EMERGENCY PROCEDURES

Atlas Minerals
Division of Atlas Corporation

EXHIBIT I

INTRODUCTION

This booklet is to acquaint each employee with emergency procedures to be observed in the event of a fire and/or an event or situation regarded as a disaster.

Knowledge of these procedures as they pertain to you in your job assignment is a condition of employment.

Learn your responsibilities and actions to be taken in case of a fire. You will be involved in training classes using fire extinguishers, emergency breathing apparatus and the use of fire fighting equipment.

Anytime you are assigned to a new job and/or a new area in the Mill, be sure to learn - and become familiar with your new responsibilities and assignments. Anyone filling in for another person due to vacation, sickness, etc. must assume the responsibility and emergency job assignment of the person being replaced.

Read this booklet and ask questions of your supervisor or the Safety Department if you have any question about your responsibilities. Do not wait for a fire and then not know what to do.

There will be practice fire drills conducted for training purposes. The first drills will be scheduled. Future drills may be conducted on a non-scheduled basis to evaluate training of the various crews.

INDEX

FIRE WARNING AND FIREFIGHTING

GENERAL INFORMATION

1. There is a siren located inside the main mill building near the Mill Office. This siren may be activated manually by one of the many fire alarm switches. It will be activated automatically through the action of a pressure switch sensing a pressure drop in the plant fire system.

2. Pressure is maintained on the fire system at all times by a low volume, high pressure "jockey" pump.

3. Any time a pressure drop occurs in the fire system, in addition to the siren being activated, the main fire pump will automatically kick in and remain on stream for approximately ten minutes after normal fire main pressure is restored.

   a. The electrically powered main fire pump, located in number two pump house, is serviced by two power supplies. One coming from number six switch in the main substation at the plant site and the other from the City of Moab. A manual selector switch near the pump is used to switch from one source to the other if necessary.

4. Manual fire alarm switches are in the following locations on the Plant site:

   Mill Office

   Precip Operators Control Panel

   Leach Operator Control Room

   Solvent Extraction Operator Control Room

   Scale House

   Ball Mill Operator Control Room

   Outside west wall of Lab Building

After sounding an alarm it is not necessary to remain at the switch. The alarm will continue until manually reset, allowing the person to proceed with other duties.

Fire Warning and Firefighting (Cont'd.)

5. Some firefighting equipment is stored outside the west wall of the Lab Building in a red, plainly labeled, metal cabinet. This equipment includes: Six fire extinguishers, four hand lanterns and a key to the Utah Gas, natural gas station north of the office building for emergency use only.

   a. An extension of the fire telephone is also located outside the west wall of the Lab Building. The in-plant number to dial this telephone is 35. This is the official fire telephone and should be used for this purpose only.

ACTION IN THE EVENT OF FIRE

1. The person first aware of the fire will go immediately to one of the manual fire alarm switches and sound the alarm. Then go to the nearest telephone and dial plant number 35 and report the fire. Then report to their assigned firefighting station.

   a. If the employee first seeing the fire is absolutely positive that the fire can be extinguished without any additional help and there is no danger that the fire may spread, that employee may elect to put out the fire and then notify the Shift Foreman. Extreme caution for this must be used. If there is any doubt, do not hesitate to sound an alarm.

2. The communications person, upon hearing the fire alarm will stop whatever activity is in progress and go to the outside west wall of the Lab Building and wait for instructions from the Fire Chief (Shift Foreman) or his designated representative. The communications person will remain by the fire telephone to instruct people as to fire location. Upon instruction from the Fire Chief (Shift Foreman) the Moab City Fire Department will be called (259-5551 or "O" Operator) and all other people listed on the emergency call list. The Fire Department may be called by using the plant fire telephone. If instructed to call others, use direct access outside telephone. The fire telephone (Plant No. 35) is not intended for this use. The communications person will remain at the fire telephone (No. 35) until relieved to receive and/or place calls and aid in communications. In the event the Lab Building is involved in the fire the communications person will report to the Mill Office and use the telephone there. Plant telephone Number 21.

Fire Warning and Firefighting (Cont'd.)

3. All other employees will report to the west wall outside the Lab Building to receive information and then report to their assigned firefighting stations and/or assist in any way they can. Persons not assigned a specific firefighting assignment will grab a fire extinguisher from the cabinet and lantern if necessary and report to the scene of the fire. The regular fire brigade will lay hose from the nearest fire station. Extra people will try to contain the fire with extinguishers and/or water hoses unless directed to do differently by the Fire Chief (Shift Foreman).

NOTE: The fire telephone number 35 must not be used by anyone except the person reporting the fire and the Fire Chief or his designee. This line must be kept open for communication between the Shift Foreman and the communications person after the fire has been reported.

INDIVIDUAL ACTION AND RESPONSIBILITIES

FIRE CHIEF (Acid Plant Shift Foreman)

1. Always designate Alkaline Plant Shift Foreman to act in your place as Fire Chief when you leave the plant site to go to the tailings pond, etc. Your crew must know who this person is.

2. Answer the alarm on fire telephone number 35.

3. Instruct communications person (Control Chemist) if you want the local Fire Department notified and/or if you want the Fire Emergency Call List people notified.

4. Instruct hose people as to hose station or stations to use.

5. Be sure Boiler Operator is watching pumps and water supply. It is mandatory that the Boiler Operator frequently informs you on conditions relative to pumps and water supply.

6. Instruct traffic person (U_3O_8 and V_2O_5 Precip Operators) to have truck gate (s) open and to direct traffic (outside fence north of Scale House and in parking lot near Guard House).

7. Isolate electricity, natural gas and reagents (ammonia, acid, organic, etc.) in area of the fire.

8. Instruct other supervisors and crews as they arrive.

9. Be alert, for unsafe actions and work areas.

10. Assign someone to remove all vehicles from fire area and keep area open for outside firefighting equipment.

11. Assign someone to stand by with self-contained breathing masks and resuscitator. When Lab people are present, they will assume this responsibility. The equipment is located in First Aid Room.

12. Remain calm. Do not lose your head. Use the people on hand to accomplish the necessary tasks. Keep control.

13. If in doubt, do not wait, call local Fire Department and others out.

14. Inform local Fire Chief of conditions when he arrives. He will assume responsibility at this time, with your assistance.

