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Item 49



*You*

AND  
YOUR COMPANY

**The Anaconda Company  
Weed Heights, Nevada**









**H. R. BURCH, *General Manager***

**THE ANACONDA COMPANY**

**Weed Heights, Nevada**

# TO NEW EMPLOYEES, VISITORS AND GUESTS



## WELCOME

## TO WEED HEIGHTS

We have written this little booklet in order to acquaint our new employees with our operations and facilities available to them here. However, it has also been written with our visitors in mind. We have scheduled guided tours of our property for visitors at 10:30 A.M. and 2:30 P.M. Monday through Friday each week.

### TO OUR NEW EMPLOYEES

You have shown us that you have the qualifications and ability to be a satisfactory and productive employee and because of this and because of the good impression you have made on us, we have asked you to become one of our employees. Now, I am sure that our people here will make a good impression on you and that you will be happy working here.

The Anaconda Company provides valuable employment opportunities for all applicants and employees limited only by their individual qualifications and abilities. The Company, therefore, will not tolerate discrimination against applicants for employment or against employees in their jobs because of race, religion, color, national origin, age, or sex.

This policy of nondiscrimination must be applied throughout every aspect of the employment relationship including, but not limited to: recruitment, selection, placement, training, compensation, promotion, transfer, layoff, recall, and termination.

No doubt you would like to know a little about our company. The Anaconda Company is one of the largest mining



companies in the world and has mining operations throughout the world where ore which is treated by its smelters and refineries is produced.

Here at Weed Heights we mine two types of ore, beneficiate it and ship the product to smelters and refineries. Our two products are copper precipitate produced from oxide ore, and copper concentrates produced from sulphide ore. The copper obtained from our mine here at Weed Heights, after refining, joins the stream of copper from other mines to our fabricating plants where it is made into finished products, such as copper wire and pipe, and various brass products. These products are sold through The Anaconda Company sales organization on the world market.

Copper is not, by any means, The Anaconda Company's sole product. The company is also a leading producer of uranium, aluminum, lead and zinc, and in addition, quantities of gold, silver, platinum, cadmium, manganese, gallium and indium are produced as by-products.

We, here at Weed Heights, are very proud of our operation and would be glad to answer any questions concerning this operation or any phase of The Anaconda Company operations. I would like to have our employees know our company, and if you have any questions, feel free to ask them at any time or discuss any company matter with your supervisors. We have offered you a steady job with good wages and many benefits and an opportunity to advance according to your capabilities.

Job openings here are filled whenever possible by employees, and in this booklet you will find charts showing job classifications and line of advancement.

You are very welcome here as a new employee and it is our hope that you will be a long-time employee of ours.

Cordially yours,

H. R. BURCH

General Manager





## OUR HISTORY

The Anaconda Company's Yerington Mine and Plant, with a present annual production schedule of seventy-five million pounds of copper, was the first copper operation of substantial size to be brought into production in the United States following the end of the hostilities of World War II.

The ore body contained within the Yerington Mine was first leased by The Anaconda Company in 1941. Then followed three years of exploration work on the property to determine the size and grade of the ore body. Churn drills were utilized to place drill holes on 200-foot centers, with extensive diamond drilling also being done. This exploration work revealed a deposit of some forty million tons of oxide ore, with a fifteen million ton body of sulphide ore below it.

Shortly after the outbreak of hostilities in Korea, and in answer to the Government's plea for stepped-up copper production, the Company officials made the decision to develop and mine this ore body. An expenditure of some \$40,000,000.00 of Anaconda Company money was necessary for the development work, plant construction, and construction of the townsite of Weed Heights. This vast outlay of capital, completely coming from Anaconda funds, was necessary before a single pound of copper could be produced. This amount represents an investment of about \$80,000.00 for every Weed Heights employee. We must use this investment wisely to assure the future of our own jobs and to yield a return for those who have provided the tools with which we work.

In the early part of November, 1951, official decision to proceed with Weed Heights was made and in the first week of December staff members of The Anaconda Company from other operations arrived in Yerington, Nevada, to begin the task of opening the pit, constructing the metallurgical plant and building a townsite to house future employees.

The Company townsite, one of the most beautifully constructed and maintained mining camps in the United States, was appropriately named Weed Heights, in honor of Mr. Clyde E. Weed, Chairman of the Board of Directors of The Anaconda Company. This modern residential area is situated on the hillside at the base of the Singatse Range,



overlooking the very fertile Mason Valley. Construction of housing was commenced in late December, 1951, on the sagebrush-covered hillside, and by May 1952, employees began moving into the new residences.

