milestones being attained in that ROAP. Lack of sufficient manpower in ROAP 21 AJF will impede attainment of goals.

1BA029

Lack of funding and/or the knowledge to what level the program will be funded have impacted ROAP's 25 AJX and 25 AKM. Initial contacts with State Agencies and the National Guard in states west of the Mississippi cannot be made until the funding issue has been resolved. The initial state contacts are the first of a sequence of events which must occur before the program can begin in a given state. As a consequence, the program is now three months behind in the western states. Further delays will jeopardize the timely completion of 25 AJX.

1BA032 and 1BB392

The "frozen funds" delayed acquisition of COFA's necessary for submission of grant and RFP packages, thus resulting in a delay in ROAP milestones.

1BB037

Any delays in the program will prevent the development of technology necessary to meet the legislated deadline of zero discharge of pollutants by 1985.

II. Issues:

1BA025

None

1BA031

Sufficient resources are not available to carry out full-scale lake restoration demonstrations. Research is brought through the laboratory and pilot-scale level, but then stymied by lack of funds for full-scale demonstration.

1BA029

The manner in which the program outputs will be used by the Office of Air and Water Programs remains unresolved.

1BA032 and 1BB392

None

1BB037

During the first quarter of FY 74 more than one-half of the staff time and resources were spent in technical assistance to the Effluent Guidelines Division preventing supervision of ongoing grant projects. This technical assistance is expected to taper off in the future,

CLS

The backlog of analytical work for the Eutrophication Survey Branch (ESB) is building and the buildup is due to personnel losses. Experience in automated analysis is a commodity that is non-available in people at the technician and entrance professional categories. Our losses (Wiley, Eckerle, Bowers, Pengally, Allen, Reed, Webster, Maier and Nedberge) are causing us problems. There is little that can be done with losses of temporaries and the loss of Wiley (a full-time permanent) must be expected. We just don't have the permanent resources to get the job done. If decisions are made to complete the ESB study, we will have to go to the Agency and the Civil Service Commission to acquire term appointments for the period of the study.

A similar situation has surfaced in the computer section in a buildup of requests for assistance and our lack of ability to respond. Here, the problem is complicated because of meeting variable NERC needs which are usually a high priority item.

III. Accomplishments:

1BA025

Instruments implanted in N. Y. Bight in June were retrieved. The data, tidal heights 20-80 miles offshore, are the first of their kind and will be used as part of the verification for our large scale numerical model of the Bight. NOAA personnel are presently analyzing the reduced records for harmonic constituents.

1BA031

ROAP 21 AIY. Completed third year of field studies at Diamond Lake, Oregon, to evaluate the effect of diversion of lodge and campground wastes on the trophic condition of the lake. Completed preliminary screening of potential nutrient inactivants for efficiency of nutrient removal. Completed bioassays for chronic effects of zirconium on Daphnia. Completed all developmental work on laboratory sediment-water systems for inactivation longevity experiments. Prepared for partitioning Cline's Pond No. 1, a requirement for pilot field inactivation tests. Conducted biological monitoring of pond.

ROAP 21AJA. A mathematical model relating algal growth to incident solar radiation and concentration of available nitrogen and phosphorus was written and tested. The results were presented at the workshop "Modeling the Eutrophication Process" held September 5-7, 1973, at Utah State University. The workshop was co-sponsored by the National Eutrophication Research Program and the Department of Environmental Engineering, Utah State University.

1BA029

The year's tributary sampling program ended in Vermont, Rhode Island, New Hampshire, Massachusetts, Maine, Wisconsin, and Connecticut during the past quarter, and data interpretation and report writing was started. Preliminary reports were prepared for Green Lake (Wisconsin), Barton Lake (Michigan), Saratoga Lake (New York), Jackson Lake (Georgia), Clyde Pond (Vermont), Waterbury Reservoir (Vermont), and Harriman Reservoir (Vermont). The remaining Vermont reports are nearing completion.

Drainage and land use areas were delineated and measured for 62 CY 1972 lakes selected for land use - nutrient runoff study in Minnesota, New York, Vermont, and Wisconsin. Preliminary graphs relating nutrient concentrations in surface water to land use were prepared for the drainage areas of the 62 lakes.

1BA032 and 1BB392

In 1BA032 the transfer of EIS review responsibility to the Regional Offices required significant effort for this program element (as well as 1BB392). A report entitled "Reviewing Environmental Impact Statements - Power Plant Cooling Systems, Engineering Aspects" was prepared. This report provides technical information for implementing EIS reviews. Also, program personnel participated in a Thermal Pollution Workshop in Atlanta (August 6-9) where the report was a primary text.

In 1BB392 significant progress was made on two fronts relating to cooling tower blowdown:

1. A mathematical model was developed to predict residual chlorine concentrations in cooling tower blowdown under various design configurations and operating modes.
2. An accurate method was developed to predict residual chlorine concentrations in brackish water characteristic of cooling tower blowdown was developed.

1BB037

Eleven reports were published during the quarter on completed grant projects.

CLS

In this quarter 54,000 analyses were reported.

Two papers, one on preservation of wastewater and one on adsorption of orthophosphate were prepared and distributed to reviewers.

Analytical Quality Control studies were continuing among Las Vegas, CLS, Ely, and NERP laboratories.

IV. Administrative/Management Problems

1BA031

Because of the temporary aspects of the Shagawa Lake Project and the site location, there has been, and there will likely continue, a high turnover rate of employees. If each successive personnel replacement must be hired at one grade level less than the preceeding grade position level, it will become impossible to obtain technically qualified personnel. The three year term appointments for the project were originally established at a minimum level of GS 4/5.

*Reduced by the
involvement of recent
certified guidelines requiring
only "an average" selection of
one grade for all vacancies that
are re-filled.*

1BA029

The major problem is the uncertainty caused by lack of funding and/or a firm knowledge of the exact level of funding. Decisions relevant to program operation cannot be made until the funding level is established.

NATIONAL ECOLOGICAL RESEARCH LABORATORY

Quarterly Status Report, 1st Quarter, FY 74

I. Impact of Delays:

1AA006

In general the specific program delays are covered in the quarterly ROAP status reports which are attached, but there are certain basic delays which (should be especially mentioned) must be addressed if NERL is to realize its full potential. First of all, the largest problem we face in the intermediate future concerns the availability of a facility to conduct controlled environmental research. ROAP 21 ALR is the ROAP most affected by this delay. As the time for vacating the ARS Ornamental facility draws nearer, it becomes less and less worthwhile to build or otherwise begin to develop programs in that facility. However, without a clear idea of where the greenhouse/lab work will reside after December 1975, it is almost impossible to make programmatic plans. ROAP 21 ALS has only one delay, the awarding of a grant under Task 07. The immediate impact of this delay is that the grantee may not be able to continue his research. Under ROAP 21 ALU the largest problem concerns the delay in funding of those extramural tasks which have been held on the carry over funding list since the beginning of the fiscal year. This has resulted in difficulty in timing or phasing of other parts of the program (interagency agreements with other agencies, in-house research) and may result in a delay of several months in bringing the program back into a coordinated perspective. ROAP 21 BBK is experiencing delays which are of potentially minimal impact. Task 04 the greenhouse salt air studies have been delayed because we are unable to fund a contract or grant with the Boyce Thompson Institute to use their aerosol exposure chambers. This will result in a delay in the greenhouse salt effects study by several months. The second delay concerns the awarding of a grant or contract to look at the usefulness of ecosystem measurement for predicting environmental stress. This delay will have minimal impact since it simply means that the time by which we can complete ROAP 21 BBK will be delayed by two to three months. Additional impacts are anticipated, but cannot be clearly specified at this time. In general, delays in acquiring facilities and new resources for achieving a broad mission will delay somewhat the realization of a comprehensive in-house capability for ecological research.

II. Issues:

There still remains two major issues which require action of higher authority within OR&D. The first issue concerns NERL's mission and scope, the second concerns the availability of a permanent facility.

Although some progress has been achieved for acceptance of a broader mission with the formalization and acceptance of our organizational plan for the entire NERC, a final resolution of this issue can only be realized with continued awareness and support at the NERC level and also at the Headquarters level. With respect to space, some of our problems have been resolved through provision of laboratory space in the main NERC building and the acquisition of modular office space.

III. Accomplishments:

The major accomplishments of the preceeding quarter are eight publications in print and achievement of a fully functional program once again. Oregon State University farm site has been made fully operative and the ARS Ornamental Facility space is being utilized effectively pending the installation of portable exposure chambers.

IV. Administrative/Management Problems:

While there have been few management difficulties in the past quarter, there are invariably some routine problems which involve NERL, PNERL and NERC. However, these difficulties are being resolved and we anticipate no serious problems in the future.

During the past quarter we have experienced some management difficulty with the cooperative research program administered by the Agricultural Research Service administered at North Carolina State University. However, at this time our management difficulties appear to be minimal and with continued assistance from Headquarters personnel the problem should resolve itself in the near future.

SOUTHEAST ENVIRONMENTAL RESEARCH LABORATORY

Quarterly Status Report, 1st Quarter, FY 74

I. Impact of Delays:

1BA023

Delay in 21 AIL 07 causes proportionate delay in testing and verifying pollutant fate models. Delay in formalizing IAG for 21 AIL 14 is inconsequential since work has started and is continuing. Delays in 21 AIM cause proportionate delays in development of mercury and malathion models, and supplying information on soil pesticide degradation to OPP. Impact of delay in 22 AEC is unknown.

1BA027

Delay in 07 ABL is tolerable to associated research at Ada. Delays in 16 ADN 37 caused by manpower diversion to write report will likely enhance EPA's ability to identify organic pollutants in water.

1BA036

Delays in 21 AZT will delay development of control technology for dyeing operations in textile industry. Delays in 21 AZR will delay development of control technology for some segments of agricultural chemicals industry; achievement of EROS will be adversely affected if delays in SR0's (highlighted below) are not resolved.

1BB039

Delays in 21 AYP affect mainly subsequent tasks in this ROAP. Major delay is highlighted as an issue below. Delays in some tasks, e.g. 15, will not adversely affect probability of meeting milestone. In 21 AYP 23, delay by ARS cooperator in delivering acceptable data and report has delayed tasks 11 and 12 and has caused SERL manpower to be diverted from scheduled tasks. Delay in 21 AYU 02 funding will delay completion.

II. Issues:

A decision is needed on strategy of research on agricultural runoff (1BB039). Revision of plans for 21 AYP during this quarter in cooperation with PAM has shown a cost of \$990K and at least two years time could be saved in meeting EROS by FY 80 if effort on nutrient runoff starts in FY 74 "piggy backed" with pesticide runoff studies. Issue will

be presented to AARD in NPS Program Area Review postponed once. Affirmative decision will require additional resources in FY 74; PAM is prepared to help solve problem. NERC Director should act to expedite decision if next growing season is to be used effectively.

SRO's submitted (and apparently approved) for 1BB039 21 AYP 29, 1BB036 21 AZR 14, 1BB036 21 AZR 14, and 1BB036 21 AZR 16 remain in limbo. Response from recipients has not been sufficient to judge task efforts, which must be assumed to be out of control. Procedure for managing SRO's is unsatisfactory for researcher needing SRO results for successful ROAP. Concept should be abandoned or better procedure developed to insure timely satisfactory response.

A familiar, but still unresolved issue is the additional resources for operating AEcoS in FY 74. Six months' operation starting 1 Jan 74 will require \$180K more than FY 74 program plan designates for 1BA023. Indecision in ORD Hq is further adversely impacting SERL morale. Recent loss of two key professionals, directly attributable to this situation, will likely be followed soon by a third unless a decision is forthcoming. A decision in Jan 74 to operate the AEcoS will be so late that a virtually new operating team will have to be trained and no experiments can be run until FY 75.

III. Accomplishments

1BA023 - 21 AIL 06 - A sub-model describing the relationship between biological growth rates and temperature was developed. When values were estimated for its parameters, the model was found to describe empirical data well in all cases tested. The model was incorporated into the aquatic ecosystem model developed to describe phytoplankton populations and a simplified water chemistry.

The effect of including chemical equilibrium expressions in the preliminary ecosystem model was studied. A computer simulation showed reduced growth rates during algal blooms when high inorganic carbon utilization rates cause the pH to increase. Further computer simulations were run incorporating six algal species that differed in nutrient uptake mechanisms and optimal growth temperatures. Four separate and irregular bloom patterns that frequently occur in natural waters.

1BA027 - 07 ABL 02 and 03 - Completion of all qualitative analyses of sixteen samples from two unbleached Kraft papermill wastewaters has yielded 65 specific identifications of compounds in both mill effluents. Many of the same compounds were present in both effluents. Thirty-eight of the 65 identifications have been confirmed. Other compounds have been identified as to chemical class.

Each specific compound or class identification was assigned a number and correlated with its respective GC peak in each of the 16 effluent extracts. This provides a chemical profile that shows the effect of treatment in the composition of the effluent.

1BA027 - 16 ADB 25 - Under a grant to Cornell University, a computer program is being developed for pollutant identification when the desired reference spectrum is not available. Twenty-five thousand (25,000) mass spectra were reviewed for inclusion in the spectra library. Coding for the Cornell PDP 11/45 computer was completed and trial runs were made. Sixty seconds are required to perform a complete search of the twenty-four thousand spectra file.

IV. Administrative/Management Problems:

The cavalier treatment of grantees scheduled for continued funding creates ill will toward EPA and diminishes research productivity. Delays in funding notifications for 3-4 months are not unusual and cause continuing grant projects to be disrupted, losing staff and data. Short-notice terminations because of lack of funds in FY 74 and failure to meet commitments to grantees, made in good faith by Project Officers, for funding essential grants have eliminated crucial final year's work and final reports, resulting in nearly complete loss of return on public's investment. Best efforts of laboratory Project Officers to avert situation are unsuccessful under present system for managing ORD programs.

GULF BREEZE ENVIRONMENTAL RESEARCH LABORATORY

Quarterly Status Report, 1st Quarter

I. Impact of Delays:

1B1077

Nothing to report.

II. Issues:

The need for better communication between NERC Laboratories and Headquarter Offices dealing with toxic substances was emphasized this quarter. Recommendations for appropriate action have been made.

III. Accomplishments:

A highlight this quarter was the visit to our laboratory by Mr. Russell E. Train and members of his staff. Mr. Train was genuinely interested in our research activities and those of NERC-Corvallis as a whole. Mr. Train stated to newsmen that one of his primary concerns was that the criteria promulgated by EPA be sound scientifically and that the public be made aware and fully informed of the need for these criteria.

IV. Administrative/Management Problems

Two key employees, our purchasing and personnel clerks, terminated in order to take positions with the Navy. We are having difficulties replacing the personnel clerk under the constraints of hiring at a grade level lower than the vacated position. The same difficulties are involved in our search for a systems ecologist.

Our time and resources expended on technical services this quarter exceeded our estimation but appears to be returning to normal.

NATIONAL WATER QUALITY LABORATORY

Quarterly Status Report, 1st Quarter FY 74

I. Impact of Delays:

1BA021

We are not behind on any milestones at the present time except those caused by delays in contracts, etc., which are beyond our control. We are, however, running behind on some Tasks even though we haven't gotten behind on milestones, as yet and we are anticipating a reprogramming action in October to correct these. Most of them result from increased time requirements to complete present Tasks over and above what we anticipated and in some cases technical delays have caused the slippage due to disease of test animals, etc.

II. Issues:

I wanted to call to your attention the bar charts which we have prepared on our ROAPs for each Task and which I think are extremely useful tools in quickly assessing when milestones of various types are to be expected. I can scan these and in one or two minutes, tell how many interim and final reports are due in any given month.

Our input on the Reserve Mining case has dwindled to the lowest in several years, now, and apart from Phil Cook who is spending full time at the trial, we are relatively little engaged in the Reserve Mining activity.

III. Accomplishments:

The tempo of activity connected with decisions on the new Water Bill and meeting the legislative deadlines has picked up considerably in the last few weeks and a number of our staff members are spending a substantial amount of time helping to make some very critical decisions for the Agency.