Fire Chief (Cont'd.)

15. As soon as sufficient help is available, have someone go through the various circuits and shut the circuits down to prevent loss of product and equipment damage. All automatic valves will fail as power is isolated. Manual valves must be closed in autoclave circuit, etc.

16. Never allow anyone to close post valves to any sprinkler system without first inspecting the area thoroughly to be sure the fire is completely out. Many fires have started up again and considerable damage has been done by shutting sprinkler systems down too soon.

SHIFT ELECTRICIAN & Mechanic (Not on #3 Shift)

1. Report to scene of fire, if known. If not, report to west outside wall of Lab Building for fire location from communications person. Do not call on plant telephone number 35 unless you are reporting the fire.

2. Report to scene of fire and begin isolation of electrical power to areas of the plant involved in fire.

3. Follow instructions of the Fire Chief (Shift Foreman).

4. Maintain close communication with Fire Chief and remain alert in case other areas may need power isolated.

COMMUNICATIONS PERSON (Control Chemist)

1. Go to outside west wall of Lab Building. Stand by fire telephone to receive instructions.

2. Instruct people as they arrive as to location of fire.

3. Remain by fire telephone for instructions by the Fire Chief.

4. If instructed by the Fire Chief or his designee. Call local Fire Department (259-5551) and then all others on call out list.

   a. Do not panic, speak slowly and clearly and give the person receiving the call the location of the fire and type, if known.

   b. Do not hang telephone up until person on the other end of the line has replaced his receiver. They may have additional questions to ask or instructions to give.

   c. Stay at telephone to receive incoming calls and deliver messages.

   d. Notify Plant Guard (Plant telephone number 10) to relay important messages through you at your telephone.

   e. If the fire should involve the Lab Building, use the Mill Office (Plant telephone number 21) as communications base.

Two telephones will be available for your use at the Fire Communications Base Stations: Main station; outside west wall of Lab Building (Plant number 35), or if Lab Building is involved in the fire; alternate station in the Mill Office (Plant number 21). The other telephone at each of these two locations is a direct outside line to Moab City telephone system. When calling the local Fire Department and persons on the call out list, use the outside telephone and leave the plant phone free to other emergency use.

FIRE EMERGENCY CALL LIST

MOAB FIRE DEPARTMENT----------259-5551

DOUG WHITE----------259-5249

TOMMIE HAMN----------259-5370

JIM JACKSON----------259-7034

DENNIS WELLS----------259-6834

WAYNARD JENSEN----------259-8535

RICHARD McCORMICK----------259-8592

SYL DOMENICK----------259-6329

LONNIE OLIVER----------259-6295

KEN ROBERTS----------259-6347

DON BEAUREGARD----------259-6391

BILL FLYNN----------259-6098

JAMES PHILLIPS----------259-7026

DALE EDWARDS----------259-6231

RAY ANDERSON----------259-7368

GLEN THAYNE - Crusher Crew----------259-6982

GEORGE ROSS - Crusher Crew----------259-6778

BOB BALDWIN----------259-5667

SID SHATLEY----------259-5531

All persons on this list should have available a call list with telephone numbers of people they are to notify. This list should be readily available in their home.

BOILER OPERATOR

1. Start inspection of fire system, pumps, water levels, etc.

2. Keep Fire Chief informed frequently of conditions.

TRAFFIC PERSON (U_3O_8 & V_2O_5 Precip Operators)

1. Come to west outside wall of Lab Building and find out where fire location is so that you will be able to direct traffic to the scene of the fire.

2. Notify Plant Guard to open truck gate at his station and direct emergency traffic to fire location.

3. Notify Scale Operator (Crushing Department) to direct emergency traffic to truck gate at Guard House from a position outside the fence north of the Scale House.

   a. Scale House gate is to be left open for secondary emergency use only.

   b. Advise all concerned to keep all unauthorized vehicles outside the plant site and to keep traffic areas clear for use by emergency vehicles only.

4. Remain near Guard House truck gate until relieved by law enforcement officer.

5. Report back to Fire Chief (Shift Foreman) for further instruction. If he is not immediately available, start moving all vehicles and equipment from the fire area.

HOSE PEOPLE (Alkaline and Acid Leach Operators, Vanadium Precip Operators, Ball Mill Helper)

1. Report to scene of fire, if known. If not, report to west outside wall of Lab Building for fire location from communications person. Do not call on fire telephone number 35 unless you are reporting the fire.

2. Report to fire hose station nearest the fire, or as directed by the Fire Chief. Lay hose and begin firefighting procedure.

3. Follow instructions of Fire Chief (Shift Foreman).

Hose People (Cont'd.)

4. Be careful of electrical equipment, MCC units and substations until the Fire Chief has isolated the power supply.

FIRE HYDRANT TENDER (Ball Mill Operator)

1. Report to scene of fire, if known. If not, report to west outside wall of Lab Building for fire location from communications person. Do not call on fire telephone number 35 unless you are reporting the fire.

2. When advised, turn hydrant on very slowly until all air has discharged from hose then open hydrant wide open. Serious injury could result if hydrant is opened too quickly.

3. Stay at the hydrant unless Fire Chief instructs to do otherwise. If the hose should break or if the hose people lose control of the nozzle it could cause very serious injury or damage. Be prepared to shut off the hydrant immediately if necessary.

OTHER EMPLOYEES (All Other People on Shift)

1. Report to outside west wall of Lab Building to find out fire location from communications person.

   a. Never use fire telephone plant number 35 except to report a fire. This line must remain free for use by Fire Chief and communications person.

2. Grab a fire extinguisher and report to the scene of the fire.

   A. Using fire extinguishers and/or plant water hoses, try to contain or extinguish the fire until the hose people have begun their firefighting procedures or until directed to do otherwise by the Fire Chief.

3. Follow instructions of the Fire Chief (Shift Foreman). He may need help in laying hose, securing ladders, etc.

ORE RECEIIVNG AND CRUSHING

HOSE PEOPLE (Loader Operators, Oiler and Laborers)

1. Report to the scene of the fire, if known. If not, report to west outside wall of Lab Building for fire location from communications person. Do not call on fire telephone plant number 35 unless you are reporting the fire.