In order to bring the ore body into production, some fifteen million tons of overburden had to be stripped. Anaconda received delivery of the first of four 5-yard P & H Electric shovels in May, 1952, and this waste began forming huge waste dumps to the south of the present pit location.

In July, 1952, under the engineering supervision of Anaconda's New York Engineering Department, working in cooperation with Yerington's General Manager, construction was commenced on the plant facilities which would be necessary to treat the oxide copper ore from the pit. Between July, 1952, and November, 1953, the barren hillside became a modern industrial site; administrative offices, shops, and warehouse buildings sprang up. Gigantic crusher buildings were constructed, and crushers to handle the ore were installed. A fluo-solids and acid plant, leaching tanks, iron launders, and attendant facilities were constructed. Meanwhile, the stripping and development of the ore body was making good progress.

By November, 1953, all was in readiness. The beneficiation plant was finished and the first truck load of copper-bearing ore from the pit was transported to the primary crusher to commence its way through.

Adding to the already existing metallurgical plant facilities, and prolonging the operating life of this property, the Company constructed a 5,000 ton-per-day concentrator to treat the sulphide ore body. The concentrator was completed and placed in operation in October, 1961. In 1966, the concentrator capacity was doubled with the completion of a \$7 million addition.

The Weed Heights ore body is spotty, consisting of porphyry copper. Granodiorite, the basement rock, is intruded by quartz monzonite porphyry. Ore occurs mainly in the quartz monzonite, but there is some in the basement rock. The principal copper minerals are chrysocolla, chalcocite and chalcopyrite.



## SOME GENERAL INFORMATION

PAY DAYS for day's pay employees are bi-weekly. Checks are distributed by the Personnel Office.



### ABSENCES

See Absentee Policy for General Rules on Absences.

Any employee absenting himself for three working days, without having first obtained a leave of absence, will be removed from the payroll. Such employee can be reinstated, at the discretion of the Company, by presenting a medical release, signed by a qualified physician, showing that his absence was due to illness.



The following are some causes for immediate termination:

Bringing alcoholic beverages on the job and/or intoxication on the job.

Violation of established safety rules.

Theft of Company property.

Fighting on the job and/or insubordination.

Continuous unauthorized absences and/or leaving the job or work area without permission.



### WHEN YOU WORK OVERTIME



We try to keep overtime work at a minimum. However, we occasionally do have a sharp increase in the work load of some department which requires a few extra hours to catch up. The cooperation of all employees is asked in meeting such emergencies.

Overtime work should be done only with permission of your Department Head. You will be paid at the rate of  $1\frac{1}{2}$  times your regular wage rate for all time worked in excess of the regular work day, or in excess of 40 hours in a week.



## EMPLOYEE HOUSING



The company maintains a residential townsite for employees at reasonable rentals, administration of which is the responsibility of the Personnel Department.

Maintenance of the residences is performed by the Company, and any and all maintenance problems should be referred to the Personnel Department. All Maintenance to be performed must be done on a work order from the Personnel Department. Employees renting Company houses are expected to maintain the houses and outside premises in such a manner as to retain a neat and orderly appearance. Residents are not permitted to make any alterations to houses or outside premises, including building fences, unless specifically authorized to do so in writing by the Company.

Since there may not be sufficient family units in Weed Heights to accommodate all employees desiring housing, it may be necessary for new employees to place their names on the waiting list for consideration. This should be done in the Personnel Office.

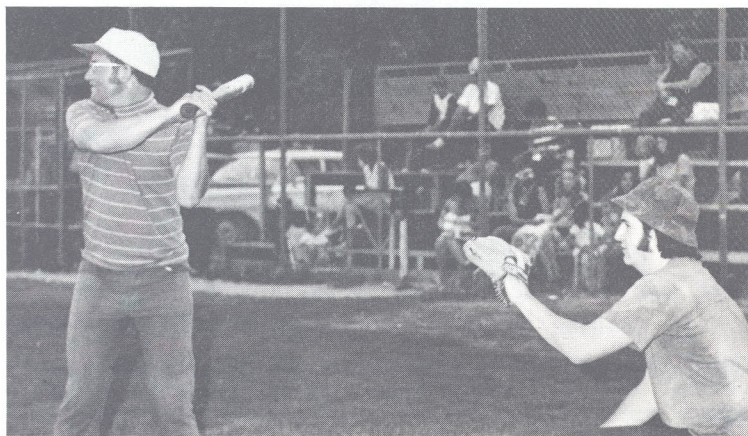
Your employer makes every effort to provide you with the requisite housing for your family in one of the finest residential mining camps in the world. Your cooperation is urged to keep the townsite one of which we can be proud.