IV. Administrative/Management Problems:

Our biggest problem and diversion of effort on the horizon is the necessary work which we must do to evaluate the effects of asbestos in our test water supply on our past research work. We have started the planning meetings to develop this work and are seeking the help of some universities in doing so. We anticipate that we will need to buy some rather expensive equipment in order to complete the work. I have discussed this equipment purchase with our PAM, with Gordon Everett, and with Gordon Robeck in Cincinnati, and they are all agreed that we should have the equipment, anyway, in order to supplement the Agency's capabilities in this area of analysis and discussions with Gordon Robeck just today

indicated that he is anxious to see us get it because they may have to do pilot work on water filtration systems for the City of Duluth and this would give them added capability. We had money in our in-house budget this year for equipping the Newtown Laboratory and some additional equipment at Jerry Bouck's lab and it would appear that the building at Newtown will not be done in time to use the money this year, so we may well be able to swing the costs pretty much without any additional clammering for funds within our own budget.

ARCTIC ENVIRONMENTAL RESEARCH LABORATORY

Quarterly Status Report, 1st Quarter FY 74

I. Impact of Delays:

1BA022 - 21ARY

The two-month delay is not significant and will not delay related tasks in the ROAP.

1BA021 - 21ARX

This delay will affect the completion of the task if the required manpower is not obtained.

1BB044 - 21ASG

The delay in task 4 is not significant. Task 5 may not be completed in FY 74; however, this effort could be accomplished early in FY 75 without affecting the completion of the ROAP. In 21ASF the delay has caused an unplanned use of in-house funds to cover extramural activities. This will likely necessitate a reprogramming of funds within the ROAP. The evaluation of the facilities will not be affected by the delay.

II. Issues:

The major issue still unresolved concerns the \$150,000 addition to the approved ROAP's, including the air pollution research program, at the Laboratory. The bulk of this money (\$105,000) is for the air program which has high priority in the Region and is of major concern in Alaska. This is a program decision that must be made between NERC and Headquarters.

A second issue is the chronic overceiling problem at the Laboratory. A recommendation concerning this issue was the subject of a separate communication (Oct 1, 73). Until this problem is resolved, the Laboratory program will continue to suffer from poor personnel and position management.

A third issue involves the question of whether to undertake a "third project" this fiscal year under ROAP # 21ASF, Task No. 6. A complete evaluation of this issue has not been made as yet and will be the subject of a separate communication with recommendations and alternatives.

III. Accomplishments:

The Laboratory staff completed seven research reports and papers during the quarter. This writing and publication effort represents the largest such effort in any one quarter at the Laboratory.

Three of the reports deal with cold climate disinfection and cover research completed during FY 72-73. This research indicates that effective treated wastewater disinfection can be achieved at $<4^{\circ}\text{C}$ under proper conditions. However, these conditions are not commonly found in wastewater treatment systems and no assessment has been made on the effect of this disinfection on arctic and subarctic aquatic life.

The air pollution research team completed a very successful first year. Two projects were undertaken and completed. The report "Cold Regions Automotive Emissions" covered the results of cold temperatures commonly found in the subarctic on CO and HC emissions. It outlined the problems faced in cold regions vehicle emission control, surveyed the problem on the most practical level, and pointed out ways in which the problem might be solved. The second project evaluated the use of ambient cold air to condense water vapor from stack emissions thereby preventing ice fog. This concept proved effective and could have significant applications in cold climates.

IV. Administrative/Management Problems

The Laboratory continues to operate without adequate clerical help. A summer temporary clerk-typist provided sufficient help to complete a number of important research reports and papers this past summer. However, we still have seven more reports in various stages of typing with no one to do the job. We have discussed the possibility of a temporary clerk-typist with Mike Hebert and Art Sandoval during their respective visits to the Laboratory. Even though this is not a final solution, it may see us through a period of heavy work load.

EPA Headquarters has not completed a lease agreement for space occupancy with the University of Alaska for the Laboratory. The problem of program support heretofore covered by the AERL-AHSRC Contract was discussed in a separate memo (October 1, 1973). This problem needs resolution by NERC and Headquarters.

The visit of NERC Administrative personnel to the Laboratory during September was very beneficial. Their assistance in budget-finance, procurement and property management will smooth out many of the problems we have experienced in the past.

*see Carlson
office, for
Maitland*

ROBERT S. KERR ENVIRONMENTAL RESEARCH LABORATORY

Quarterly Status Report, 1st Quarter FY 74

I. Impact of Delays:

1BB024 1BB036 1BB045
1BB039 1BB040

We are still suffering from impacts produced by the diversion of manpower to the effluent guideline studies, task forces, and committee assignments of other areas. Providing there are no new crashes and there is a timely release of funding dollars for extramural projects, I am optimistic of accomplishing our assigned tasks within the time frame listed.

II. Issues:

Participation in lagoon upgrading task force committee with deadlines occurring monthly through January 1974. Task force resulted from request of Air & Water Program need for guidance and established with Mr. Trakowski's concurrence.

Participation in task force established by the Non-Point Source Program (1B2039) and Industrial Waste Program (1B2036).

Continued participation in the effluent guideline activities. These efforts by our staff seem to be about phased out.

Participation in the technical study committee for salinity production in the Colorado River Basin and directly the result of President Nixon's efforts to satisfy Mexico's needs.

Participation of one member of our staff in the SCOPE activities. These meetings occurring in Europe, are going to impact the dollar resources of the program. This participation will result in costs of approximately six thousand dollars which were not included in our budget planning.

III. Accomplishments:

A national feedlot conference was successfully achieved. There are still many complimentary comments being received. Mr. Russell Train expressed disappointment to me at not being there.

Mr. Russell Train visited the laboratory on September 24, 1973.

A number of reports which were behind schedule have been sent to the GPO.

IV. Administrative/Management Problems:

There are no serious Administrative/Management problems to report at this time.

PART III

ROAP STATUS REPORTS

QUARTERLY ROAP STATUS REPORT

1 Program Element 1AA006	2 Roap No 21 ALR	3. Roap Title Strengthening Scientific Basis for Secondary Air Qual. Stand. & Cont. of Other Pollutants			4. Date 10/5/73	5 Page No --- of ---
6 Total Tasks in Roaps 27	7. No. Tasks Completed 9	8. No. Active Tasks 15	9. No. on Schedule 9	10. No. Completed CFY 0	11 No. Delayed 6	12
13 Program Chief L.C. Ranieri		14. Roap Manager L.C. Ranieri			15	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
06	Acute and chronic studies in greenhouse	8	7/1/73	2/1/74	AD	Proceeding with related studies not requiring gas exposure chambers	Branch Ch.
08	Pollutant mixture studies in greenhouse	8	7/1/73	2/1/74	AD	" "	"
09	Environmental stress studies (inhouse)	2	7/1/73	7/1/75	O-Functional Transfer	Construction and/or acquisition of sophisticated env. control facility.	HQ
10	Mechanisms of action studies	8	7/1/73	2/1/74	AD	Proceeding with related studies not requiring gas exposure chambers.	Br. Ch.
22	Uptake and transport of trace elements and heavy metals	8	7/1/73	2/1/74	AD	Develop cooperative work at OSU	Branch Ch.
24	Transfer funds to USDA, ARS, No. Carolina State University	2	9/1/73	11/1/73	AG - Negot.	Expedite	HQ

17 REMARKS: Need firm commitment and target date for new ecological research facility.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example: delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element 1AA006	2. Roap No. 21 ALS	3. Roap Title Impact Upon Selected Natural and Disturbed Ecosystems			4. Date 10/5/73	5. Page No _____ of 1
6. Total Tasks in Roaps 5	7. No. Tasks Completed	8. No. Active Tasks 5	9. No. on Schedule 4	10. No. Completed CFY 0	11. No. Delayed 1	12.
13. Program Chief Vacant		14. Roap Manager R. Wilhour			15.	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
07	Photochemical Oxidants on Woody Vegetation.	2	7/1/73	Immed.	Funds tied up in carryover money.	Reissue COFA and release funds.	HQ

17 REMARKS: This is a grant continuation. As such, the delay has placed the principal investigator in an emergency situation. Neither salary nor operating money is available; therefore, it's essential that immediate action be taken if we intend to continue this grant.

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QUARTERLY ROAP STATUS REPORT

1. Program Element 1AA006		2. Roap No. 21 ALU		3. Roap Title Predictive Modeling of the Impact of Air Pollution on Ecosystems		4. Date 10/5/73		5. Page No 1 of 1	
6. Total Tasks in Roaps 38		7. No. Tasks Completed 2		8. No. Active Tasks 16		9. No. on Schedule 12		10. No. Completed CFY 3	
11. No. Delayed 4		12.		13. Program Chief A.S. Lefohn		14. Roap Manager A.S. Lefohn		15.	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
26	Biological Scavenging of Air Pollutants	4	6/1/73	10/73	FF	Has been taken off carryover list	NERL/HQ
28	IAG with ARS, Ft. Collins for purposes of assessing effects of coal-fired power plants (CFPP) on ecosystems.	1	9/1/73	1/74	0	Delay until CFPP protocol developed.	
30	Grant to NCSU Ag. Experiment Sta.	3	7/1/73	1/74	AG	Complete interagency agreement with ARS	
27	Grant to Wichita State University to study effects of coal-fired power plant on ecosystems.	2	6/1/73	8/73	FF	Has been taken off carryover list.	

17. REMARKS: The delay in funding task 26 has resulted in a phasing problem between the inhouse and extramural soil research program. Immediate action has been taken to remedy the situation. It is expected the earliest both components of the program will get back on schedule together will be March 1974.

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QUARTERLY ROAP STATUS REPORT

1. Program Element 1AA006	2. Roap No. 21 B8K	3. Roap Title Meas. of Ecosystems Response & Ecological Effects of Salt Water Drift.			4. Date 10/5/73	5. Page No --1-- of --1--
6 Total Tasks in Roaps 11	7. No. Tasks Completed 0	8. No. Active Tasks 6	9. No. on Schedule 4	10. No. Completed CFY 0	11. No. Delayed 2	12.
13. Program Chief L.C. Raniere		14. Roap Manager I. Hindawi			15.	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
04	Greenhouse salt aerosol studies	5	9/1/73	3/1/74	AD	Awaiting support from Boyce Thompson	Program Ch
06	Determine ecosystems response to change	2	8/31/73	11/1/73	AG- Selection of Contractor	Proceed with existing information.	

17 REMARKS

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QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA021	2. Roap No. 05ADD	3. Roap Title Tolerance Limits of Ammonia for Aquatic Life	4. Date 10-1-73	5. Page No. ---1--- of ---1---
6. Total Tasks in Roaps 1	7. No. Tasks Completed 0	8. No. Active Tasks 1	9. No. on Schedule 0	10. No. Completed CFY 0
		11. No. Delayed 1	12.	
13. Program Chief Donald I. Mount, Ph.D.		14. Roap Manager Kenneth E. F. Hokanson, Ph.D.		

16. TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
1	Determine Tolerance Limits of Ammonia for Aquatic Life	6	12/73	11/74	0	Because of delay in construction of testing facility, a year in the life cycle was lost and nothing can be done to regain the year. An extension without additional funds was granted by the Project Officer.	Project Officer

17. REMARKS: 0 - Building to perform bioassays was completed 6 months behind schedule.

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QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA021	2. Roap No. 16AAD	3. Roap Title Effects of Heavy Metals Upon Freshwater Aquatic Life			4. Date 10-1-73	5. Page No. 1 of 1
6. Total Tasks in Roaps 15	7. No. Tasks Completed 0	8. No. Active Tasks 9	9. No. on Schedule 9	10. No. Completed CFY 0	11. No. Delayed 0	12.
13. Program Chief Donald I. Mount, Ph.D.		14. Roap Manager Kenneth E. Biesinger, Ph.D.		15.		

16. TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

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QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA021	2. Roap No. 16AAE	3. Roap Title Bioassay Technical Support for Freshwater Life			4. Date 10-1-73	5. Page No. 1 of 1
6. Total Tasks in Roaps 11	7. No. Tasks Completed 0	8. No. Active Tasks 9	9. No. on Schedule 9	10. No. Completed CFY 0	11. No. Delayed 0	12.
13. Program Chief Donald I. Mount, Ph.D.		14. Roap Manager John W. Arthur		15.		

16. TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

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QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA021	2. Roap No. 16AAI	3. Roap Title Development of Biological Test Methods			4. Date 10-1-73	5. Page No 1 of 1
6. Total Tasks in Roaps 8	7. No. Tasks Completed 0	8. No. Active Tasks 8	9. No. on Schedule 8	10. No. Completed CFY 0	11. No. Delayed 0	12.
13. Program Chief Donald I. Mount, Ph.D.		14. Roap Manager James M. McKim, Ph.D.			15.	

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

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QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA021	2. Roap No. 16AAJ	3. Roap Title Short-Cut Methods to Determine Toxicant Criteria	4. Date 10-1-73	5. Page No. 1 of 1		
6. Total Tasks in Roaps 11	7. No. Tasks Completed 0	8. No. Active Tasks 6	9. No. on Schedule 6	10. No. Completed CFY 0	11. No. Delayed 0	12.
13. Program Chief Donald I. Mount, Ph.D.		14. Roap Manager James M. McKim, Ph.D.		15.		

16. TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

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QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA021	2. Roap No. 16AAK	3. Roap Title Effect of Synthetic Hazardous Organics in the Freshwater Environment			4. Date 10-1-73	5. Page No. ---1--- of ---1---
6 Total Tasks in Roaps 21	7. No. Tasks Completed 0	8. No. Active Tasks 15	9. No. on Schedule 0	10. No. Completed CFY 0	11. No. Delayed 0	12.
13. Program Chief Donald I. Mount, Ph.D.		14. Roap Manager John C. Eaton		15.		

16. TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

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QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA021	2. Roap No. 16AAO	3. Roap Title Complex Effluent Criteria				4. Date 10-1-73	5. Page No -- 1 -- of -- 1 --
6. Total Tasks in Roaps 18	7. No. Tasks Completed 0	8. No. Active Tasks 7	9. No. on Schedule 7	10. No. Completed CFY 0	11. No. Delayed 0	12.	
13. Program Chief Donald I. Mount, Ph.D.		14. Roap Manager William B. Horning, II			15		

16. TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

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QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA021	2. Roap No. 21AKG	3. Roap Title Effects of Air Supersaturation on Fishes and Other Aquatic Life			4. Date 10-1-73	5. Page No. 1 of 1
6. Total Tasks in Roaps 8	7. No. Tasks Completed 0	8. No. Active Tasks 7	9. No. on Schedule 7	10. No. Completed CFY 1	11. No. Delayed 0	12.
13. Program Chief Donald I. Mount, Ph.D.		14. Roap Manager Gerald R. Bouck, Ph.D.			15.	

16. TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

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QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA021	2. Roap No. 16ABI	3. Roap Title Temperature and Dissolved Oxygen Requirements for Freshwater Organisms	4. Date 10-1-73	5. Page No. 1 of 1
6. Total Tasks in Roaps 20	7. No. Tasks Completed 0	8. No. Active Tasks 13	9. No. on Schedule 13	10. No. Completed CFY 0
11. No. Delayed 0		12.		
13. Program Chief Donald I. Mount, Ph.D.		14. Roap Manager Bernard R. Jones		15.

16. TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

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QUARTERLY ROAP STATUS REPORT

1. Program Element 18A021	2. Roap No. 25AIC	3. Roap Title Effects of Oil(s) on Freshwater Fish, Other Freshwater Life and Wildlife			4. Date 10-1-73	5. Page No. 1 of 1
6. Total Tasks in Roaps 3	7. No. Tasks Completed 0	8. No. Active Tasks 3	9. No. on Schedule 3	10. No. Completed CFV 0	11. No. Delayed 0	12.
13. Program Chief Donald L. Mount, Ph.D.		14. Roap Manager Steven F. Hedtke		15.		

16. TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

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QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA021	2 Roap No 21ARX	3. Roap Title Effects of Man on Arctic Freshwater Ecosystems			4 Date 10/05/73	5. Page No ---1--- of ---1---
6. Total Tasks in Roaps 11	7. No Tasks Completed 0	8. No. Active Tasks 6	9. No on Schedule 5	10. No. Completed CFY 0	11 No. Delayed 1	12
13. Program Chief Richard W. Latimer		14 Roap Manager Ernst W. Mueller			15	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
06	Effects of Low D.O. and Low Temperatures on Arctic Biota	2	07/76-	--	0*	Hire temporary technician to complete FY 1974 portion of task	Lab.Dir. NERC

17 REMARKS. *Biological Laboratory Technician working on this task terminated employment in August 1973.

REASON FOR DELAY CODE

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	AP - Personnel Problems (specify)	

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA021	2 Roap No. 21ASA	3 Roap Title Effects of Oil on Arctic Freshwater	4 Date 10/05/73	5 Page No __L__ of __L__
6 Total Tasks in Roaps 4	7 No. Tasks Completed 0	8 No Active Tasks 3	9 No. on Schedule 3	10 No. Completed CFY 0
11 No Delayed 0		12		
13 Program Chief Richard W. Latimer	14 Roap Manager Ernst W. Mueller	15		

16. TASKS DELAYED

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QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA022	2. Roap No 16 AAS	3. Roap Title Effects of Free Chlorine and Chlorinated Compounds on Selected Marine Organisms			4. Date 10/9/73	5. Page No 1 of 1
6. Total Tasks in Roaps 11	7. No. Tasks Completed 0	8. No. Active Tasks 1	9. No. on Schedule 0	10. No. Completed CFY 0	11. No. Delayed 1	12.
13. Program Chief		14. Roap Manager			15.	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
09	Effects of chlorinated waste treatment effluents	3	10/1/73	1/1/74	FF	Release Funds	HQ

17 REMARKS:

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 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA022	2. Roap No. 16 AAT	3. Roap Title Criteria for Heavy Metals to Protect Estuarine and Marine Life				4. Date 10/9/73	5. Page No 1 of 1
6. Total Tasks in Roaps 14	7. No. Tasks Completed 4	8. No. Active Tasks 6	9. No. on Schedule 6	10. No. Completed CFY 0	11. No. Delayed 0	12.	
13. Program Chief		14. Roap Manager			15.		

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17. REMARKS:

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example: delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA022	2 Roap No 16 AAV	3. Roap Title Effects of Petroleum, oils, oil dis- persants, and petrochemical wastes on marine life			4 Date 10/9/73	5. Page No 1 of 1
6 Total Tasks in Roaps 6	7. No. Tasks Completed 2	8. No. Active Tasks 6	9. No. on Schedule 5	10. No Completed CFY 0	11. No. Delayed 1	12
13 Program Chief Dr. Eric D. Schneider		14. Roap Manager Dr. D. K. Phelps			15.	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
12	Short term bioassays of effluent	6	6/30/74	1/1/75	DO,AD	Complete wet lab	Lab Dir.

17. REMARKS:

Task 12 delayed because of concentration of manpower into task 17, waste oils. We also had no suitable facility to run continuous exposures of ballast effluent. Project will recommence on completion of waste oils task.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA022	2. Roap No 21 AKF	3. Roap Title Ecological Requirements Essential for the Protection of Estuarine and Marine Life			4. Date 10/9/73	5. Page No ---1--- of ---1---
6. Total Tasks in Roaps 46	7. No Tasks Completed 0	8. No. Active Tasks 28	9. No. on Schedule 24	10. No Completed CFY 0	11. No. Delayed 4	12.
13. Program Chief Dr. Eric D. Schneider		14. Roap Manager Dr. D. K. Phelps			15.	

16. TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
04	West Coast polychate culture	?	11/19/73		FF	Release funds	HQ
29	Sublethal effects, corals	?	10/11/73		FF	Release funds	HQ
30	Temperature standards	2	6/30/74	8/30/74	AD	Complete wet lab	Lab. Dir.
32	Salinity standards	2	6/30/74	8/30/74	AD	" "	Lab. Dir.

17 REMARKS.

Task 34: Objectives of this task will be met by transferring support to 21 BBG, Task 05.

Tasks 03,04,29: Delays proportional to duration of freeze.

REASON FOR DELAY CODE

FUNDING -- F	ADMINISTRATIVE - A	STAFFING - OTHER -- D/O
FF - Funds Frozen	AD - Equipment Delays	DA - Diversion of Staff for Technical Assistance
FI - Funding Insufficient	AF - Equipment Failure	DO - Diversion of Staff for Other Than Technical Assistance (specify)
FD - Funds Diverted (specify)	AG - Grant/Contract Delay (specify)	O - Other (specify)
FL - Funds Late (Example delay in advice of allowance)	AO - Other Administrative (specify)	
	AP - Personnel Problems (specify)	

QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA022	2. Roap No. 21 AKK	3. Roap Title Biological Techniques for Water Quality Criteria Development		4. Date 10/9/73	5. Page No - 1 - of - 1 -
6. Total Tasks in Roaps 18	7. No. Tasks Completed 0	8. No. Active Tasks 7	9. No. on Schedule 5	10. No. Completed CFY 0	11. No. Delayed 2
13. Program Chief Dr. Eric D. Schneider		14. Roap Manager Dr. D. K. Phelps			15.

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
14	Bioassay system, larval arthropods	1	9/1/73	10/1/73	AG		
17	Toxicity data file	6	7/1/73	1/1/74	A)		

17 REMARKS

Task 14: Negotiation necessary, no further problem.

Task 17: Coordination with Data Systems and Office of Toxic Substances is required unless scope severely restricted.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
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FL - Funds Late (Example: delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA022	2 Roap No. 21 BBG	3. Roap Title Ecological Assessment of Ocean Dumping			4. Date 10/9/73	5 Page No 1 of 1
6. Total Tasks in Roaps 6	7. No Tasks Completed 0	8. No Active Tasks 6	9. No. on Schedule 0	10. No Completed CFY 0	11. No Delayed 6	12.
13 Program Chief Dr. Eric D. Schneider		14. Roap Manager Dr. D. K. Phelps			15	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
01	Merits of deep ocean and shelf disposal				FF	Release funds	HQ
02	Leaching from spoils and sludge				FF	" "	"
03	Ecological effects of spoils and sludge				FF	" "	"
04	Bioassay and bioaccumulation	4	9/15/73	1/15/74	AD, DO	Complete wet lab	Lab Dir.
05	Site monitoring methods	4	9/15/73	1/15/74	AD, DO	" "	"
06	Biological availability at dump sites				FF	Release funds	HQ

17 REMARKS

General: Extramural support is being sought in anticipation of release of funds.

Tasks 04,05: Delays in completion of wet lab facilities and diversion of staff for permit hearings and drafting of regulations contribute equally to delays.

This ROAP is being revised to properly reflect the higher level of effort intended for coming fiscal years. Such revisions have been requested by the PAM and by NERC-Corvallis.

REASON FOR DELAY CODE

FUNDING -- F	ADMINISTRATIVE - A	STAFFING - OTHER -- D/O
FF - Funds Frozen	AD - Equipment Delays	DA - Diversion of Staff for Technical Assistance
FI - Funding Insufficient	AF - Equipment Failure	DO - Diversion of Staff for Other Than Technical Assistance (specify)
FD - Funds Diverted (specify)	AG - Grant/Contract Delay (specify)	O - Other (specify)
FL - Funds Late (Example: delay in advice of allowance)	AO - Other Administrative (specify)	
	AP - Personnel Problems (specify)	

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA022		2 Roap No. 21ARY		3. Roap Title Effects of Man on Arctic Estuarine			4 Date 10/05/73	5. Page No ---1--- of ---1---
6 Total Tasks in Roaps 5	7. No Tasks Completed 0	8. No Active Tasks 3	9. No. on Schedule 2	10. No. Completed CFY 0	11 No. Delayed 1	12.		
13 Program Chief Richard W. Latimer			14. Roap Manager Ernst W. Mueller			15.		

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
02	Baseline Study of Arctic Estuarine Environment	2	10/73-	12/73	A.G.	Contact Grantee to expedite report	Project Officer

17 REMARKS

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example: delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA022	2 Roap No. 21ARZ	3. Roap Title Effects of Oil on Arctic Estuarine	4. Date 10/05/73	5. Page No --]----- of --]-----
6 Total Tasks in Roaps 6	7. No. Tasks Completed 0	8. No. Active Tasks 4	9. No. on Schedule 4	10. No. Completed CFY 0
11. No. Delayed 0		12.		
13 Program Chief Richard W. Latimer		14. Roap Manager Ernst W. Mueller		15

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17 REMARKS.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example: delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

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DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA023	2. Roap No 21 AIL	3. Roap Title Dynamics of Natural Freshwater Ecosystems	4. Date 2 Oct 73	5. Page No --1-----of-----1-----
6. Total Tasks in Roaps 13	7. No. Tasks Completed 3	8. No. Active Tasks 5	9. No. on Schedule 4	10. No. Completed CFY 0
11. No. Delayed 1		12.		
13. Program Chief Dr. W. M. Sanders, III		14. Roap Manager Dr. W. M. Sanders, III		

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
07	Experimental determination of physical, chemical, and microbial rate constants & their dependency on biotic & abiotic factors	6	6/30/74	12/30/74	O * FI	Approve over-target resources	AARD

17 REMARKS:

* Loss of critical personnel

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA023	2. Roap No. 21 AIM	3. Roap Title Fate & Impact of Selected Pollutants in Freshwater Ecosystems			4. Date 2 Oct 73	5. Page No 1 of 1
6. Total Tasks in Roaps 29	7. No. Tasks Completed 1	8. No. Active Tasks 14	9. No. on Schedule 10	10. No. Completed CFY 0	11. No. Delayed 4	12.
13. Program Chief Dr. W. M. Sanders, III		14. Roap Manager Dr. W. M. Sanders, III			15.	

16. TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
13*	Develop submodel routines for combined chem., photochem., & microbial degradation, degradation rates & product formation.	3	9/30/74	12/30/74	O** FI	Approve over-target resources	AARD
30	Study combined chem, physical & photochem & microbial degradation	3	9/1/74	12/1/74	O** FI	Same as Task 13	
32	Grant to conduct research workshop on chemical & photochem degradation of pollutant pesticides in soils	3	1/1/74	4/1/74	FI	Same as Task 13	
33	Grant to determine chem & photochem degradation kinetics & product formation for selected pesticides on soil.	3	1/30/74	4/30/74	FI	Same as Task 13	

17 REMARKS:

* Task 13 - output should be mercury model, not malathion model.

** Loss of critical personnel.

REASON FOR DELAY CODE

FUNDING -- F

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FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA023	2 Roap No. 22 AEC	3. Roap Title Non-point Water Pollution Source Simulation Models			4. Date 3 Oct 73	5 Page No -- 1 -- of -- 1 --
6 Total Tasks in Roaps 2	7. No. Tasks Completed 0	8. No. Active Tasks 2	9. No. on Schedule 1	10. No. Completed CFY 0	11 No. Delayed 1	12 12
13 Program Chief Dr. W. M. Sanders, III		14. Roap Manager Dr. W. M. Sanders, III			15	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
02	Contract to develop loading model for non-point source pollution for selected priority category and river basin.	6	9/1/73	2/1/74	FF * AO	Decide what work should be done	PAM

17 REMARKS:

* No decision on selection of watersheds to be researched.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
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O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA024	2 Roap No. 27A10	3. Roap Title National Assessment of Ground Water Pollution Problems			4. Date 10/3/73	5 Page No ---1--- of ---1---
6 Total Tasks in Roaps 10	7 No Tasks Completed 2	8 No Active Tasks 5	9 No on Schedule 3	10 No Completed CFV 0	11 No Delayed 2	12
13 Program Chief Jack W. Keeley		14 Roap Manager Marion R. Scalf			15	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
07	Second National Ground Water Quality Symposium. *Contract is near completion at this time.	2	8/73	11/73	AG*	None. Delay is not critical at this point.	Program Chief
09	Assess ground-water problems in southeastern states. **More favorable competitive time for contractor response	1	9/73	2/74	AO**	Delay milestone until 2/74	

17 REMARKS.

REASON FOR DELAY CODE

FUNDING -- F	ADMINISTRATIVE - A	STAFFING - OTHER -- D/O
FF - Funds Frozen FI - Funding Insufficient FD - Funds Diverted (specify) FL - Funds Late (Example delay in advice of allowance)	AD - Equipment Delays AF - Equipment Failure AG - Grant/Contract Delay (specify) AO - Other Administrative (specify) AP - Personnel Problems (specify)	DA - Diversion of Staff for Technical Assistance DO - Diversion of Staff for Other Than Technical Assistance (specify) O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 18A024	2 Roap No. 16A3B	3. Roap Title Criteria & Parameters for Ground-Water Basin Management			4. Date 10/3/73	5 Page No 1 of 1
6 Total Tasks in Roaps 3	7. No Tasks Completed 0	8. No Active Tasks 1	9. No. on Schedule 1	10. No. Completed CFV 0	11. No Delayed 0	12.
13. Program Chief Jack W. Keeley		14 Roap Manager Jack W. Keeley			15.	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17 REMARKS.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA024	2 Roap No 21AKO	3. Roap Title Predictive Models for Pollutants in the Ground-Water Environment			4 Date 10/3/73	5. Page No ---1--- of ---1---
6. Total Tasks in Roaps 24	7. No. Tasks Completed 7	8. No. Active Tasks 5	9. No. on Schedule 5	10. No. Completed CFY 0	11. No. Delayed 0	12.
13. Program Chief Jack W. Keelev		14 Roap Manager William J. Dunlap			15	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17 REMARKS.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA1025	2. Roap No. 21 Ais	3. Roap Title Scientific Criteria for Ocean Disposal			4. Date Oct. 4, 1973	5. Page No --1-- of 1
6. Total Tasks in Roaps 30	7. No. Tasks Completed 0	8. No. Active Tasks 14	9. No. on Schedule 10	10. No. Completed CFY 4	11. No. Delayed 4	12.
13. Program Chief Dr. D. J. Baumgartner		14. Roap Manager Dr. D. J. Baumgartner			15.	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
09	Synoptic Survey of PCB in L. A. Bight final report	9	1/73		FL	No action; final report is now in process 10/73.	Grantee
21	Determine quantitative Response Characteristics for Benthic Invertebrates and Demersal Fishes of the LA Bight to Waste Water Discharges.	3	6/75	9/75	AG (1)	None	
36	HM in LA Bight. Model and Computational methods.	6	1/73	7/73	FL	Action already taken	ROAP Manager
38	Mercury Chemistry in Natural Waters 801512	9	6/73	3/74	FL	Action already taken	ROAP Manager

17. REMARKS.

(1) Delay in the awarding of the grant

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA1025	2. Roap No. 21 AIS-A	3. Roap Title Scientific Criteria for Ocean Disposal	4. Date 10/04/73	5 Page No. --1-- of --1--
6. Total Tasks in Roaps 15	7. No. Tasks Completed 0	8. No. Active Tasks 7	9. No. on Schedule 4	10. No. Completed CFY 0
13. Program Chief Dr. D. J. Baumgartner		14. Roap Manager W. F. Rittall	15.	

16 TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
04	Improvement of Analytical Methods	2	7/75	7/75	0	None (Slippage to be made up during grant funding period)	
05	Development of Specific Analytical Methods	2	7/75	7/75	0	" "	
11	Development of Methodology for assessment of bioaccumulatory nature of specific industrial waste constituents	2	7/76	7/76	0	" "	

17 REMARKS:

(0--OTHER) The design of these studies is defined in terms of a document to be issued by Headquarters staff OR&D and the initiation of work is directly related to their publication of finding the Methods Manual. It is now in the review process and the final documents are expected prior to end of this Calendar Yr.