2. Report to the scene of the fire and lay hose from the nearest hose house to fire area.

Hose People (Cont'd.)

3. Follow instructions of the Fire Chief (Shift Foreman).

4. Be careful of electrical equipment, MCC units and substations until Fire Chief has isolated the power supply.

FIRE HYDRANT TENDER (Crusher Operator)

1. Report to scene of fire, if known. If not, report to west outside wall of Lab Building for location of fire from communications person. Never call on fire telephone plant number 35 except to report a fire.

2. When advised, open hydrant very slowly until all air has been discharged from hose, then open hydrant wide open. Serious injury could result if hydrant is opened too quickly.

3. Stay at the hydrant unless Fire Chief instructs you to do otherwise. If the hose should break or if the hose people lose control of the nozzle it could cause very serious injury or damage. Be prepared to shut off the hydrant immediately if necessary.

4. Follow instructions of the Fire Chief (Shift Foreman).

OTHER EMPLOYEES (All Other People on Shift)

1. Report to outside west wall of Lab Building to find out fire location from communications person.

   a. Never use fire telephone plant number 35 except to report a fire. This line must remain free for use by Fire Chief and communications person.

2. Grab a fire extinguisher and report to the scene of the fire.

   a. Using fire extinguishers and/or plant water hoses, try to contain or extinguish the fire until the hose people have begun their firefighting procedures or until directed to do otherwise by the Fire Chief.

ASSISTANT CRUSHER FOREMAN

1. Direct and assist hose team in laying out hoses.

2. Make sure a loader is available in case it is needed to help fight the fire or control spills.

CRUSHER FOREMAN

1. Act in capacity of Fire Chief until relieved by Shift Foreman.

   a. See "Fire Chief" job outline. (Pages 6 & 7)

   b. When relieved follow instructions of Fire Chief.

NOTE: Ore receiving and crushing information listed here applies to a fire on day shift only. If fire occurs at night, people will assume assignments outlined as they arrive at plant site.

MAINTENANCE

1. One maintenance person will remain in the maintenance office to keep the tool crib open, assist in locating necessary tools and to act as communications expediter for the maintenance effort in fighting the fire.

2. The electricians will report to the west outside wall of the Lab Building for fire location from the communications person then to the scene of the fire for instructions from the Fire Chief as to what areas of the Mill that power should be isolated from.

3. One mechanic and one electrician will report to number 2 Pump House to check fire pump and fire system to make sure all is operating properly. They will maintain a watch over the fire system and report any malfunction to the Fire Chief until the fire is out and they are relieved from duty.

4. The rest of the maintenance crew will report to the west outside wall of the Lab Building and/or to the scene of the fire for instructions from the Fire Chief.

5. The Maintenance Superintendent and Maintenance Foremen will report to the Fire Chief (Shift Foreman) but normally will supervise maintenance people in conjunection with the Fire Chief to contain the fire.

LAB PEOPLE

All lab people will report to the west outside wall of the Lab Building for information as to fire location or report to the scene of the fire for instructions by the Fire Chief. Lab people having specific fire emergency assignments will proceed immediately with their assigned responsibilities.

PADIATION TECHNICIAN

The responsibility of the Radiation Technician is to collect air, water, and effluent samples to determine the extent of any polution.

1. Report to west outside wall of Lab Building for fire information.

2. Inspect fire area to determine the nature of any environmental pollution.

3. Meet with metallurgist to outline sampling program.

4. Assemble equipment and begin sampling as outlined. In the event that the sampling program requires more than one person, the metallurgist will assign a person to assist and/or assist himself.

ASSISTANT RADIATION TECHNICIAN

The responsibility of the Assistant Radiation Technician is to inspect and maintain Chemox breathing units, oxygen breathing units and the pneumlator. In the event of a fire, the analytical chemists will break out and distribute the breathing equipment according to instructions from the Fire Chief. They will instruct the fire fighters in proper use of the equipment.

1. Report to the west outside wall of the Lab Building for information on location and nature of fire.

2. The ore assayer will remain at the west outside wall of Lab Building to receive information relating to breathing equipment requirements.

3. The other analytical chemists will proceed to the first aid room to prepare breathing equipment for possible distribution.

4. The analytical chemists will distribute and help set up equipment according to instructions from Fire Chief relayed through the ore assayer.

METALLURGICAL TECHNICIAN AND LAB SAMPLE PREP PERSON

The above will be responsible for assisting the radiation person and in transporting injured people, but only in accordance with instructions from the Fire Chief.

1. Report to the west outside wall of Lab Building and remain there until instructions have been received from the Fire Chief.

AFTER FIRES AND DRILLS (All Persons)

After fires are secured or drills have been completed all persons concerned will report to the Fire Chief who will assign the following tasks:

1. Drain and put away all fire hoses ready for reuse.

2. Put unused fire extinguishers back in their proper place ready for reuse.

3. Take all used fire extinguishers to machine shop for handling by maintenance.

4. Get recharged fire extinguishers from maintenance tool crib and place them where discharged extinguishers have been removed.

   a. Refer to fire extinguisher location list. Each location listed must have an extinguisher ready for use.

5. Report any fire equipment malfunction and/or damaged firefighting equipment to the Fire Chief (Shift Foreman).

The Fire Chief may delegate part of this responsibility to other Foremen and their crews as he deems necessary.