## RECREATION

The Anaconda Company has gone to some expense to provide recreation for the employees at Weed Heights.

A completely grassed ball park for the use of the children is maintained here. We also have a basketball court, tennis courts, a children's playground and a swimming pool, which is open during the summer months. All of these facilities are provided without cost to the employees.



## RECREATION CLUB

A voluntary association of employees, known as Weed Heights Recreation Club, conducts dinners, dances, card parties and bingo parties for club members. A nominal monthly membership fee is assessed for those employees wishing to participate in Club activities.

## EMPLOYEES' WELFARE FUND

Our employees have formed a voluntary Welfare Fund for the purpose of giving financial assistance to members whenever they are subjected to hardship through unforeseen events. Each member contributes a nominal sum each month for this worthwhile activity. The fund is administered by a Board of Trustees, elected from among the employees.



## EXTRAS

In addition to job security, steady employment, good wages, and good working conditions, The Anaconda Company offers you many additional benefits for the present and future security of yourself and your family.



## GROUP LIFE INSURANCE

As an employee of The Anaconda Company, you are eligible to enroll in the Company's Group Life Insurance Plan. The cost to you for this life insurance is only sixty cents per month per thousand dollars of insurance. Your employer pays the balance of the premium for you. The amount of insurance which you can secure depends upon your wages. Complete details of this benefit can be found in the brochure which you will receive covering this insurance plan.

There is a group Accident & Health Insurance plan covering employees and their families in force, and the major portion of the premium cost for this insurance is assumed by your employer. Detailed information of this insurance can be obtained from a brochure which can be supplied by the Personnel Department.

## GROUP ACCIDENT AND HEALTH INSURANCE



## A PAID VACATION EVERY YEAR



Day's pay employees are given one week's vacation with pay after one year of service, and two weeks' vacation with pay after three years of service. After ten years of service, an employee is given three weeks' vacation, with pay.

After twenty years an employee is given four weeks' vacation with pay.

Vacations shall be in accordance with schedules prepared by the Company, having regard to the expressed desires of the employees, period of employment, and spreading vacation periods so as not to interfere with operations.

## HOLIDAYS

The Company recognizes a number of paid holidays for day's pay employees who qualify under the conditions established. Those holidays currently recognized are as follows:

New Year's Day  
Washington's Birthday  
Memorial Day  
Fourth of July

Labor Day  
Nevada Admission Day  
Thanksgiving Day  
Christmas Day

## WORKMEN'S COMPENSATION



You are covered under the provisions of the Nevada Industrial Insurance Act, providing medical expenses and compensation benefits for on-the-job injuries. This protection is provided for you at the sole cost and expense of your employer.

In order that you will receive benefits in the event of an on-the-job injury, you must report any and all accidents, however slight, to your Foreman immediately. If an accident is not reported immediately, it will not be recognized, and benefits will be lost.

## UNEMPLOYMENT INSURANCE

Your employer pays the entire cost of having you covered under the provisions of the State Unemployment Act. Under this law, if you are terminated through no fault of your own, because of lack of work, you are eligible for benefits.



## PENSION PLAN

The Anaconda Company has provided a pension plan for its employees who retire from active employment after reaching retirement age, and who have the requisite number of years' service to qualify for pension allowance.

The Plan also provides for a vested interest in deferred pension benefits should you leave the employ of the Company for any reason, and should you qualify for such vested interest.

Complete details of this pension plan, as it will benefit you, are available in the Personnel Department. This benefit is provided at no cost to you as an employee, the entire expense being borne by your employer.

## SAFETY PROGRAM

The health and safety of employees is of vital concern to your employer. A rigid safety program is a continuous and important part of our operations. One of the most important parts of your job is to do your work in a safe manner. The Company puts forth its best efforts to protect you from injury; however, in the end it is up to you to do your work in such a manner that you will not injure yourself or others.