REASON FOR DELAY CODE

<u>FUNDING -- F</u>	<u>ADMINISTRATIVE - A</u>	<u>STAFFING - OTHER -- D/O</u>
FF - Funds Frozen	AD - Equipment Delays	DA - Diversion of Staff for Technical Assistance
FI - Funding Insufficient	AF - Equipment Failure	DO - Diversion of Staff for Other Than Technical Assistance (specify)
FD - Funds Diverted (specify)	AG - Grant/Contract Delay (specify)	O - Other (specify)
FL - Funds Late (Example delay in advice of allowance)	AO - Other Administrative (specify)	
	AP - Personnel Problems (specify)	

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA1025	2 Roap No. 21 AIT	3. Roap Title Predictive Models for Pollutants in Ocean Environ.			4. Date 10/4/73	5. Page No --- of ---
6. Total Tasks in Roaps 23	7. No Tasks Completed 9	8. No. Active Tasks 5	9. No. on Schedule 3	10. No Completed CFV 1	11. No. Delayed 2	12
13 Program Chief Dr. D. J. Baumgartner		14. Roap Manager R. J. Callaway			15.	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
12	Fjord Hydrodynamics	6	10/73	4/74	FL	6 months extension granted	Hdqtrs.
13	Numerical Models, N. Y. Bight	4	8/73	12/73	0		

17. REMARKS:

(0--OTHER). Extra commitments by grantee. Grant interagency agreement extension given.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA026	2 Roap No. 21AKP	3 Roap Title Predictive Model of Chem., Biolog., & Physical Process Affecting Pollution of Lg. Lakes	4 Date 10/9/73	5 Page No --1-- of --1--
6 Total Tasks in Roaps 24	7 No Tasks Completed 2	8 No Active Tasks	9 No on Schedule 22	10 No Completed CFY 0
13 Program Chief Thomas	14 Roap Manager Tudor Davies		15.	

16	TASKS	DELAYED
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Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17 REMARKS	
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REASON FOR DELAY CODE	
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FUNDING -- F	ADMINISTRATIVE - A	STAFFING - OTHER-- D/O

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in
advice of allowance)

FUNDING -- F	ADMINISTRATIVE - A
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FF - Funds Frozen	AD - Equipment Delays
FI - Funding Insufficient	AF - Equipment Failure
FD - Funds Diverted (specify)	AG - Grant/Contract Delay (specify)
FL - Funds Late (Example delay in advice of allowance)	AO - Other Administrative (specify)
	AP - Personnel Problems (specify)

FUNDING -- F	ADMINISTRATIVE - A	STAFFING - OTHER-- D/O

FF - Funds Frozen	AD - Equipment Delays	DA - Diversion of Staff for Technical Assistance
FI - Funding Insufficient	AF - Equipment Failure	
FD - Funds Diverted (specify)	AG - Grant/Contract Delay (specify)	DO - Diversion of Staff for Other Than Technical Assistance (specify)
FL - Funds Late (Example delay in advice of allowance)	AO - Other Administrative (specify)	O - Other (specify)
	AP - Personnel Problems (specify)	

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA026	2 Roap No. 21BAZ	3 Roap Title Support of the US-Canada Upper Lakes Ref Study	4 Date 10/9/73	5 Page No --}----o{--}-----
6 Total Tasks in Roaps 9	7 No Tasks Completed 0	8 No Active Tasks	9 No on Schedule 9	10 No Completed CFY
11 No Delayed 0	12	13 Program Chief Thomas	14 Roap Manager Tudor Davies	15
16 TASKS DELAYED				

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17. REMARKS:

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element IBAO26	2 Roap No 21BB1	3 Roap Title Comprehension of the Michigan-Huron-Superior Lake System	4 Date 10/9/73	5 Page No 1 of 1
6 Total Tasks in Roaps 8	7 No. Tasks Completed 0	8 No Active Tasks	9 No on Schedule 6	10 No Completed CFY
13 Program Chief Thomas		14 Roap Manager Tudor Davies	15	11 No Delayed 2
12				

16 TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
02	Ship Leasing	3 Mos.			AO		
07	Data Input to STORET	3 Mos.			AP	Hire Temp.	

17 REMARKS

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA026		2 Roap No 25ADR		3 Roap Title Guidelines for Controlling Nutrients- Large Lakes			4 Date 10/9/73		5 Page No 1 of 1		
6 Total Tasks in Roaps 11		7 No Tasks Completed 1		8 No Active Tasks		9 No on Schedule 10		10 No Completed CFV		11 No Delayed 1	
13 Program Chief Thomas				14 Roap Manager Tudor Davies				15			

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
05	Nutrient Budgets of Major Large Lakes	5 Mos.			0	Certain nutrient inputs could not be estimated at this time. Programs have been started to supply needed information.	

17 REMARKS

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example: delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA026	2 Roap No 25ADS	3. Roap Title Guidelines for Controlling the Ecological Stresses Caused by Thermal Poll of Lg Lakes			4. Date 10/9/73	5 Page No ---1--- of ---1---
6 Total Tasks in Roaps 5	7. No. Tasks Completed 0	8. No. Active Tasks	9. No. on Schedule 4	10. No. Completed CFY	11 No. Delayed 1	12.
13 Program Chief Thomas		14. Roap Manager Tudor Davies			15.	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
05	Effects of Once Through Cooling	1 Mos.			FF	Funds being held up by Dr. Greenfield	

17 REMARKS:

REASON FOR DELAY CODE

<u>FUNDING -- F</u>	<u>ADMINISTRATIVE - A</u>	<u>STAFFING - OTHER -- D/O</u>
FF - Funds Frozen	AD - Equipment Delays	DA - Diversion of Staff for Technical Assistance
FI - Funding Insufficient	AF - Equipment Failure	DO - Diversion of Staff for Other Than Technical Assistance (specify)
FD - Funds Diverted (specify)	AG - Grant/Contract Delay (specify)	O - Other (specify)
FL - Funds Late (Example delay in advice of allowance)	AO - Other Administrative (specify)	
	AP - Personnel Problems (specify)	

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA026	2 Roap No. 25ADX	3. Roap Title Guidelines for the Control of Dredge Operat. & Disposal of Dredge Spoils in Lg Lakes			4. Date 10/9/73	5 Page No ---1--- of ---1---
6 Total Tasks in Roaps 5	7. No Tasks Completed 0	8. No Active Tasks	9. No. on Schedule 4	10. No Completed CPY	11. No. Delayed 1	12
13 Program Chief Thomas		14 Roap Manager Tudor Davies			15	

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
06	Determine impact of Dredging & Disposal on the Ecosystem.	4			FI	Incorrect Milestone Date, should be 6/30/74	

17 REMARKS

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA027	2. Roap No. 07ABL	3. Roap Title Identification of Chemical Pollutants in Industrial Wastewaters			4. Date 10/2/73	5. Page No -----1--- of ---1-----
6. Total Tasks in Roaps 15	7. No. Tasks Completed 0	8. No. Active Tasks 8	9. No. on Schedule 7	10. No. Completed CFY 0	11. No. Delayed 1	12.
13. Program Chief W. T. Donaldson		14. Roap Manager A. W. Garrison			15.	

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
04	Identify Pollutants in Petroleum Refinery Wastewaters	6	12/31/73	6/30/73	DO*	Reschedule Research Report on Separation Techniques for Petroleum Refinery Pollutants to 6/30/74	

17. REMARKS:

*Time diverted to Tasks 02 and 03.

REASON FOR DELAY CODE

<u>FUNDING -- F</u>	<u>ADMINISTRATIVE - A</u>	<u>STAFFING - OTHER -- D/O</u>
FF - Funds Frozen	AD - Equipment Delays	DA - Diversion of Staff for Technical Assistance
FI - Funding Insufficient	AF - Equipment Failure	DO - Diversion of Staff for Other Than Technical Assistance (specify)
FD - Funds Diverted (specify)	AG - Grant/Contract Delay (specify)	O - Other (specify)
FL - Funds Late (Example delay in advice of allowance)	AO - Other Administrative (specify)	
	AP - Personnel Problems (specify)	

QUARTERLY ROAP STATUS REPORT

1 Program Element TBA027	2 Roap No. 16ACG	3 Roap Title Identification of Chemical Pollutants in Municipal Wastewaters				4 Date 10/2/73	5 Page No ---
6 Total Tasks in Roaps 9	7 No Tasks Completed 1	8 No Active Tasks 4	9 No on Schedule 4	10 No Completed CFY 0	11 No Delayed 0	12 ---	
13 Program Chief W.L. Donaldson		14 Roap Manager A.W. Garrison			15		

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17 REMARKS:

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example: delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA027	2 Roap No 16ADN	3. Roap Title Identification of Organic, Inorganic and Elemental Chemical Pollutants			4. Date 9/27/73	5 Page No ---1--- of ---2---
6 Total Tasks in Roaps 83	7 No Tasks Completed 16	8. No Active Tasks 26	9 No on Schedule 18	10. No Completed CFY 0	11 No Delayed 8	12
13 Program Chief W. T. Donaldson		14 Roap Manager T. B. Hoover and J.M. McGuire			15	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
22	Spark Source Mass Spectrometry	4 1/2	9/1/73	1/15/74	DA	Reschedule Milestone for Research Report	Prog Chief
23	Mass Chromatography	1	9/1/73	9/28/73	AD/DO (Task 65)	None	--
27	Improve Low Resolution Mass Spectrometry	1 2	11/1/73 2/1/74	12/1/73 3/15/74	AD AP Lack of spectrometrists with computer background	None Permission to fill position	Lab Dir
29	Grant "Spectra Matching"	4	9/30/73	1/30/74	FF/O Planning	Release funds/reschedule milestones	HQ/Prog Chief

17 REMARKS:

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example: delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA027	2. Roap No. 16ADN	3. Roap Title Identification of Organic, Inorganic and Elemental Chemical Pollutants			4. Date 9/27/73	5. Page No 2 of 2
6. Total Tasks in Roaps 83	7. No. Tasks Completed	8. No. Active Tasks	9. No. on Schedule	10. No. Completed CFY	11. No. Delayed	12.
13. Program Chief		14. Roap Manager			15.	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
31	Evaluate Flame Photometric Detection of Phosphorus	2	8/15/73	10/15/73	AO (Publication time not estimated)		
32	Evaluate Microwave Emission	3	8/15/73	11/15/73	AO (same as Task 31)		
35	Grant "Computer Interpretation of Spectra"	3	7/13/73	11/1/73	FF	Release funds	HQ
37	Separation and Concentration Techniques for Water Pollutants	6	12/31/73	6/30/74	DA DO*	Reschedule Research Report on Microreticular Resins to 6/30/74	

17 REMARKS:

*Some manpower was diverted to write report on "Current Practice in GC/MS Analysis of Organics in Water," written under the same task in lage FY 73.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA029	2 Roap No 25AJX	3 Roap Title Survey of Nutrient Loadings to Lakes			4 Date 10/2/73	5 Page No. -----1--of--1-----
6 Total Tasks in Roaps 10	7 No Tasks Completed 3	8 No Active Tasks 7	9 No. on Schedule 7	10 No Completed CFY 1	11 No. Delayed 0	12
13. Program Chief J. H. Gakstatter		14. Roap Manager Ralph E. Austin			15	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
	None*						

17 REMARKS:

*Tasks begin with the initiation of sampling, therefore no delays are now evident in the ROAP; however, lack of funding and subsequent uncertainty concerning the future course of the National Eutrophication Survey have delayed initial meetings with State Pollution Agencies and State National Guard Organizations which are necessary precursors to the initiation of sampling. Consequently, delays in task completion can be anticipated.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example: delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA029	2 Roap No. 25ALP	3. Roap Title Survey of Watershed Land Use			4 Date 10/2/73	5. Page No ----- of -----
6. Total Tasks in Roaps 3	7. No. Tasks Completed 0	8. No. Active Tasks 3	9. No. on Schedule 3	10. No. Completed CFY 0	11. No Delayed 0	12.
13 Program Chief J. H. Gakstatter		14 Roap Manager James M. Omernik			15 	

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
	None						

17 REMARKS:

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element TBA029	2 Roap No 25AKM	3. Roap Title Survey of Rate Limiting Nutrients			4. Date 10/2/73	5. Page No ____ of ____
6. Total Tasks in Roaps 3	7. No. Tasks Completed 0	8. No Active Tasks 3	9. No. on Schedule 3	10. No Completed CFY 0	11. No Delayed 0	12
13 Program Chief J. H. Gakstatter		14 Roap Manager Albert Katko			15 	

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
	None						

17 REMARKS:

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA031	2 Roap No 21 AIY	3 Roap Title The Determination of the Effectiveness of Lake Restoration Procedures			4 Date 10/1/73	5 Page No --- of ---
6 Total Tasks in Roaps 40	7 No Tasks Completed 4	8 No Active Tasks 26	9 No on Schedule 22	10 No Completed CFY 3	11 No Delayed 4	12
13 Program Chief T. E. Maloney		14 Roap Manager K. W. Malueg			15	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
12	Evaluate nutrient diversion as a lake restoration technique at Detroit Lakes, MN.	4	7/76	12/76	AO(1)	Continue on a minimum monitoring and research program, which is being done	Prog. Chief
14	Conduct field evaluation to determine effect of nutrient inactivation, using fly ash as a lake restoration method	1	9/76	10/76	O (2)	Restaff with qualified personnel which is completed	Prog. Chief
40	Manipulation of natural systems to control aquatic plant growth	5	9/75	2/76	AG(3)	Negotiations with potential grantees are being pursued	Prog. Chief
35	A&E study for design of experimental ponds	12	1/74	1/75	O (4)	Potential new sites are being sought	Prog. Chief

17 REMARKS:

- (1) Construction program was delayed because of wastewater system redesign to meet state requirements and insufficient resources to implement original plan.
- (2) Four of the five main investigators left the University
- (3) Delays in negotiating with potential grantee
- (4) Potential construction site no longer available.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BA031	2 Roap No. 21 AJA	3. Roap Title Predictive Models for the eutrophication Process				4. Date 10/1/73	5 Page No 1 of 1
6 Total Tasks in Roaps 13	7. No. Tasks Completed 1	8 No. Active Tasks 11	9. No. on Schedule 11	10. No. Completed CFY 0	11 No. Delayed 0	12	
13 Program Chief T. E. Maloney		14. Roap Manager K. W. Maloney			15		

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17 REMARKS.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element TBA031	2 Roap No. 21 AJE	3. Roap Title Development of techniques to measure nutrients from diffuse sources			4. Date 10/1/73	5. Page No --]----- of --]-----
6 Total Tasks in Roaps 11	7 No Tasks Completed 0	8. No Active Tasks 9	9 No on Schedule 8	10 No Completed CFY 0	11 No. Delayed 1	12.
13 Program Chief T. E. Maloney		14. Roap Manager C. F. Powers			15	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
29	Studies of the effect of aluminum addition and aeration (two lake restoration techniques) on sediment-water nitrogen relationships	1	9/1/73	ASAP	FF	Funding as soon as funds available	Head-quarters

17 REMARKS: Two of the eight active tasks are not being supported by FY-73 funds but have/given no-cost extensions to permit completion of final report. A third task was funded in FY-73 and will be completed in FY-73 if it remains on scheduled.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element TBA031	2. Roap No. 21 AJF	3. Roap Title Development of methods for assessing and categorizing potential entro. of nat. waters			4. Date 10/1/73	5. Page No ----- of -----
6. Total Tasks in Roaps 17	7. No. Tasks Completed 0	8. No. Active Tasks 13	9. No. on Schedule 11	10. No. Completed CFY 0	11. No. Delayed 2	12.
13. Program Chief Thomas E. Maloney		14. Roap Manager William E. Miller			15.	

16 TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
08	Environmental and nutritional requirements and physiological processes of selected fresh water and estuarine algae and aquatic plants	03	1/1/74	4/1/74	0	Permission to hire personnel	PED
17	Determine the critical levels of nitrogen, phosphorus and iron necessary to support the growth of <u>Anabaena Flos aquae</u> and <u>Microcystis aeruginosa</u> in AAP culture medium and natural waters.	03	1/1/74	4/1/74	0	Permission to hire personnel	PED

17 REMARKS: 6.3 pmy's were assigned to ROAP 21 AJF to accomplish the stated research tasks in FY 74. To date 4.0 pmy positions are assuming the work outlined in the ROAP. The remaining 2.3 positions have been assigned to non-research functions. Unless this situation is changed delays in task output will continue.