AFTER FIRES (Supervisors)

1. Set up schedules for fire watch up to 24 hours to assure danger of recurrence is elemianted.

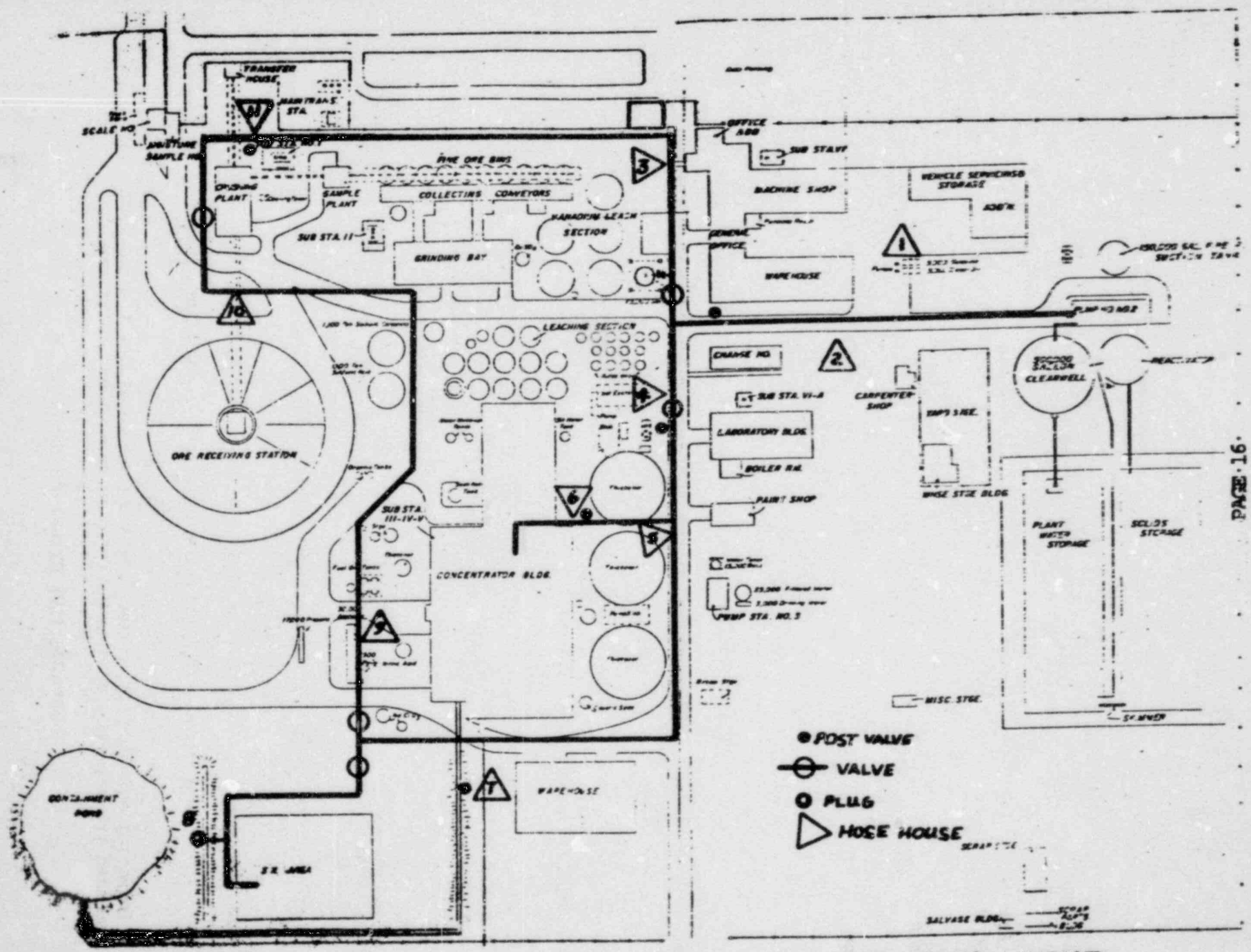
2. Double check to see that firefighting equipment (hoses, extinguishers, etc.) has been put away properly and is ready for reuse.

3. Have affected sprinkler systems repaired and returned to service as soon as possible.

4. Upon instruction, begin salvage operation and investigation to determine the cause of the fire.

5. In cooperation with Plant Safety Supervisor; get statements from people who first noticed the fire and/or were in the general area shortly before and shortly after the fire was observed.

6. Depending on the type and seriousness of the fire, notify necessary people, fire insurance company, Water Pollution Board, etc.



FIRE MAIN LAYOUT

TYPE AND CLASS OF FIRES

Fire burns because three elements are present--heat, fuel and oxygen. In technical language, fire is a chemical reaction. It happens when a material unites with oxygen so rapidly that it produces flame. Think of fire as a triangle. If any one of the three sides--heat, fuel or oxygen is taken away, the fire goes out. This is the basis for fire extinguishment. Heat can be taken away by cooling, oxygen can be taken away by excluding air and fuel can be removed to a place where there is no flame.

In order to express the relative fire extinguishing potential of portable fire extinguishers, the following classification plan has been established.

Fires can be divided into four basic types:

CLASS A FIRES - defined as fires in ordinary combustible materials such as wood, cloth, paper, etc.

CLASS B FIRES - defined as fires in flammable petroleum products or other flammable liquids, greases, etc.

CLASS C FIRES - defined as fires involving energized electrical equipment where the electrical nonconductivity of the extinguishing media is of importance.

In most cases where electrical equipment is de-energized, extinguishers suitable for use on Class A and B fires may be employed effectively.

OTHER FIRES - involving certain combustible metals or reactive chemicals require, in some cases, special extinguishing agents or techniques.

COMPARATIVE CHARACTERISTICS OF FIRE EXTINGUISHERS

TYPE OF EXTINGUISHER	DRY CHEMICAL	CARBON DIOXIDE	FOAM	SODA & ACID	WATER PAILS
Class A Fires Wood, cloth, paper, etc.	NO Control small fires	NO Control small fires	YES	YES	YES
Class B Fires Oil, Gas, Grease and Paint	YES	YES	YES	NO	NO
Class C Fires Electrical Equipment	YES	YES	NO	NO	NO