REASON FOR DELAY CODE

FUNDING -- F	ADMINISTRATIVE -- A	STAFFING - OTHER -- D/O
FF - Funds Frozen	AD - Equipment Delays	DA - Diversion of Staff for Technical Assistance
FI - Funding Insufficient	AF - Equipment Failure	DO - Diversion of Staff for Other Than Technical Assistance (specify)
FD - Funds Diverted (specify)	AG - Grant/Contract Delay (specify)	O - Other (specify)
FL - Funds Late (Example delay in advice of allowance)	AO - Other Administrative (specify)	
	AP - Personnel Problems (specify)	

QUARTERLY ROAP STATUS REPORT

1. Program Element 1BA032	2. Roap No 21AJH	3. Roap Title Predictive Models for Thermal Pollution			4. Date 10/3/73	5. Page No 1 of 1
6. Total Tasks in Roaps 28	7. No. Tasks Completed 10	8. No. Active Tasks 11	9. No. on Schedule 9	10. No. Completed CFY 0	11. No. Delayed 2	12.
13. Program Chief Frank H. Rainwater		14. Roap Manager Bruce A. Tichenor			15.	

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
34	Field test cooling tower plume models	4	start 8/1/73	start 12/1/73	FF	None - Funds unfrozen as of 9/17/73	B. Tichenor
35	Improve statistical reliability of stream temperature prediction. Section 303(d), PL92-500 requirement	3	start 10/1/73	start 1/1/74	FF	None - Funds unfrozen as of 9/17/73	B. Tichenor

17 REMARKS

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example: delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element 1BB392	2. Roap No. 21 AZU	3. Roap Title Industrial Water Control Technology-Electric Power Gen.			4. Date 10/1/73	5. Page No 1 of 1
6. Total Tasks in Roaps 30	7. No. Tasks Completed 16	8. No. Active Tasks 8	9. No. on Schedule 4	10. No. Completed CPY 0	11. No. Delayed 4	12.
13. Program Chief Frank H. Rainwater		14. Roap Manager Alden Christianson			15.	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
19	Assess engineering and economic feasibility of backfitting various cooling devices to existing power plants.	6	start 7/1/73	start 1/1/74	FF	Release Funds	Hdqtrs.
25	Predemonstration characterization SO ₂ scrubber water effluents and investigation of potential handling and treatment	3	start 9/1/73	start 1/1/74	FF	Release Funds	Hdqtrs.
21	Predemonstration engineering and economic assessment of once-through discharge modifications for adverse impact control	6	start 7/1/73	start 1/1/74	FF	Release Funds	Hdqtrs.
28	Demonstrate effluent control as a phase of recycle/reuse	6	start 9/1/73	start 3/1/74	AG	Pursue different (but related) demonstration project	NTPRP Prog. Chief

17 REMARKS:

Task 28 -- Negotiations with potential contractor stopped because of management decisions evolving from equipment cost rise and questionable reliability.

REASON FOR DELAY CODE

FUNDING -- F	ADMINISTRATIVE -- A	STAFFING - OTHER -- D/O
FF - Funds Frozen	AD - Equipment Delays	DA - Diversion of Staff for Technical Assistance
FI - Funding Insufficient	AF - Equipment Failure	DO - Diversion of Staff for Other Than Technical Assistance (specify)
FD - Funds Diverted (specify)	AG - Grant/Contract Delay (specify)	O - Other (specify)
FL - Funds Late (Example delay in advice of allowance)	AO - Other Administrative (specify)	
	AP - Personnel Problems (specify)	

QUARTERLY ROAP STATUS REPORT

1 Program Element 1B8392	2 Roap No. 58AAK	3 Roap Title Assistance to Technology Transfer			4 Date 10/1/73	5 Page No 1 of 1
6 Total Tasks in Roaps 2	7 No. Tasks Completed 0	8 No. Active Tasks 2	9 No. on Schedule 2	10 No. Completed CFY 0	11 No. Delayed 0	12 12
13 Program Chief Frank H. Rainwater		14 Roap Manager Alden Christianson			15 15	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17 REMARKS.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example delay in
 advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BB036		2 Roap No. 21AVS		3 Roap Title Tech Assistance - Heavy Industrial Sources			4 Date 9/26/73		5 Page No -----1-----		
6 Total Tasks in Roaps		7 No Tasks Completed 0		8 No Active Tasks 1		9 No on Schedule		10 No Completed CFY 0		11 No Delayed 0	
13 Program Chief Marvin L. Wood				14 Roap Manager Leon H. Myers				15			

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17 REMARKS:

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

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QUARTERLY ROAP STATUS REPORT

1 Program Element 1BB036	2 Roap No 21AZN	3. Roap Title Tech Res for the Elimination of, etc. Steel, Machinery, Transportat. & Metal Finishings		4 Date 10/9/73	5 Page No -- 1 -- of -- 1 --
6. Total Tasks in Roaps 13	7. No Tasks Completed 0	8. No Active Tasks	9. No. on Schedule 12	10. No Completed CFV	11. No. Delayed 1
13. Program Chief Durham		14 Roap Manager Tudor Davies			15.

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
08	"Demonstration of Ultrafiltration for Treatment of Central Cutting Oil Sys. Emulsion Effluents" Formerly 21ARE-1BB036-05	2			FF	Recommend that these funds be released as soon as possible	

17. REMARKS

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

Technology Research for the Elimination

1. Program Element 1BB036	2. Roap No. 21AZP	3. Roap Title Of the Discharge of Pollutants from the Petrochemical & Petroleum Refinery Industries			4. Date 9/26/73	5. Page No 1 of 1
6. Total Tasks in Roaps 25	7. No. Tasks Completed 0	8. No. Active Tasks 6	9. No. on Schedule 6	10. No. Completed CFY 0	11. No. Delayed 0	12.
13. Program Chief Marvin Wood		14. Roap Manager Leon Myers			15.	

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17 REMARKS

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element 1BB036	2. Roap No. 21-AZR	3. Roap Title Technology Research for the Elimination Discharge of Pollutants from the Ag. Chem. Ind.			4. Date 26 Sep 73	5. Page No 1 of 4
6. Total Tasks in Roaps 35	7. No. Tasks Completed 5	8. No. Active Tasks 13	9. No. on Schedule 6	10. No. Completed CFY 0	11. No. Delayed 7	12.
13. Program Chief Dr. H. P. Nicholson		14. Roap Manager Dr. R. R. Swank, Jr.			15.	

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
06	ROAP Administration/Monitoring-Industrial Task Force analysis with PERTS for BPT/BAT response (ORD plan for FY-75 ff cycles)	2	9/73	11/73	DA	1. Reestablish deadline - Use industry - comments to draft guidelines. 2. Prepare PERT/plan 10/11/73 as part of pre-ROAP cycle.	Dir. NERC-C plus Trakowski Plans-PED & ROAP Mgr.
07	Integrated fluorine/slime control for phos-acid/phosphate complexes -- initiate scope revision and experimental phase.	4	5/73	9/73	AG (FL)	Technical scope revisions/ timing for fluorine control/ recovery phases be re-negotiated to accelerate project.	Project Officer & Technical Asst.

17. REMARKS. General:

1. Please clarify SRO status with regard to FY-74 submission - they are crucial to success of this ROAP.
 2. Please clarify future SRO submission procedures, approval modes, fiscal responsibility, program control mechanisms, and initiator feedback rights before the FY-75 ROAP cycle has begun.
- Task 06: Delay due to excessive demands for Effluent Guidelines (2 industries) support.
- Task 07: Approval by AAR of scope change submitted in November 1972 was delayed until July 1973. Slime obviation phase was initiated 9/73. Fluorine phases will now be further delayed due to rescheduling technical difficulties arising from long elapsed time awaiting scope approval.

REASON FOR DELAY CODE

<u>FUNDING -- F</u>	<u>ADMINISTRATIVE - A</u>	<u>STAFFING - OTHER -- D/O</u>
FF - Funds Frozen	AD - Equipment Delays	DA - Diversion of Staff for Technical Assistance
FI - Funding Insufficient	AF - Equipment Failure	DO - Diversion of Staff for Other Than Technical Assistance (specify)
FD - Funds Diverted (specify)	AG - Grant/Contract Delay (specify)	O - Other (specify)
FL - Funds Late (Example: delay in advice of allowance)	AO - Other Administrative (specify)	
	AP - Personnel Problems (specify)	

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BB036	2 Roap No. 21-AZR	3. Roap Title (See Page 1)			4. Date 26 Sep 73	5. Page No 2 of 4
6 Total Tasks in Roaps	7. No Tasks Completed	8. No Active Tasks	9. No. on Schedule	10. No Completed CFY	11. No. Delayed	12.
13. Program Chief		14. Roap Manager			15.	

16. TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
09	Feasibility of ionizing radiation to degrade aqueous pesticide wastes.	3	7/74	10/74	AF	1. Reassess candidate promoters - try new oxidizing modes. 2. Test other (non-pesticide) chlorinated wastes (aqueous) - use brine values.	Project Director in conjunction with EPA PO.
14	Integrated air-water technology for balanced N-fertilizer complexes (SRO 51-AZR-1A2012-14).	3	3/74	6/74	AG (FL)	1. Clarify SRO status immediately. 2. Approve SRO and assign responsibilities and budget. 3. Initiate industrial contacts - prepare project plan.	Dirs. NERC-C & NERC-RTP Trakowski Appointed PO's.

17 REMARKS: Task 09: Promoters/catalysts tried to date have not proven effective. Apparent requirement to solubalize pesticidal component has also caused difficulty for "concentrated" wastes.

Task 14: SRO status unknown - official inquiries have been initiated - no feedback. Prospects for industrial cooperation unclear due to EPA indecision.

REASON FOR DELAY CODE

FUNDING -- F

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 FD - Funds Diverted (specify)
 FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

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 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BB036	2 Roap No 21-AZR	3. Roap Title (See Page 1)			4. Date 26 Sep 73	5. Page No 3 of 4
6 Total Tasks in Roaps	7. No Tasks Completed	8 No. Active Tasks	9. No. on Schedule	10 No Completed CFY	11. No. Delayed	12
13 Program Chief		14. Roap Manager			15.	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
15	Emissions survey and control technology for fertilizer (mixed fertilizer-pesticide) bulk blend plants (SRO 21AZR-1A2015-15)	2 (May be 12)	10/73	12/73	AG (FL)	1. Clarify SRO status immediately. 2. Approve SRO and assign responsibilities/budgets. 3. Renegotiate, expedite, or reject grant application in system as appropriate immediately. Delay beyond 12/73 will force delay of 12 months due to seasonal nature of operation.	Dirs. NERC-C & NERC-RTP Trakowski Assigned PO's.

17 REMARKS. Task 15: SRO status unknown. Official inquiries have been initiated -- no feedback.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element 1BB036	2. Roap No. 21-AZR	3. Roap Title (See Page 1)			4. Date 26 Sep 73	5. Page No 4 of 4
6. Total Tasks in Roaps	7. No. Tasks Completed	8. No. Active Tasks	9. No. on Schedule	10. No. Completed CFY	11. No. Delayed	12.
13. Program Chief		14. Roap Manager			15.	

16. TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
16	Bioassay (acute and chronic) of effluents from developed/developing pesticide treatment and discharge (BPT) class R&D projects. (SRO 51-AZR-1B1021-16)	8	7/73	2/74	AG	1. Same as Tasks 14 & 15. 2. Coordinate with Duluth staff in "complex industrial effluents program" to meet need (SRO).	Same as Tasks 14 & 15. Dir. NERC-C PED 1BB036 PO's involved.
17	Ammonia plant condensate treatment (closed cycle - air and water)	3	10/73	1/74	AG (FL) AO	1. Clarify interface. 2. Negotiate grant (in system) to meet need as redefined. 3. Expedite grant (redefined) processing and initiation.	PO-1BB036 and PED - 1BB036

17 REMARKS. Task 16: SRO status unknown - see remarks for Tasks 14 and 15.
Task 17: 1. Grant application was received late. 2. Advice of allowance not received. 3. Minor scope/budget questions need resolution prior to grant funding approval. 4. Successful interface both technologically and managerially with Tasks 12 and 14 must be assured during scope revision discussions.

REASON FOR DELAY CODE

FUNDING -- F	ADMINISTRATIVE - A	STAFFING - OTHER -- D/O
FF - Funds Frozen	AD - Equipment Delays	DA - Diversion of Staff for Technical Assistance
FI - Funding Insufficient	AF - Equipment Failure	DO - Diversion of Staff for Other Than Technical Assistance (specify)
FD - Funds Diverted (specify)	AG - Grant/Contract Delay (specify)	O - Other (specify)
FL - Funds Late (Example delay in advice of allowance)	AO - Other Administrative (specify)	
	AP - Personnel Problems (specify)	

QUARTERLY ROAP STATUS REPORT

1 Program Element 1B8036	2 Roap No 21AZT	3. Roap Title Technology Research for the Elimination of the Discharge of Pollutants from Textile Industry			4. Date 10/1/73	5 Page No 1 of 1
6 Total Tasks in Roaps 16	7. No Tasks Completed 03	8. No. Active Tasks 05	9. No on Schedule 03	10. No. Completed CFV 0	11 No Delayed 02	12.
13. Program Chief Dr. H.P. Nicholson		14. Roap Manager Mr. T.N. Sargent			15.	

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
08	Extramural project - Demonstrate membrane technology recycle/reuse at multiple sites	03	9/30/73	12/31/73	AG/Grant application will be submitted late	Work with potential grantee in formulating proposal	ROAP Mgr
09	Extramural project - Demonstrates the reduction/elimination of dye waste discharges using solvent dying systems	**	10/31/73	**	AG	Attempt to interest appropriate segments of the industry in cooperating in this project.	ROAP Mgr

17 REMARKS:

**Task 21AZT-09 - No interest expressed in this task to date by textile industry. "Months delayed" and "proposed target" can be estimated once initial contacts have been made with textile industry.

REASON FOR DELAY CODE

FUNDING -- F	ADMINISTRATIVE - A	STAFFING - OTHER -- D/O
FF - Funds Frozen	AD - Equipment Delays	DA - Diversion of Staff for Technical Assistance
FI - Funding Insufficient	AF - Equipment Failure	DO - Diversion of Staff for Other Than Technical Assistance (specify)
FD - Funds Diverted (specify)	AG - Grant/Contract Delay (specify)	O - Other (specify)
FL - Funds Late (Example: delay in advice of allowance)	AO - Other Administrative (specify)	
	AP - Personnel Problems (specify)	

QUARTERLY ROAP STATUS REPORT

Research for the Elimination of the Discharge

1 Program Element 1BB036	2 Roap No. 21AZV	3. Roap Title of Pollutants from Joint Industrial Municipal or Publicly Owned Treatment Workds			4. Date 9/26/73	5 Page No --- of ---
6 Total Tasks in Roaps 40	7. No Tasks Completed 0	8. No. Active Tasks 3	9. No on Schedule 3	10. No Completed CFY 0	11. No. Delayed 0	12.
13 Program Chief Marvin L. Wood		14 Roap Manager Leon H. Myers			15.	

16 TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17. REMARKS

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example: delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical
Assistance
DO - Diversion of Staff for Other Than
Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element IBB036	2. Roap No. 58 AAH	3. Roap Title Assistance to Technology Transfer	4. Date 2 Oct 73	5. Page No 1 of 1
6. Total Tasks in Roaps 03	7. No. Tasks Completed 0	8. No. Active Tasks 03	9. No. on Schedule 03	10. No. Completed CFY 0
11. No. Delayed 0		12		
13. Program Chief Dr. H.P. Nicholson		14. Roap Manager Mr. T. N. Sargent	15.	

18 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17. REMARKS.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element JBB037	2. Roap No. 21-AZX	3. Roap Title Demonstrate Closed-loop. . . Wood Pulping			4. Date 10/5/73	5. Page No. 1 of 1
6. Total Tasks in Roaps 7	7. No. Tasks Completed 0	8. No. Active Tasks 7	9. No. on Schedule 4	10. No. Completed CFY 0	11. No. Delayed 3	12.
13. Program Chief J.R. Boydston		14. Roap Manager H.K. Willard			15.	

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
02	Preparation bi-annual project assessment; evaluation of non-EPA Federal projects related to ROAP In-house assessment of effluent limitations etc.	3	a. 1/74 b. 7/74	3/74 7/74	DA	Delay final request date.	PEM
30	Water quality requirements for pulping water recycle.	--	--	--	FI	Transfer funds to 21-AZY: 12 when available	PED
03	Final report published.	1-3	--	--	AG & AO	PED has declined to carry out recommendation of P.O. This should be effected on grant 12040 DEH.	PED

17 REMARKS.

REASON FOR DELAY CODE

FUNDING -- F

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 FD - Funds Diverted (specify)
 FL - Funds Late (Example: delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element 1BB037	2. Roap No. 21-AZY	3. Roap Title Demonstrate Closed-loop. . . Paper Prod.			4. Date 10/5/73	5. Page No. 1 of 1
6. Total Tasks in Roaps 6	7. No. Tasks Completed 1	8. No. Active Tasks 5	9. No. on Schedule 1	10. No. Completed CFV 1	11. No. Delayed 4	12.
13. Program Chief J.R. Boydston		14. Roap Manager J.S. Ruppertsberger			15.	

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
09	Final reports published.	1-3	--	--	AG	Adjust completion date.	P.O. (RM)
10	In-house report preparation.	1-3	a. 1/74 b. 3/74 c. 7/74	3/74 6/74 --	DA & AF	Delay final request date.	PEM
12	Grant	3			FF	Relax freeze.	PAG
13	Grant	3			FF	Relax freeze. *	

17. REMARKS:

* Light small bon fire under chair of D.O.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE -- A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element 18B037	2. Roap No. 21-AZZ	3. Roap Title Industrial...Control Wood Products			4. Date 10/5/73	5. Page No. --1-- of --1--
6. Total Tasks in Roaps 4	7. No. Tasks Completed 0	8. No. Active Tasks	9. No. on Schedule 1	10. No. Completed CFY 0	11. No. Delayed 2	12.
13. Program Chief J.R. Boydston		14. Roap Manager A.L. Ewing			15.	

16. TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
07	Final report published.	1-3	--	--	AD	Adjust completion date.	P.O. (RM)
08	In-house bi-annual reports.	1-3	--	--	DA	Delay final request date.	PEM
09	Grant	3	--	--	FF	Relax freeze.	PAG

17. REMARKS:

REASON FOR DELAY CODE

<u>FUNDING -- F</u>	<u>ADMINISTRATIVE -- A</u>	<u>STAFFING - OTHER -- D/O</u>
FF - Funds Frozen	AD - Equipment Delays	DA - Diversion of Staff for Technical Assistance
FI - Funding Insufficient	AF - Equipment Failure	DO - Diversion of Staff for Other Than Technical Assistance (specify)
FD - Funds Diverted (specify)	AG - Grant/Contract Delay (specify)	O - Other (specify)
FL - Funds Late (Example delay in advice of allowance)	AO - Other Administrative (specify)	
	AP - Personnel Problems (specify)	

QUARTERLY ROAP STATUS REPORT

1 Program Element TBB037	2 Roap No. 21-BAA	3 Roap Title Industrial. . .Meat & Edible Oils	4 Date 10/9/73	5 Page No 1 of 1
6 Total Tasks in Roaps 46	7 No Tasks Completed 9	8 No. Active Tasks 15	9 No. on Schedule 11	10 No. Completed CFY 0
13 Program Chief J.R. Boydston		14 Roap Manager J.L. Witherow		15.

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
12	Demonstrate aerobic treatment & spray irrigation for small meat packers	18	9/73	3/75	DO Temp. position frozen.	See Task 13	--
13	In-house analytical support of Task 12	18	9/73	3/75	AG Error in contract procedures	Wait for contracting officer to act.	NERC Cin.
14	In-house direction of Task 12.	18	9/73	3/75	O Result of 12 & 13	Wait for Task 13.	--
19	Demonstrate fluid bed dryer and incineration	--	10/74	--	AG Grant offer rejected	Delete Task.	PAM

17 REMARKS:

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example delay in
 advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element 1BB037	2. Roap No. 21-BAB	3. Roap Title Industrial. . .Fruits, Vegetables, Sugar & Bakery Products			4. Date 10/9/73	5. Page No ---1--- of ---2---
6. Total Tasks in Roaps 100	7. No. Tasks Completed 26	8. No. Active Tasks 17	9. No. on Schedule 9	10. No. Completed CFY 0	11. No. Delayed 8	12.
13. Program Chief J.R. Boydston		14. Roap Manager H.W. Thompson			15.	

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
28	State of art - prepared food industry	4	8/73	12/73	AG Grantee sampling delayed	Extension requested.	P.O.
29	Pilot plant - low liquid waste vegetable blancher.	2	10/73	12/73	DA	Grant extended.	--
		7	2/74	2/74	AG Director left country	Extend termination.	D.O.
31	State of art - sweet potato	3	8/73	11/73	DA	Extend termination	P.O.
33	By-products from waste activated sludge.	6	9/73	3/74	AG No appl.	Wait for application.	--

17 REMARKS

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

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 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BB037	2 Roap No. 21-BAB	3 Roap Title Industrial. . .Fruits, Vegetables, Sugar & Bakery Products	4 Date 10/9/73	5 Page No ---2--- of ---2---
6 Total Tasks in Roaps 100	7 No. Tasks Completed 26	8 No Active Tasks 17	9 No. on Schedule 9	10 No Completed CFY 0
11 No. Delayed 8		12.		
13 Program Chief J.R. Boydston		14 Roap Manager H.W. Thompson		15.

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
36	Low water use - leafy vegetable cleaning.	4	8/73	12/73	AG Appl. late	Process grant application.	D.O.
38	Low water use for cleaning root crops.	8	8/73	4/74	AG No appl.	Wait for application.	--
85	Cane harvesting & cleaning.	5	7/73	12/73	AG Three mo. strike	Grant extended.	--
88	Beet sugar unit process water quality requirements.	--	8/73	--	AG No appl.	Delete task.	PAM

17 REMARKS.

REASON FOR DELAY CODE

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FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element 1BB037	2. Roap No. 21-BAC	3. Roap Title Industrial . . . Grain Mills & Beverages			4. Date 10/9/73	5. Page No 1 of 1
6. Total Tasks in Roaps 34	7. No. Tasks Completed 5	8. No. Active Tasks 9	9. No. on Schedule 6	10. No. Completed CFY 0	11. No. Delayed 3	12.
13. Program Chief J.R. Boydston		14. Roap Manager M.W. Cochrane			15. 	

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
04	Treatment and reuse in wine production.	8	8/73	4/73	FF & AG No appl.	Wait for grant application.	--
08	Activated sludge treatment of winery wastewater.	5	7/73	12/73	DA	Complete review of final report.	P.O.
10	Pilot plant treatment of wine stillage.	5	7/73	12/73	DA	Complete review of final report.	P.O.

17 REMARKS:

REASON FOR DELAY CODE

<u>FUNDING -- F</u>	<u>ADMINISTRATIVE - A</u>	<u>STAFFING - OTHER -- D/O</u>
FF - Funds Frozen	AD - Equipment Delays	DA - Diversion of Staff for Technical Assistance
FI - Funding Insufficient	AF - Equipment Failure	DO - Diversion of Staff for Other Than Technical Assistance (specify)
FD - Funds Diverted (specify)	AG - Grant/Contract Delay (specify)	O - Other (specify)
FL - Funds Late (Example delay in advice of allowance)	AO - Other Administrative (specify)	
	AP - Personnel Problems (specify)	

QUARTERLY ROAP STATUS REPORT

1. Program Element TBB037	2. Roap No. 21-BAD	3. Roap Title Dairy Products and Industrial . . . Miscellaneous Foods			4. Date 10/9/73	5. Page No ---1--- of ---1---
6. Total Tasks in Roaps 42	7. No. Tasks Completed 10	8. No. Active Tasks 8	9. No. on Schedule 6	10. No. Completed CFY 0	11. No. Delayed 2	12.
13. Program Chief J.R. Boydston		14. Roap Manager M.W. Cochrane			15. 	

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
05	Dissolved-air flotation of seafood processing waste.	9	6/73	3/73	FF & AG No appl.	Wait for grant application.	--
14	Literature review - misc. food processing wastes.	7	8/73	3/73	FF & AG No appl.	Wait for grant application.	--

17 REMARKS:

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example: delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element 1BB037	2. Roap No. 21-BAE	3. Roap Title Industrial, . . . Misc. Ind./Stone, Clay, Glass			4. Date 10/9/73	5. Page No --]---- of ---]-----
6. Total Tasks in Roaps 12	7. No. Tasks Completed 0	8. No. Active Tasks 12	9. No. on Schedule 10	10. No. Completed CFY 11	11. No. Delayed 2	12.
13. Program Chief J.R. Boydston		14. Roap Manager M.D. Knittel			15.	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
17	Grant - reuse brines from ion exchange softening.	3	8/73	11/73	AF	Extend grant period.	P.O.
18	Mag. carb. coag. for municipal water.	3	9/73	12/73	AF (1)	Extend grant period.	P.O.

17 REMARKS

(1) Grant amendment issued 7/73.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example: delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BB037	2. Roap No 21-BAF	3 Roap Title Industrial. . .Joint Light Ind./Munic.			4. Date 10/9/73	5. Page No 1 of 1
6 Total Tasks in Roaps 12	7. No Tasks Completed 2	8. No Active Tasks 10	9 No on Schedule 11	10. No Completed CFY 10	11 No. Delayed 1	12
13 Program Chief J.R. Boydston		14 Roap Manager M.D. Knittel			15.	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
17	Pilot processing for cleaning sugar cane.	3	9/73	12/73	AD	Extend grant period.	P.O.

17 REMARKS.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

Information & Guidelines for Management

1 Program Element 1BB039	2 Roap No. 21 AYN	3. Roap Title Of Animal Wastes, Irrigation Return Flows, & Other Agriculture Related Non-Point Sources			4 Date 9/20/73	5 Page No ----1--- of ---1---
6 Total Tasks in Roaps 18	7 No Tasks Completed 9	8 No Active Tasks 8	9 No on Schedule 8	10 No Completed CFY 0	11 No Delayed 0	12
13. Program Chief Marvin L. Wood		14 Roap Manager Lynn R. Shuyler			15	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17. REMARKS:

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

Development & Demonstration of Crop/Soil/Water

1 Program Element 1BB039	2 Roap No. 21AYR	3. Roap Title Management Methods to Reduce Volume and Pollutants in Irrigation Return Flow	4 Date 9/26/73	5. Page No ---1--- of ---1---
6 Total Tasks in Roaps 17	7 No Tasks Completed 6	8. No Active Tasks 8	9. No on Schedule 7	10. No Completed CFY 0
13 Program Chief Marvin L. Wood		14. Roap Manager James P. Law, Jr.		15 1

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
08	Prototype evaluation of irrigation management practices (In-house)	12	6/30/75	6/30/76	FI/O	Project now underway. Man- years assigned inadequate	Headquarter

17 REMARKS.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element TBB039	2 Roap No. A2TAYR	3. Roap Title (Same as 21 AYR)				4 Date 9/26/73	5 Page No 1 of 1
6 Total Tasks in Roaps 9	7. No. Tasks Completed 0	8. No. Active Tasks 3	9. No. on Schedule 3	10. No. Completed CFY 0	11. No. Delayed 0	12	
13. Program Chief Marvin L. Wood		14. Roap Manager James P. Law, Jr.			15		

16. TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17 REMARKS.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example: delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element TBB039		2. Roap No 21AYS		3. Roap Title Development & Demonstration of Predictive Methods for Managing Irrigation Return Flows			4. Date 9/26/73		5. Page No 1 of 1		
6. Total Tasks in Roaps 8		7. No. Tasks Completed 1		8. No. Active Tasks 4		9. No. on Schedule 4		10. No. Completed CFV 0		11. No. Delayed 0	
13. Program Chief Marvin L. Wood				14. Roap Manager James P. Law, Jr.				15.			

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17 REMARKS:

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

Land Disposal, Treatment and Control

1 Program Element 1BB039	2 Roap No A21AYV	3 Roap Title Concepts for Wastes from Animal Feeding Enterprises	4 Date 9/20/73	5 Page No 1 of 1
6 Total Tasks in Roaps 05	7 No Tasks Completed 0	8 No Active Tasks 3	9 No on Schedule 2	10 No Completed CFY 0
11 No Delayed 1	12	13 Program Chief Marvin L. Wood	14 Roap Manager Lynn R. Shuyler	15

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
03	Develop user-oriented state-of-the-art for land disposal of animal wastes, delineating land loading criteria for major production areas, including mathematical runoff and infiltration modeling where available.	4	9/1/73	1/1/74	FF	Ask for release of funds when grant package is ready for processing	HQ

17 REMARKS

03 Formal application for funds is not ready as of this date; it is expected within 30 days.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

Land Disposal, Treatment & Control

1 Program Element 1BB039	2 Roap No 21AYV	3. Roap Title Concepts for Wastes from Animal Feeding Enterprises			4 Date 9/20/73	5 Page No 1 of 2
6 Total Tasks in Roaps 24	7 No Tasks Completed 4	8 No. Active Tasks 16	9 No. on Schedule 13	10 No. Completed CFY 1	11 No Delayed 4	12
13 Program Chief Marvin L. Wood		14 Roap Manager Lynn R. Schuyler			15	

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
03	Demonstration of rotating biological contractor for treatment of swine wastes and recycled waste water for confinement building flushing systems.	4	2/1/73	6/30/73	AD	Extension granted by PO and HQ prior to NERC having authority.	PO
05	To modify existing soils with barrier at a depth which will enhance the soils ability to remove nitrogen and phosphate from waste water and allow recovery & reuse of the waste water.	6	3/30/73	9/30/73	0	Extension granted by PO	PO
06	To study the effectiveness of liquid aerobic composting on dairy wastes in Chino Valley, California, and to evaluate the results of such a system.	4	5/30/73	10/30/73	0	Extension granted	PO

- 17 REMARKS 03 - Project is finished; please note change of stop date.
 05 - Additional data was obtained by extending the grant period without additional funding.
 06 - This extension was needed to evaluate the system during hot weather.
 17 - Grant application not received this date. Due to shortage of funds, task may be deactivated to allow continuation of ongoing work.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

Land Disposal, Treatment & Control

1 Program Element 188039	2 Roap No. 21AYV	3 Roap Title Concepts for Wastes from Animal Feeding Enterprises	4 Date 9/20/73	5 Page No ---2--- of ---2---
6 Total Tasks in Roaps 24	7 No Tasks Completed 4	8 No Active Tasks 16	9 No on Schedule 13	10 No Completed CFY 1
11 No. Delayed 4	12	13	14	15.
13 Program Chief Marvin L. Wood		14 Roap Manager Lynn R. Shuyler		

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
17	Demonstrate spray runoff treatment methods for central plains for beef cattle feedlot located in moderate rainfall area.		8/1/73 Start		AG,FD	Possible deactivation of task for FY -74	Lab Dir

17 REMARKS

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element		2 Roap No		3. Roap Title Formulation & Field Verification of		4 Date		5 Page No					
1BB039		21AYP		Pesticide & Nutrient Runoff Mathematical Models		9/27/73		--- 1 --- of --- 3 ---					
6 Total Tasks in Roaps		7 No Tasks Completed		8. No Active Tasks		9. No on Schedule		10 No Completed CFY		11 No. Delayed		12.	
53		5		22		11		0		11			
13 Program Chief				14 Roap Manager				15					
Dr. H. P. Nicholson				Dr. George W. Bailey									