FIRE EXTINGUISHER CHECK LIST

NUMBER	LOCATION	TYPE
1	West Wall of ore pad dog house	Dry Chem.
2	On beam near crusher dog house	Dry Chem.
3	On beam near cone crusher oil reservoir	Dry Cehm.
4	North wall of Scale House	Dry Chem.
5	East wall - top floor of sample tower	
6	North side of Man door-bottom floor sample tower	Dry Chem.
7	South wall near #10 conveyor ramp - ball mill	CO_2
8	South wall near #11 conveyor ramp - ball mill	Dry Chem.
9	South wall near #3 feeder conveyor - Gallery	CO_2
10	East wall outside of ball mill dog house	Dry Chem.
11	East wall by door - ball mill building	Dry Chem.
12	North wall 2nd floor alk. drum filter area	Dry Chem.
13	East wall 2nd floor alk. drum filter area	Dry Chem.
14	East wall bottom floor north of tails pumps	Dry Chem.
15	West wall outside of leach dog house near MCC	CO_2
16	Operator Control Room - new boiler room	Dry Chem.
17	West wall near YC hearth truck door	Dry Chem.
18	East wall near YC precip instrument panel	Dry Chem.
19	Top of stairs N. end RIP building	Dry Chem.
20	On beam south of dog house B RIP	Dry Chem.
21	East of bank B-3, 2nd floor of RIP building	Dry Chem.
22	Top deck (Center) of RIP building by MCC	Dry Chem.
23	Control room platform - Red Cake Dryer	Dry Chem.
24	East hanger building by post on dividing fence	Dry Chem.
25	West hanger building in Reagents storage area N.W. corner MACCO Warehouse	Dry Chem.
26	East wall bottom floor of RIP building	Dry Chem.
27	West hanger - MACCO Warehouse	CO_2
28	West wall by door #3 pump house	CO_2
29	North wall by door - paint shop	CO_2
30	East wall by truck door - oil shop	Dry Chem.

NUMBER	LOCATION	TYPE
31	South wall - main Lab	Dry Chem.
32	South wall - Fluorimetric Lab	Dry Chem.
33	North wall - Met. Lab	Dry Chem.
34	West wall near door - Instrument shop	Dry Chem.
35	East wall near door of change room	Soda acid
36	East wall - Carpenter shop	Dry Chem.
37	North wall of Yard office	Dry Chem.
38	North wall of Salvage office	Dry Chem.
39	North wall outside on ammonia compressor room	Dry Chem.
40	South wall of #2 pump house	Dry Chem.
41	North wall of garage building	Dry Chem.
42	By man door - west side - old office furnace annex	Dry Chem.
43	North wall of warehouse building	Dry Chem.
44	East wall of warehouse building	Soda acid
45	West wall near man door of old office building	Soda Acid
46	South wall of new office furnace room	CO_2
47	Storage cabinet west of maintenance lunch area	Dry Chem.
48	South wall east end machine shop	Dry Chem.
49	No. 1 alk. thick. o'flow tank - ground level	CO_2
50	On west wall in Lab boiler room	Dry Chem.
51	On north wall outside of office equipment room (stor.)	Dry Chem.
52	#1 Foam fire extinguisher on wheels - bottom floor RIP near rest room	Foam engine
53	#3 Foam fire extinguisher on wheels - bottom floor sand slime building	Foam enginer
54	South wall compressor room	Dry Chem.
55	Yellow cake compound - inside near overhead door	Dry Chem.
56	South wall of warehouse building	Dry Chem.
57	Middle divider - warehouse by paint storage	Dry Chem.
58	Outside of building on south side of MACCO warehouse west hanger building	Dry Chem.
59	North east corner of SX pad	CO_2
60	SX dog house	CO_2
61	Acid thickener 2nd deck - east wall	CO_2
62	U_3O_8 Hearth control room - east wall floor	CO_2
63	Red Cake thickener area - east wall pkg. partition	Dry Chem.
64	SX pad diesel unloading area hanging on post	CO_2
65	North wall floor - 2nd floor sample tower	Dry Chem.
66	By east truck door ball mill	Dry Chem.

FIRE ALARM SWITCH LOCATIONS

NUMBER	LOCATION
1	Front of Lab Building - west end
2	Leach Operator Control Room
3	Precip Operator Control Panel
4	Mill Office
5	Solvent Extraction Operator Control Room
6	Crusher Scale House
7	Ball Mill Operator Control Room

Power source to alarm system - MCC 18, Pushmatic box east side, not in panel

ALARMS

Siren near Mill Office

Siren in fine ore bin area

Siren in ball mill building

Acid Thickener (CCD) area

Bell in Lab Building

Buzzer in machine shop

WHEN AN ACCIDENT HAPPENS

All accidents are to be reported to your Foreman as outlined in your Safety Manual. In instances where immediate emergency assistance is required the following actions should be taken:

1. Yell for assistance.

2. Begin first aid procedures.

3. As soon as possible, follow the communications procedure:

   a. During office hours: 8:00 a.m. to 12:00 noon and 1:00 p.m. to 5:00 p.m. dial "0" (Operator) from the nearest phone. Explain what has happened and the location of the accident victim.

   b. The switchboard operator will call: Jim Phillips (42), Rob Thurman (55), Shift Foremen on duty and Bill Flynn (42) in that order.

   c. At any other time when the switchboard may be unattended: contact an Operating Shift Foreman on duty, Jim Phillips (259-7026), and Sid Shatley (259-5531).

   d. If unable to contact a Shift Foreman right away and the accident is of a serious nature: call the ambulance directly (259-7403) or (259-5612). Then call the Guard (10) and ask that the gate be opened and that the Guard direct the ambulance to the accident victim.

4. In the event emergency transportation is necessary to transport an accident victim: (ambulance not available or not required).

   a. A vehicle will be parked near the Guard House for this purpose.

   b. Keys for this vehicle will be within plain sight, inside the Guard House.

   c. Any supervisor or his designee may obtain the keys and use this vehicle at any time for emergency transportation of an accident victim.

   d. The person taking the keys will state his name to the Guard when picking up the keys.

   e. The Guard will note the name of the person taking the keys as well as the date and time of day.

   f. Vehicle keys are to be returned to the Guard House as soon as the vehicle is returned to its designated parking space and the Guard will log it back in.

5. Assist in accident investigation by relating information about the accident to your Foreman and/or the Safety Engineer.

N O T I C E

June 12, 1979

The following is the procedure which must be put in motion immediately in the event of a tailings line or pond dike failure which results in tailings material going to the Colorado River.

1. Shut down the mill

2. Call immediately:

W. Jensen	259-8535		
D. McCormick	259-8592		
G. Swanby (303)	757-3698		
S. Domenick	259-6329		
L. Oliver	259-6295	or G. Ross	259-6778
B. H. Flynn	259-6098		
D. Edwards	259-6231	or J. Atwood	259-6678
Doug White	259-5249		
L. Jacobs	259-7709		

3. If the break occurs in the dike around either of the two settling basins, contact the crusher foreman and start loaders and trucks building a dam to contain the brine spilled.

4. Upon notification of dike failure, D. Edwards will initiate a sampling program to determine the effects of the released material on the Colorado River.

5. W. Jensen will immediately notify by telephone and telegram the nature of the failure to:

John Linehan
Nuclear Regulatory Commission
Washington, D.C. 20555
Phone: (301) 427-4103

Glen R. Brown, Chief
Region IV, USNRC
Fuel Facility and Material Safety
611 Ryan Plaza Drive
Suite 1000
Arlington, Texas 76012
Phone: (817) 334-3475

Utah Water Pollution Control Board
44 Medical Drive
Salt Lake City, Utah 84113
Attn: Russ Hinshaw, Env. Health Scientist
Phone: 533-6145 or 533-6146

Environmental Protection Agency
1860 Lincoln St.
Denver, Colorado 80295
Attn: 8-S.E.P.
Ref. Dick Jones, Physical Scientist
Phone: (303) 837-3880

TABLE 5.3-1

EMPLOYEE INDOCTRINATION ON RADIATION

The care utilized in processing uranium and the safety mindedness of the operating personnel can play a large part in keeping exposures to radiation at an absolute minimum. The company recognized the importance of attempting to keep working surroundings free from radioactive materials as evidenced by frequent air sampling, monitoring personnel, use of personal protective equipment and maintaining huge dust collecting systems.

Even though the amount of radiation you may receive here at Atlas Minerals is very small, we want to keep it as low as possible. Our concern, then, is how you can be protected from even small amounts of radiation. Radioactive materials can attack the body from a source external to the body and from a source inside the body.

1. Protection from External Radiation

Protection from external radiation exposure may be obtained by the use of the safety factors of time and distance.

a. The Safety Factor of Time

The shorter the period of time the body is exposed to radioactive materials, the less radiation it will receive.

b. The Safety Factor of Distance

The farther away the body is from the source of radiation, the smaller is the amount of radiation received.

Therefore, to protect yourself from external radiation, you should spend only the minimum time required in highly radioactive areas. Secondly, keep the source of radiation as far away from your body as possible. This would also indicate keeping radioactive materials off your face, hands and clothing.

2. Protection from Internal Radiation

There are four possible ways to get radioactive materials into the body:

a. By breathing
b. By swallowing
c. Through breaks in the skin
d. By absorption through the skin.

To protect yourself from internal radiation you should observe the following:

a. Maintain good housekeeping techniques by using vacuum cleaners and by wetting down dusty areas when required.

b. Don't smoke in areas where radioactive materials are handled. Radioactive materials can be transferred from the hands, to the cigarette, to the mouth and into the body.

c. Wash up before you eat. Reason: radioactive materials on the hands can go on food, to the mouth, and into the body.

d. Wear a respirator or gas mask when required.

At the present time it is believed that the body can withstand low dosages of radiation spread over a long period of time without any apparent effect. However, it is to the mutual advantage of everyone connected to this plant to make every effort to keep exposure to radioactive materials at an absolute minimum. In general, follow company procedures and regulations regarding radiation; they are made for your protection.

Date_____ Employee Signature_____

Supervisor Signature_____ Date_____

The employee has been examined on_____ (date) and has a satisfactory understanding and retention of the above materials.

_____
Supervisor

EXHIBIT J

DALE

TABLE 5.3-1

EMPLOYEE INDOCTRINATION ON RADIATION

The care utilized in processing uranium and the safety mindedness of the operating personnel can play a large part in keeping exposures to radiation at an absolute minimum. The company recognized the importance of attempting to keep working surroundings free from radioactive materials as evidenced by frequent air sampling, monitoring personnel, use of personal protective equipment and maintaining huge dust collecting systems.

Even though the amount of radiation you may receive here at Atlas Minerals is very small, we want to keep it as low as possible. Our concern, then, is how you can be protected from even small amounts of radiation. Radioactive materials can attack the body from a source external to the body and from a source inside the body.

1. Protection from External Radiation

Protection from external radiation exposure may be obtained by the use of the safety factors of time and distance.

a. The Safety Factor of Time

The shorter the period of time the body is exposed to radioactive materials, the less radiation it will receive.

b. The Safety Factor of Distance

The farther away the body is from the source of radiation, the smaller is the amount of radiation received.

Therefore, to protect yourself from external radiation, you should spend only the minimum time required in highly radioactive areas. Secondly, keep the source of radiation as far away from your body as possible. This would also indicate keeping radioactive materials off your face, hands and clothing.

2. Protection from Internal Radiation

There are four possible ways to get radioactive materials into the body:

a. By breathing
b. By swallowing
c. Through breaks in the skin
d. By absorption through the skin.

To protect yourself from internal radiation you should observe the following:

a. Maintain good housekeeping techniques by using vacuum cleaners and by wetting down dusty areas when required.

b. Don't smoke in areas where radioactive materials are handled. Radioactive materials can be transferred from the hands, to the cigarette, to the mouth and into the body.

c. Wash up before you eat. Reason: radioactive materials on the hands can go on food, to the mouth, and into the body.

d. Wear a respirator or gas mask when required.

At the present time it is believed that the body can withstand low dosages of radiation spread over a long period of time without any apparent effect. However, it is to the mutual advantage of everyone connected to this plant to make every effort to keep exposure to radioactive materials at an absolute minimum. In general, follow company procedures and regulations regarding radiation; they are made for your protection.

3. I have read and understand Regulatory Guide 8.13 "Instructions Concerning Prenatal Radiation Exposure" and Appendix to Regulatory Guide 8.13 "Possible Health Risks to Children of Women Who Are Exposed To Radiation During Pregnancy." A copy of this information was received by me.

Date_____ Employee Signature_____

Supervisor Signature_____ Date_____

The employee has been examined on_____ (date)

and has a satisfactory understanding and retention of the above materials.

_____

Supervisor

FEMALE

EXHIBIT K

REPAIR WORK

All non-routine activities which might involve radioactive material require a work order authorization form reviewed and signed by a Superintendent or the Radiation Safety Supervisor. Should they determine that special health physics precautions are applicable, instructions will be issued in written form to utilize monitoring procedures or the use of special safety equipment, such as respirators and company overalls.