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
05	Res Grant (R800401) Nutrient Input to Streams from Fertilizer	6	6/30/73	12/30/74	AG Initial Draft Late	Lean on grantee garder to finish final report	Project Officer
06	Res Grant (13020EBL) Pesticide Movement from Cropland into Lake Erie	6	6/30/73	12/30/74	AG Initial Draft Late	Complete review of initial draft of final report	Project Officer
08	Data Reduction and Analysis for Initial Testing and Model Calibration	3	6/30/73	10/1/73	0 Data Not Available from IA Agreement Cooperator	None	

17 REMARKS Extensive ROAP revisions are required; these resulting from redefinition of agency needs & deadlines as viewed by PAM. ROAP revisions cannot be completed until resource issues are resolved; program review with Assistant Administrator for R&D required to resolve critical issues (originally scheduled for 9/20/73 but cancelled & not rescheduled as yet). Slippage in model development contracts due to data transmittal problems/or model redefinition requirements. Differences between FY & growing season complicate model testing & development. PERT chart completed for development, calibration, testing & verification of pesticide & plant nutrient models in 4 major geographic regions through FY 80 (projected program completion date). ROAP revisions anticipated include tasks 17, 18, 19, 20, 21, 26, 27, 30, 32, and 33.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BBO39	2 Roap No. 21AYP	3 Roap Title Formulation & Field Verification of Pesticide & Nutrient Runoff Mathematical Models			4 Date 9/27/73	5 Page No --- 2 --- of --- 3 ---
6 Total Tasks in Roaps 53	7 No. Tasks Completed 5	8 No Active Tasks 22	9 No. on Schedule 11	10 No Completed CFV 0	11 No. Delayed 11	12
13. Program Chief Dr. H. P. Nicholson		14 Roap Manager Dr. George W. Bailey			15	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
10	ROAP Supervision - Interim Report, Pesticide Runoff Model Piedmont, Rest of Milestones on Schedule	2	8/15/73	10/15/73	AO Chge in Output Nds	ROAP revision - Change to interim in-house report on FY-73 work plan	ROAP Manager
11	Contract (68-01-0721) Pesticide Runoff Model Definition & Testing, Mechanistic Approach ESL	5	8/30/73	1/30/74	AG Scope Chge Needed	Action of proposed scope change	Project & Contracting Officers
12	Contract (68-01-0887) Pesticide Runoff Model Definition Testing Lumped Parameter Approach - Hydrocomp	4	8/26/73	12/30/73	AG Needed Data not Transmitted	Action taken	Project Officer
15	Res Grant (801835) Pesticide Volatility Sub-Model	6	10/30/73	4/30/74	AP Delay in Filling Post-Doc. Position	Give grant extension (ROAP target date in error)	Project Officer

17 REMARKS

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BB039	2 Roap No. 21AYP	3. Roap Title Formulation & Field Verification of Pesticide & Nutrient Runoff Mathematical Models			4 Date 9/27/73	5 Page No ---3--- of ---3---
6 Total Tasks in Roaps 53	7 No Tasks Completed 5	8 No Active Tasks 22	9 No. on Schedule 11	10 No Completed CFY 0	11 No. Delayed 11	12
13 Program Chief Dr. H. P. Nicholson		14 Roap Manager Dr. George W. Bailey			15	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
19	Pesticide Microbial Degradation Sub-Model	3	9/15/73	12/15/73	DO Diversion to Task 24	Re-direct personnel	Program Chief
22	Organism Uptake Sub-Model	2	10/15/73	12/15/74	DO Diversion to 21AYP, 24	Re-direct personnel	Program Chief
26	Contract for Software Development and Data Reduction for Tasks 11, 12, & 23	4	9/30/73	1/30/74	AO	Re-define task after Agency & program needs redefined (see remarks)	AAR&D PAM, PED Program Chief
27	Contract for Correlation & Analysis of Field Data from Task 23	3	11/1/73		AO	Re-define task after Agency program needs redefined (see remarks)	AAR&D PAM, PED Prog Chief

17 REMARKS

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BB039	2 Roap No 21AYU	3. Roap Title Waste Treatment & Disposal Sys for Poultry Waste			4 Date 9/25/73	5 Page No ---1--- of ---1---
6 Total Tasks in Roaps 3	7 No Tasks Completed 0	8 No Active Tasks 3	9 No on Schedule 2	10 No Completed CFY 0	11 No Delayed 1	12
13 Program Chief H. P. Nicholson		14 Roap Manager Lee A. Mulkey				

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
02	Development of Biological Treatment System Coupled with Land Disposal for Egg Production Wastes	1	9/1/73	10/15/73	FF	Request Funds Release	HQ

17 REMARKS Delays in grant award (this is continuation award for final year of a three-year project) are creating substantial administrative and financial difficulties for grantee.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element 1BB039	2 Roap No. 21BBV	3. Roap Title Criteria Development for Agricultural Chemical Usage	4 Date 10/1/73	5 Page No 1 of 1
6 Total Tasks in Roaps 2	7 No. Tasks Completed 0	8 No Active Tasks 2	9. No. on Schedule 2	10 No Completed CFY 0
11 No Delayed 0		12.		
13 Program Chief Dr. H. P. Nicholson		14 Roap Manager L. A. Mulkey		15.

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17 REMARKS.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example: delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BB040	2 Roap No. 21 AGD	3 Roap Title Control of Pollution Caused by Oil Production	4 Date 9/25/73	5 Page No -----1-----of-----1-----
6 Total Tasks in Roaps 9	7 No Tasks Completed 0	8 No Active Tasks 1	9 No on Schedule 1	10 No Completed CPV 0
11 No Delayed 0		12		
13 Program Chief Marvin L. Wood		14 Roap Manager Fred M. Pfeffer		15

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17 REMARKS.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1B8040	2 Roap No. 21AGF	3 Roap Title Mining Sources (Ores)			4 Date 9/25/73	5 Page No ----- of -----
6 Total Tasks in Roaps 9	7 No Tasks Completed 1	8 No Active Tasks 2	9 No on Schedule 0	10 No Completed CFY 1	11 No Delayed 2	12
13 Program Chief Marvin L. Wood		14 Roap Manager James E. Moyer			15	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
02	State-of-the-Art; Uranium Mining, Milling, and Refining Industry	3	6/30/73	10/31/73	DO	Final review & publication	M.L. Wood
16	Evaluation of Tailings Pond Sealants	3	6/30/73	12/31/73	DO	Resume report writing	M.L. Wood

17 REMARKS: Reason for delay - Assignment of personnel to API-EPA Oil Refinery Survey and compilation of priority report (Task 05) for ore mining industries.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BBO40	2 Roap No 21AGG	3. Roap Title Mining Sources (Sand and Gravel)			4 Date 9/25/73	5 Page No ----- of -----
6 Total Tasks in Roaps 10	7. No Tasks Completed 0	8. No Active Tasks 1	9. No on Schedule 0	10 No Completed CFY 0	11 No Delayed 1	12
13 Program Chief Marvin Wood		14 Roap Manager James E. Moyer			15	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
02	State-of-the-Art: Sand and Gravel	3	6/30/73	10/31/73	DO	Complete report	M. Wood

17 REMARKS Reason for delay - Assignment of personnel to API-EPA Oil Refinery Survey, compilation of priority report (ROAP 21AGF, Task 05) for ore mining industries, and inability to obtain state regulatory documents.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

1 Program Element IBB042	2 Roap No. 21AG1	3 Roap Title Control of Poll Caused by Construction Project			4 Date 10/9/73	5 Page No 1 of 1
6 Total Tasks in Roaps 4	7 No Tasks Completed 0	8 No. Active Tasks	9 No on Schedule 4	10 No Completed CFY	11 No. Delayed 0	12
13 Program Chief Thomas		14 Roap Manager Tudor Davies			15.	

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17. REMARKS:

<u>FUNDING -- F</u>	<u>ADMINISTRATIVE - A</u>	<u>STAFFING - OTHER -- D/O</u>
FF - Funds Frozen	AD - Equipment Delays	DA - Diversion of Staff for Technical Assistance
FI - Funding Insufficient	AF - Equipment Failure	DO - Diversion of Staff for Other Than Technical Assistance (specify)
FD - Funds Diverted (specify)	AG - Grant/Contract Delay (specify)	O - Other (specify)
FL - Funds Late (Example delay in advice of allowance)	AO - Other Administrative (specify)	
	AP - Personnel Problems (specify)	

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BB042	2 Roap No. A21AG1	3. Roap Title Control of Poll Caused by Construction Project	4 Date 10/9/73	5. Page No 1 of 1
6 Total Tasks in Roaps 2	7. No. Tasks Completed 0	8. No Active Tasks	9. No on Schedule 2	10 No Completed CFY
13 Program Chief Thomas	14 Roap Manager Tudor Davies	15.	11 No. Delayed 0	12.

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17 REMARKS:

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
DO - Diversion of Staff for Other Than Technical Assistance (specify)
O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element TBB044	2 Roap No. 21ASF	3. Roap Title Alaska Village Demonstration Project			4. Date 10/05/73	5 Page No --- of ---
6 Total Tasks in Roaps 8	7 No. Tasks Completed 3	8 No. Active Tasks 4	9 No. on Schedule 3	10 No. Completed CFY 0	11 No. Delayed 1	12
13 Program Chief Richard W. Latimer		14. Roap Manager Merritt A. Mitchell			15.	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
05	Operation of Emmonak and Wainwright projects for evaluation	3	07/73	10/73	A.G.	Action has been taken to complete negotiations for contracts	Program Chief

17 REMARKS.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
 FI - Funding Insufficient
 FD - Funds Diverted (specify)
 FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA - Diversion of Staff for Technical Assistance
 DO - Diversion of Staff for Other Than Technical Assistance (specify)
 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1. Program Element 1BB044 C	2. Roap No. 21ASG	3. Roap Title Treatment for Municipal Wastes in Cold Climates			4. Date 10/05/73	5. Page No ---1--- of ---1-----
6. Total Tasks in Roaps 9	7. No. Tasks Completed 3	8. No. Active Tasks 4	9. No. on Schedule 2	10. No. Completed CFY 0	11. No. Delayed 2	12 12
13. Program Chief Richard W. Latimer		14. Roap Manager Barry H. Reid			15.	

16. TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
04	Inventory of non-conventional process with application in Arctic	3	3/74		D.O.	Reprogram .3 MY (no funds) FROM 21ASG to 21ASF	Lab.Dir.
05	Conference on non-conventional processes	3	3/74		D.O.		

17 REMARKS. This reprogram action is within the same program element 1BB044

REASON FOR DELAY CODE

FUNDING -- F

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 FD - Funds Diverted (specify)
 FL - Funds Late (Example: delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

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QUARTERLY ROAP STATUS REPORT

1 Program Element 1BB045	2 Roap No. 21-ASJ	3 Roap Title Biological/Ecological Municipal Wastewater Treatment/Control Systems				4 Date 10-2-73	5 Page No -----1-----of-----1-----
6 Total Tasks in Roaps 4	7 No Tasks Completed 1	8 No Active Tasks 3	9 No on Schedule 3	10 No Completed CFY 0	11 No Delayed 0	12	
13 Program Chief Curtis C. Harlin, Jr.		14 Roap Manager W. C. Galegar			15		

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17. REMARKS: Completion date for Task 02 was extended to November 30, 1973.

REASON FOR DELAY CODE

FUNDING -- F

FF - Funds Frozen
FI - Funding Insufficient
FD - Funds Diverted (specify)
FL - Funds Late (Example delay in
advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
AF - Equipment Failure
AG - Grant/Contract Delay (specify)
AO - Other Administrative (specify)
AP - Personnel Problems (specify)

STAFFING - OTHER-- D/O

DA - Diversion of Staff for Technical Assistance
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O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1BB045	2 Roap No. 21-ASH	3. Roap Title Soil Systems for Municipal Wastewater Treatment			4 Date 10-2-73	5. Page No ---1--- of ---1---
6. Total Tasks in Roaps 37	7 No. Tasks Completed 6	8. No Active Tasks 17	9 No on Schedule 15	10. No. Completed CFY 0	11 No Delayed 2	12
13 Program Chief Curtis C. Harlin, Jr.		14 Roap Manager William C. Galegar			15.	

16. TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
14	Testing of infiltration-percolation approach for hydrology, nutrient removal, organic removal and microorganism removal.	2	6/81		AD/DO ^{1/}	Finish report so involved personnel can be shifted to this project. Continue assembling equipment with available personnel.	Program Chief
15	Management of soil systems for land restoration through wastewater reuse.	3	6/79		AO/O ^{2/}	Resolution of the status of funding Task 19 during FY 75	HQS

17 REMARKS. ^{1/} Diversion of staff to complete project report on previously completed research.
^{2/} This task is preliminary laboratory work for Task 19 which is scheduled for funding in FY 75. At this time, there is a question whether or not Task 19 will be funded next year; therefore, nothing should be initiated under Task 15 until this decision is made.

Task 37 and 38 cover SRO's submitted to other program elements. The status of work under these tasks is not known at this time.

REASON FOR DELAY CODE

FUNDING -- F

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 FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

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 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

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 O - Other (specify)

QUARTERLY ROAP STATUS REPORT

1 Program Element 1B8045	2 Roap No A21-ASH	3. Roap Title Soil Systems for Municipal Wastewater Treatment			4 Date 10-2-/73	5 Page No --1-----of-----1---
6 Total Tasks in Roaps 14	7. No Tasks Completed 0	8. No Active Tasks 8	9. No on Schedule 8	10. No Completed CFY 0	11 No. Delayed 0	12
13 Program Chief Curtis C. Harlin, Jr.		14. Roap Manager W. C. Galegar			15	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom

17 REMARKS:

Task 06 is a supplement to ROAP 21-ASH, Task 11.
Task 07 is a supplement to ROAP 21-ASH, Task 12.

REASON FOR DELAY CODE

FUNDING -- F

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advice of allowance)

ADMINISTRATIVE - A

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AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

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QUARTERLY ROAP STATUS REPORT

1 Program Element 1E1077	2. Roap No 10AKC	3. Roap Title Effects of Selected Hazardous Synthetic Organics on the Ecology of the Coastal Environment			4 Date 10/4/73	5 Page No 1 of 1
6 Total Tasks in Roaps 40	7. No Tasks Completed 8	8. No Active Tasks 32	9. No on Schedule 31	10. No. Completed CFY 0	11 No. Delayed 1	12
13 Program Chief		14 Roap Manager Thomas W. Duke			15.	

16 TASKS DELAYED

Task No.	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
13	Begin spawning experiments with grass shrimp	4	7/1/73	11/30/73	DA	Action has been taken. Tanks, lights, and temperature-regulating equipment have been ordered.	Research Coordinator

17 REMARKS.

REASON FOR DELAY CODE

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 FD - Funds Diverted (specify)
 FL - Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD - Equipment Delays
 AF - Equipment Failure
 AG - Grant/Contract Delay (specify)
 AO - Other Administrative (specify)
 AP - Personnel Problems (specify)

STAFFING - OTHER -- D/O

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QUARTERLY ROAP STATUS REPORT

1 Program Element 1E1077	2 Roap No. 25AJN	3 Roap Title Effects of Specific Biotic and Abiotic Factors on Estuarine Eco-systems.			4 Date 10/4/73	5 Page No 1 of 1
6 Total Tasks in Roaps 10	7 No. Tasks Completed 0	8 No. Active Tasks 10	9 No. on Schedule 10	10 No. Completed CFY 0	11 No. Delayed 0	12
13 Program Chief		14 Roap Manager Thomas W. Duke			15	

16 TASKS DELAYED

Task No	Brief Description	months delayed	original target	proposed target	Reason	Recommended Action	By Whom
10	Milestone "Issue RFP 7/30/73" cancelled. The task has been re-programmed to read "Symposium on Assessment of Current Use and Possible Impact of Microbial Seed Cultures in Estuarine Ecosystems."		RFP 7/30/73	6/30/74	AO	Task reprogrammed for Symposium	Laboratory Director

17 REMARKS.

REASON FOR DELAY CODE

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FI -- Funding Insufficient
FD -- Funds Diverted (specify)
FL -- Funds Late (Example delay in advice of allowance)

ADMINISTRATIVE - A

AD -- Equipment Delays
AF -- Equipment Failure
AG -- Grant/Contract Delay (specify)
AO -- Other Administrative (specify)
AP -- Personnel Problems (specify)

STAFFING - OTHER -- D/O

DA -- Diversion of Staff for Technical Assistance
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O -- Other (specify)

PART IV

RESEARCH PUBLICATIONS

QUARTERLY ROAP STATUS REPORT

RESEARCH PUBLICATIONS

Program Chief: A.L. Lefohn

Program Element: 1AA006

Date: 9/30/73

ROAP	TASK	Publication Title	How Published (Give name of series or journal, etc., Number, and Date)	Portion of Task Completed (Check)		
				ALL	PART	NONE
21 ALU	19	Nitrogen Fixation on Granite Outcrop Pioneer Ecosystems.	The Bryologist, Vol. 76, No. 1, 1973.		X	
21 ALU	16	Lead Pollution: Records in So. California Coastal Sediments.	Science, Vol. 181, 10 Aug 73.		X	
21 ALU	Term. FY-72	Orovada, Nevada Basin Environmental Study.	Final Report of EPA Grant #APO 0944 July 1973.	X		

QUARTERLY ROAP STATUS REPORT

RESEARCH PUBLICATIONS

Program Chief: L.C. Raniere

Program Element: 1AA006

Date: 9/30/73

ROAP	TASK	Publication Title	How Published (Give name of series or journal, etc., Number, and Date)	Portion of Task Completed (Check)		
				ALL	PART	NONE
21 ALR	10	Effects of Ozone on Soybean Nodules.	Jour. of Environmental Quality Vol. 2, No. 3 Jul-Sept 1973		X	
21 ALR	10	Foliar Sensitivity of Soybeans to Ozone as Related to Several Leaf Parameters.	Environ. Pollution (4) 1973		X	
21 ALR	9	Response of Pinto Bean and Tobacco to Ozone as Conditioned by Light Intensity and/or Humidity.	Environ. Science & Technology Vol. 7, No. 9 Sept. 1973		X	
21 ALR	10	Ozone Alteration of Nitrate Reduc- tion in Soybean.	Physiol. Plant. Vol. 29 1973		X	
21 ALR	8	Foliar Injury Responses of Eleven Plant Species to Ozone/Sulfur Dioxide Mixtures.	Atmospheric Environment, Pergamon Press. Vol. 7 1973		X	

QUARTERLY ROAP STATUS REPORT

RESEARCH PUBLICATIONS

Program Chief: Richard W. Latimer

Program Element: 1AA009

Date: October 5, 1973

ROAP	TASK	Publication Title	How Published (Give name of series or journal, etc., Number, and Date)	Portion of Task Completed (Check)		
				ALL	PART	NONE
21AUJ	06	Cold Regions Automotive Emissions	AERL - Working Paper Series, #19, August 1973		X	

QUARTERLY ROAP STATUS REPORT

RESEARCH PUBLICATIONS

Program Chief: W. M. Sanders, III

Program Element: 1BA023

Date: 5 Oct 73

ROAP	TASK	Publication Title	How Published (Give name of series or journal, etc., Number, and Date)	Portion of Task Completed (Check)		
				ALL	PART	NONE
31030100G	(FY 72)	Chemistry of Phenylmercury Compounds in the Aquatic Environment	<u>Chemosphere</u> No. 6, pp 273-278 (1973)	X		
31030100G	(FY 72)	Gas Chromatography-Mass Spectrometry of Organomercury Compounds	<u>Journal of Chromatography</u> 76 pp 417- 476 (1973)	X		
31030100PL	(FY 72)	Carbon Cycle in Sediment-Water Sys- tems	<u>Journal of Environmental Quality</u> Vol 2, No. 1 Jan-Mar (1973)	X		
31030100RL	(FY 72)	Chemical and Microbial Degradation of Ten Selected Pesticides in Aquatic Systems	<u>Residue Reviews</u> Vol 45 pp 95-124 (1973)		X	
31030100G	(FY 72)	Photodecomposition of Phenylmercury Compounds in Sunlight	<u>Chemosphere</u> No 3 pp 93-99 (1973)	X		

QUARTERLY ROAP STATUS REPORT

RESEARCH PUBLICATIONS

Program Chief: Dr. D. J. Baumgartner

Program Element: 1BA1025

Date: Oct. 5, 1973

ROAP	TASK	Publication Title	How Published (Give name of series or journal, etc., Number, and Date)	Portion of Task Completed (Check)		
				ALL	PART	NONE
21 AIS	16	Evaluation of Floatables of Waste Water Origin in the Vicinity of Marine Outfalls	Proceedings 3rd Annual Technical Conference on Estuaries of the Pacific Northwest. Oregon State University 1973			XX
16070	EKZ	Oxidation of Organic Matter in Seabed*	Several Journal Publications by Pamatmat	XX		
		An Instrument for Measuring Subtidal Benthic Metabolism <u>in situ</u> .*	University of Washington, 1969			
		Oxidation of Organic matter in the Seabed*	First annual progress report 1970			
		Oxygen Consumption by THE SEABED, <u>IN SITU</u> Measurements to 180m. depth.*	University of Washington, 1969			
		Oxygen Consumption by the Seabed. Seasonal cycle of chemical oxidation and respiration in Puget Sound.*	Internationale Revue der Gesamten Hydrobiology			
*Final report now in publications department in Headquarters.						

QUARTERLY ROAP STATUS REPORT

RESEARCH PUBLICATIONS

Program Chief: W. T. Donaldson

Program Element: 1BA027

Date: 5 Oct 73

ROAP	TASK	Publication Title	How Published (Give name of series or journal, etc., Number, and Date)	Portion of Task Completed (Check)		
				ALL	PART	NONE
09 AEC	03	Quantitative PCB Standards for EC-GC	<u>Journal of Chromatographic Science</u> Jul, 11, 366 (1973)	*		
06020 QDC (FY 72)		Environmental Applications of Advanced Instrumental Analyses: Assistance Projects, FY 69-71	EPA Research Report EPA-R2-73-155 May 1973	X		
16 ADN	18	Polarographic Determination of NTA	EPA Research Report EPA-R2-73-254 Jun 1973	X		
16 ADN	25	Organic Pollutant Identification Utilizing Mass Spectrometry	EPA Research Report EPA-R2-73-234		X	
* ROAP not funded. Project started before notification of funding.						

QUARTERLY ROAP STATUS REPORT

RESEARCH PUBLICATIONS

Program Chief: T. E. Maloney

Program Element: 1BA031

Date: 10/1/73

ROAP	TASK	Publication Title	How Published (Give name of series or journal, etc., Number, and Date)	Portion of Task Completed (Check)		
				ALL	PART	NONE
21 AIY	01	The Shagawa Lake Project - Lake Restoration by Nutrient Removal from Wastewater Effluent	EPA Ecological Series, EPA-R3-73-026	X		
This research was completed in 1971 before ROAP procedures were implemented		Uptake of Radiophosphorus by Rooted Aquatic Plants	Proceeding of the Third National Symposium of Radioecology held in Oak Ridge, Tenn., May 10-12, 1971			

QUARTERLY ROAP STATUS REPORT

RESEARCH PUBLICATIONS

Program Chief: T. E. Maloney

Program Element: 1BA031

Date: 10/1/73

ROAP	TASK	Publication Title	How Published (Give name of series or journal, etc., Number, and Date)	Portion of Task Completed (Check)		
				ALL	PART	NONE
No ROAP or Task grant terminated in 1971. (16010 DZK, Dakota State College)		Effect of silt and silt removal in a prairie lake.	Ecological Research Series, EPA-R3- 73-037, July 1973.	X		

QUARTERLY ROAP STATUS REPORT

RESEARCH PUBLICATIONS

Program Chief: Frank H. Rainwater

Program Element: 1BA032

Date: 10/1/73

ROAP	TASK	Publication Title	How Published (Give name of series or journal, etc., Number, and Date)	Portion of Task Completed (Check)		
				ALL	PART	NONE
21AJH	10	Reviewing Environmental Impact Statements-Power Plant Cooling Systems, Engineering Aspects	GPO - Environmental Protection Techno- logy Series - EPA-660/2-73-016 - June 1973		X	
21AJH	12	Negatively Buoyant Jets in Cross Flow	GPO - Environmental Protection Tech. Series - EPA-660/2-73-012 - July 1973		X	
21AJH	--	Explicit Calibration of the PILLS II System	GPO - Environmental Protection Tech. Series - EPA-660/2-73-011 - July 1973			
21AJH	--	Statistical Prediction of Equilibrium Temperature from Standard Meteorological Data Bases	GPO - Environmental Protection Tech. Series - EPA-660/2-73-003 - July 1973			

QUARTERLY ROAP STATUS REPORT

RESEARCH PUBLICATIONS

Program Chief: Frank H. Rainwater

Program Element: 1BB392

Date: 10/1/73

ROAP	TASK	Publication Title	How Published (Give name of series or journal, etc., Number, and Date)	Portion of Task Completed (Check)		
				ALL	PART	NONE
21AZU	23	Predicting and Controlling Residual Chlorine in Cooling Tower Blowdown	GPO - Environmental Protection Technology Series - EPA-R2-73-273 - July 1973		X	
21AZU	--	Reviewing Environmental Impact Statements-Power Plant Cooling Systems, Engineering Aspects	GPO - Environmental Protection Technology Series - EPA-660/2-73-016 - June 1973			
21AZU	--	Nomographs for Thermal Pollution Control Systems	GPO - Environmental Protection Technology Series - EPA-660/2-73-004 - July 1973			

QUARTERLY ROAP STATUS REPORT

RESEARCH PUBLICATIONS

Program Chief: J.R. Boydston

Program Element: 1BB037

Date: 10/5/73

ROAP	TASK	Publication Title	How Published (Give name of series or journal, etc., Number, and Date) ALL ARE EPA REPORTS.	Portion of Task Completed (Check)		
				ALL	PART	NONE
AOL	03	Forest Fertilization (A State-or-the-Art Review and Description of Environmental Effects)	EPA-R2-72-016	X		
AZZ	02	International Paper Company	12040 DYD	X		
AZZ	03	Oregon State University	12100 EBG	X		
BAE	04	State of Art-Ready Mix Concrete	12080 HBM	X		
AZX	14	St. Regis Paper Company	12040 EJU	X		
BAB	81	Anaerobic - Aerobic Ponds for Beet Sugar Waste Treatment	WPD-93-04-68	X		
BAE	08	Melbourne Water Science Institute Report	12060 EHS	X		
---	--	Waste Management Research and Development Program - Meat Packing	EPA-R2-73-178 (12060 FGF)	X		
AKZ	04	State of Art Review of Pulp and Paper Industry	EPA-R2-73-184 (12040 HAR)	X		
---	--	Cannery Wastewater Treatment with Rotating Biological Contactor and Extended Aeration.	EPA-R2-73-024	X		
AZZ	02	Aerob. Trtmt. Plywood Glue Wastes	12100 EZU	X		

QUARTERLY ROAP STATUS REPORT

RESEARCH PUBLICATIONS

Program Chief: Marvin L. Wood

Program Element: 1BB039

Date: September 24, 1973

ROAP	TASK	Publication Title	How Published (Give name of series or journal, etc., Number, and Date)	Portion of Task Completed (Check)		
				ALL	PART	NONE
21 AOW	01	Prediction Modeling for Salinity Control in Irrigation Return Flows (In-House Report)	Environmental Protection Technology Series: EPA-R2-73-168		X	
21 AOV	02	Cation Transport in Soils and Factors Affecting Carbonate Solubility	EPA-R2-73-235		X	
21 AOV	02	Irrigation Management for Control of Quality of Irrigation Return Flow	EPA-R2-73-265		X	
21 AOV	02	Herbicide Contamination of Surface Runoff Waters	EPA-R2-73-266		X	
21 AOY	14	Selected Irrigation Return Flow Quality Abstracts 1970-1971	EPA-R2-73-271	X		

QUARTERLY ROAP STATUS REPORT

RESEARCH PUBLICATIONS

Program Chief: Richard W. Latimer

Program Element: 1BB044

Date: October 5, 1973

ROAP	TASK	Publication Title	How Published (Give name of series or journal, etc., Number, and Date)	Portion of Task Completed (Check)		
				ALL	PART	NONE
21ASG	02	Diffusion Systems for Cold Climate Lagoons	Proceedings of the "International Symposium on Research and Treatment of Waste Waters in Cold Climates," August 1973. Also AERL Working Paper #20.		X	
21ASG	09	Chlorine Disinfection of Treated Wastewater in a Baffled Contact Chamber at <1°C	Proceedings of the "International Symposium on Research and Treatment of Waste Waters in Cold Climates," August 1973. Also AERL Working Paper #21		X	

QUARTERLY ROAP STATUS REPORT

RESEARCH PUBLICATIONS

Program Chief: Richard W. Latimer

Program Element: 1BB044

Date: October 5, 1973

ROAP	TASK	Publication Title	How Published (Give name of series or journal, etc., Number, and Date)	Portion of Task Completed (Check)		
				ALL	PART	NONE
21ASG	09	Batch Disinfection of Treated Wastewater with Chlorine at Less Than 0°C	Environmental Protection Technology Series #EPA-660/2-73-005, September 1973		X	
21ASG	09	Lime Disinfection of Sewage Bacteria at Low Temperature	Environmental Protection Technology Series #EPA-660/2-73-017, September 1973		X	
21ASF	08	Report to Congress--Alaska Village Demonstration Projects	EPA-ORD Special Publication, July 1973		X	
21ASF	01	Alaska Village Demonstration Projects: First Generation of Integrated Utilities for Remote Communities	Proceedings of the "International Symposium on Research and Treatment of Waste Waters in Cold Climates," August 1973. Also AERL Working Paper #22.		X	

QUARTERLY ROAP STATUS REPORT

RESEARCH PUBLICATIONS

Program Chief: _____

Program Element: 1E1077

Date: 10/4/73

ROAP	TASK	Publication Title	How Published (Give name of series or journal, etc., Number, and Date)	Portion of Task Completed (Check)		
				ALL	PART	NONE
10AKC	12	The polychlorinated biphenyls Aroclor [®] 1248 and 1260: Effect on and accumulation by <u>Tetrahymena pyriformis</u> .	Journal of Protozoology 20: 443-445, 1973		X	
10AKC	14	Relation between simple dynamic pool and surplus production models for yield from a fishery.	Journal of the Fisheries Research Board of Canada, 30: 998-1002, 1973		X	

RESEARCH PUBLICATIONS

Program Element: 1B2045

Date: 10-2-73

ROAP	TASK	Publication Title	How Published (Give name of series or journal, etc., Number, and Date)	Portion of Task Completed (Check)		
				ALL	PART	NONE
*		Nitrate and Nitrite Volatilization by Microorganisms in Laboratory Experiments.	EPA-660/2-73-002 (R-800997)	X		
21-ABY**	22	Wastewater Treatment and Reuse by Land Application, Volume I.	EPA-660/2-73-006a (Contract 68-01-0741)	X		
21-ABY**	22	Wastewater Treatment and Reuse by Land Application, Volume II.	EPA-660/2-73-006b (Contract 68-01-0741)	X		
		EPA Studies on Applying Sludge and Effluent to the Land.	COMPOST SCIENCE, Journal of Waste Recycling, Vol. 14, No. 4, July-August 1973.			X
		Land Disposal II: An Overview of Treatment Methods	JOURNAL WATER POLLUTION CONTROL FEDERATION, Vol. 45, No. 7, July 1973.			X
<p>* Carryover of FY '72. **Carryover of FY'73 approved ROAPs.</p>						