EXHIBIT L

AUTHORIZATION FOR WORK IN RADIATION AREAS

DATE: _____

TO:

FROM: _____

Permission is requested to work _____ employee(s) in the _____ Department for _____ hours on _____ (date): The work will consist of _____

_____

_____

_____

_____

_____

TO:

FROM: _____

Authorization is hereby given for the above request with the following conditions:

_____

_____

_____

_____

_____

_____

PRO[illegible]EDURE FOR MAINTENANCE OF RESPIRATOR

1. All used respirators will be put in a container outside of the entrance of the lab building.

2. The radiation technician or his assistant, will then disassemble the respirator and throw away the used cartridges in the trash can, and clean the respirator and parts such as valves, etc., with warm water with detergent in it, by hand using a brush.

3. The respirator and parts will then be rinsed in clear water and disinfected by immersing in a solution of hypochlorite solution (50 PPM of chlorine) for 2 minutes.

4. The respirator and parts will then be placed on clean paper towels that have been placed on the bench top and air dried until dry.

5. The valves, headbands, and other parts will then be inspected, new parts will be used if any of the old parts are found defective.

6. The respirator will then be put together with new cartridges, making sure the seal is tight.

7. The respirators will then be checked for contamination on any surface of the respirator. It will not exceed 0.2 millirads per hour above background at contact or the alpha contamination level does not exceed 100 disintegration per minute (d/m) per 100 cm^2 on a standard swipe test, or the fixed alpha 1000 d/m per 100 cm^2.

8. All respirators will then be placed in a plastic bag for storage.

9. The clean bagged respirators will then be put in the container in the lab and locked up in the catalog room.

10. All employees will be required to check out and to check in all respirators - see "Procedure for Issuance and Return of Respirators."

EXHIBIT M

ATLAS MINERALS

DIVISION OF ATLAS CORPORATION

INTER-OFFICE CORRESPONDENCE

To R. A. Adrian

From Dale L. Edwards ✓ Dale L. Edwards **Date** 11-18-77

Subject High Urine Analysis

COPY FOR: Radiation File

Herman Herrera's urine analysis for U-nat. showed higher than normal this month, I suggest we put him on the yard crew, or some area where he won't receive as high an exposure.

Dale L. Edwards

DLE:sd

EXHIBIT N

ATLAS MINERALS

DIVISION OF ATLAS CORPORATION

INTER-OFFICE CORRESPONDENCE

To Dale Edward

From R. A. Adrian R. A. Adrian **Date** 12-1-77

Subject High Urine Analysis - Herman Herrera

COPY FOR: Radiation Safety File

Because of the urine analysis results you reported, Herman Herrera has been assigned to the yard crew effective 11-28-77. As you know, his previous job was in the U308 drying/packaging area. I expect this re-assignment will reduce this individual's exposure to acceptable limits. We will continue to monitor his bioassay results to be sure this is the case.

RAA:sd

EXHIBIT O

RADIATION DETECTION COMPANY
162 Wolfe Road • P.O. Box 1414 • Sunnyvale, California 94088 • (408) 735-8700

August 5, 1981

Mr. Richard Blubaugh
Atlas Minerals
P.O. Box 1207
Moab, UT 84532

Dear Mr. Blubaugh:

This letter is intended to confirm our telephone conversation of today. RDC has a Quality Assurance program. We have been audited by EAL Corporation on a Semi-annual basis during the past three years. EAL Corporation is a sub-contractor to Southern California Edison which operates the San Onofre Power Plant. Pacific Gas and Electric Company has also been monitoring our QA program for the past several years and are scheduled for their next audit in the next several months. South Carolina Electric and Gas Company will be performing a QA audit on August 13, 1981.

Secondly, RDC has scored 100% in both TLD and film dosimetry testing through the University of Michigans NSF Testing Program. We have been cerified by NSF every year since the early 1960's.

Very truly yours,

Richard H. Holden

Richard H. Holden
President

EXHIBIT P

Proposal

J & S CONSTRUCTION
Post Office Box 276
MOAB, UTAH 84532
Phone 259-8377

PROPOSAL SUBMITTED TO	PHONE	DATE
ATLAS MINERALS		7/14/80
STREET	**JOB NAME**	
	Remodel Doghouse - Precip Bldg	
CITY, STATE AND ZIP CODE	**JOB LOCATION**	
ARCHITECT	**DATE OF PLANS**	**JOB PHONE**

We hereby submit specifications and estimates for:

Will Include:

Remove existing wallboard, ceiling tile, insulation, windows, door and exterior siding
Install new concrete floor with floor drain (piped to bottom level floor)
Install new insulation
Install new paneling 8' highoon walls
Install new plasterboard ceiling and paint
Install new metal entrance door
Install new sliding window
Install new galvanized metal roof - Sloping to one side for drainage
Install Fiberglass sheeting on exterior sides of building (Sheeting privided by Atlas)
Install new sink base and towel dispenser.

Atlas will be responsible for electrical and plumbing lines changed during remodel

Total Price $4650.00

We Propose hereby to furnish material and labor — complete in accordance with above specifications, for the sum of:

Forty Six Hundred Fifty Dollars and no Cents dollars ($ 4,650.00).

Payment to be made as follows:
Payment Upon completion of job

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workmen's Compensation Insurance.

Authorized Signature _____

Note: This proposal may be withdrawn by us if not accepted within 30 days.

Acceptance of Proposal — The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment to be made as outlined above.

Signature _____

Date of Acceptance: 7-22-1980

Signature _____

EXHIBIT A

10277

PURCHASE ORDER

SHOW ORDER NUMBER ON ALL PACKAGES, INVOICES AND SHIPPING PAPERS.

ATLAS MINERALS

A- 3938

DIVISION OF ATLAS CORPORATION
BOX 1207 MOAB, UTAH 84532
(801) 259-5131

TO
J & S CONSTRUCTION
P.O. BOX 276
MOAB, UT 84532

SHIP TO
NO. HWY. 163/ MILL SITE

ALL PURCHASE ORDERS SUBJECT TO TERMS AND CONDITIONS ON FRONT AND BACK.

DATE ORDERED	DATE REQUIRED	TERMS	F.O.B. POINT
7-25-80	7-23-80	NET	MILL SITE

SHIPPED VIA: J & S

MAIL BILL OF LADING AND INVOICES IN DUPLICATE TO: P.O. BOX 1207 . MOAB, UTAH 84532

ITEM	QTY ORD'D	PER	DESCRIPTION	COST	PER	ACCOUNT NO.	COMPUTER NO.	BIN LOCATION
1	Completed 8-22-1980 per Bob Dalozer GK		ACID LEACH DOG HOUSE REMODEL DOGHOUSE ACCORDING TO CONTRACT AGREEMENT.	4650.00		95-334-64		
			CONFIRMING					

J & S Construction

X Gene Hales 8-22-1980
RECEIVED BY

BY Gene Hales A- 3938
PURCHASING AGENT

EXHIBIT B

PURCHASING WORKING COPY

10277

PURCHASE ORDER

SHOW ORDER NUMBER ON ALL PACKAGES, INVOICES AND SHIPPING PAPERS.

ATLAS MINERALS

DIVISION OF ATLAS CORPORATION
BOX 1207 MOAB, UTAH 84532

A-3938-1

TO: J&S CONSTRUCTION
P.O. BOX 276
MOAB, UT 84532

SHIP TO: NO. HWY. 163/ MILL SITE

ALL PURCHASE ORDERS SUBJECT TO TERMS AND CONDITIONS ON FRONT AND BACK.

DATE ORDERED	DATE REQUIRED	TERMS	F.O.B. POINT
8-15-80	8-15-80		

SHIPPED VIA

MAIL BILL OF LADING AND INVOICES IN DUPLICATE TO:
P.O. BOX 1207 MOAB, UTAH 84532

ITEM	QTY ORD'D	PER	DESCRIPTION	COST	PER	ACCOUNT NO.	COMPUTER NO.	BIN LOCATION
1	Completed 8-22-1980 per Bob Salazar SJR		CHANGE ORDER FROM ORIGINAL CONTRACT REMOVE CONDUIT; REPLACE WITH NEW CONDUIT AND ELEC. BOXES. RECESS SAME IN WALL. REPLACE OLD GAS HEATER WITH NEW WALL BOARD TYPE ELEC. HEATER STANDARD SIZE OUR ELEC. TO COMPLETE WIRE HOOK-UP ON COMPLETION OF JOB	208.00	COMPLETE	95-334-64		

OK TO PAY
Marie

J&S Construction

X Gene F Coles 8-22-1980
RECEIVED BY

BY
PURCHASING AGENT

EXHIBIT C

PURCHASING WORKING COPY

10277

J & S CONSTRUCTION CO.
P. O. Box 276
MOAB, UTAH 84532

(801) 259-8377

№ 044

PHONE

DATE OF ORDER 8/22/80

ORDER TAKEN BY

CUSTOMER'S ORDER NUMBER A-3938

TO ATLAS MINERALS
P. O. Box 1207
Moab, Utah 84532

☒ DAY WORK ☐ CONTRACT ☐ EXTRA

JOB NAME / NUMBER Acid Leach Dog House

JOB LOCATION Mill Site

JOB PHONE

STARTING DATE

TERMS:

QTY.	MATERIAL	PRICE	AMOUNT
	Labor and Materials for:		
	A. Acid Leach Dog House remodel.		4,650.00
	B. Electrical		208.00
	Total		4,858.00

DESCRIPTION OF WORK

OTHER CHARGES

TOTAL OTHER

LABOR	HRS.	RATE	AMOUNT

DATE COMPLETED

TOTAL MATERIALS

TOTAL LABOR

TOTAL MATERIALS

TOTAL OTHER

TAX

TOTAL 4,858.

Thank You!

Work ordered by

Signature

I hereby acknowledge the satisfactory completion of the above described work.

EXHIBIT D

Table 6.4. Future Radiological and NonRadiological Monitoring Program

Environmental Element	Material Sampled	Sampling: Location (see Fig. 6.3)	Sampling: Method	Sampling: Frequency	Test Frequency	Isotope or Radiation and Chemicals Identified
Surface water	Colorado River	One site upstream of mill, five sites downstream of mill	Grab (1 gallon)	Monthly	Monthly	Gross $\beta\gamma$, Unat, Ra-226, Th-230
					Quarterly	Pb-210, Po-210, K^+, Na^+, Cl^-, $SO_4^=$, NO_3^-, Cu, Fe, Mn, As, Se, TDS, conductivity, and pH[b]
External radiation	Ambient	Fourteen locations around tailings pond area and near site boundary and particulate collection sites	Scintillation counter	Quarterly	Quarterly	Direct reading γ dose rate
Soils	Five samples minimum	Same locations as airborne particulates	Grab	Annually	Annually	Unat, Ra-226, As
Vegetation (shrubs, forbs, grasses)	Foliage	Offsite cattle grazing areas	Grab	During grazing	During grazing season	Ra-226, Pb-210
Groundwater	Monitor well water	Three monitor wells located between mill and Colorado River and several natural sites for comparison	Grab	Quarterly	Quarterly	Gross $\beta\gamma$, Unat, Ra-226, Th-230, Pb-210, Po-210 K^+, Na^+, Cl^-, $SO_4^=$, NO_3^-, Cu, Fe, Mn, As, Se, TDS, conductivity, and pH[b]
Ambient air	Airborne suspended particles	Site boundary NW and SE Tex's tour center Arches park headquarters Near Moab[a] Background (remote from site)	Continuous	Filter change weekly, or as required by dust loading	Monthly (composite)	Unat, Pb-210
					Quarterly (composite)	Ra-226, Th-230
Ambient air	Gaseous air	Same locations as airborne particulates	One week continuous per month	Monthly[b]	Monthly[b]	Rn-222
Ambient air	Particulates from yellowcake dryer[b]	Yellowcake dryer stack	Isokinetic sampling or	Semi-annually[b]	Semi-annually	U_3O_8 (nat) Ra-226, Th-230[b]

[a] ~ 2.7 km from site. [b] Staff recommendation.

EXHIBIT E