The Safety Committee conducts safety inspections in various departments at regular intervals, and makes recommendations for safety improvements.

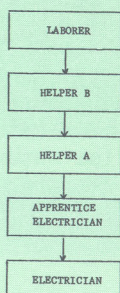
One of the finest safety records in the mining industry was established by this Company at this operation when not a single lost time accident occurred from December 22, 1957, to March 27, 1959. This kind of record requires the complete conscientious effort of every employee on the job, from newly-hired laborers to top management.



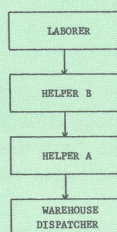
# YOUR FUTURE

The following charts will assist you in learning about your future with The Anaconda Company.

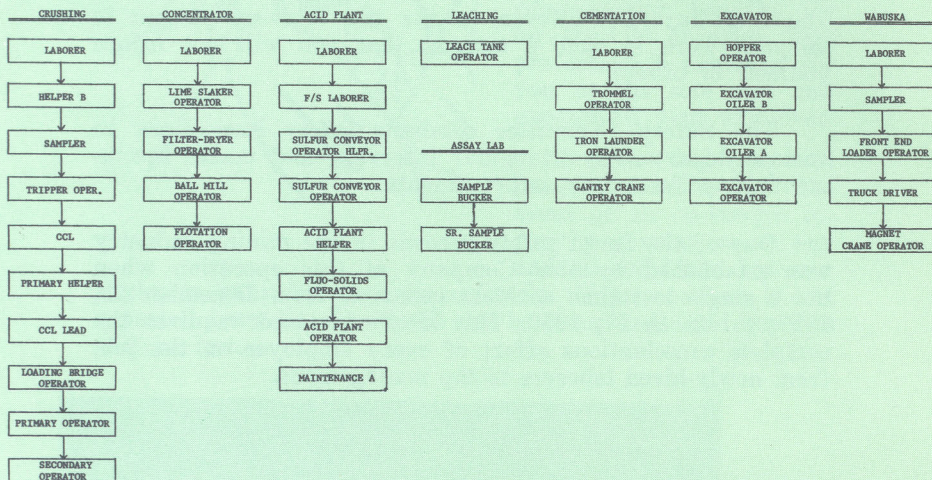
LINE OF PROMOTION  
ELECTRICAL DEPARTMENT



LINE OF PROMOTION  
WAREHOUSE DEPARTMENT

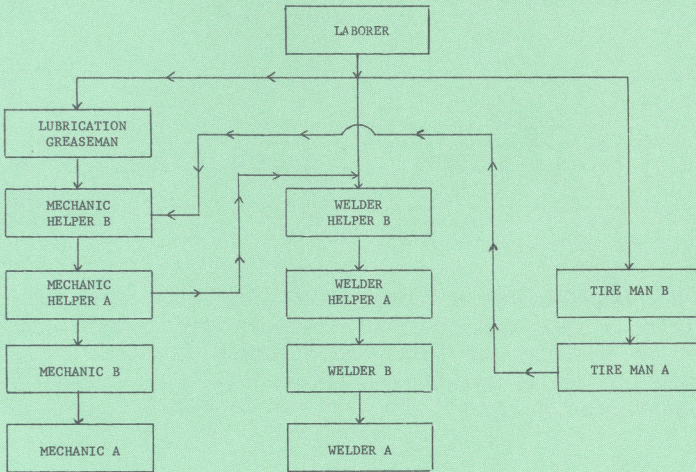


LINE OF PROMOTION  
PLANT DEPARTMENT

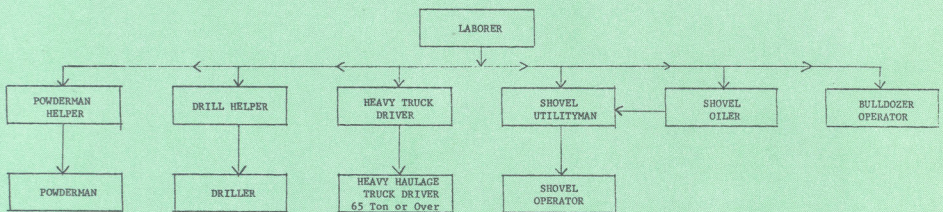




LINE OF PROMOTION  
REPAIR & MAINTENANCE -- MOBILE EQUIPMENT



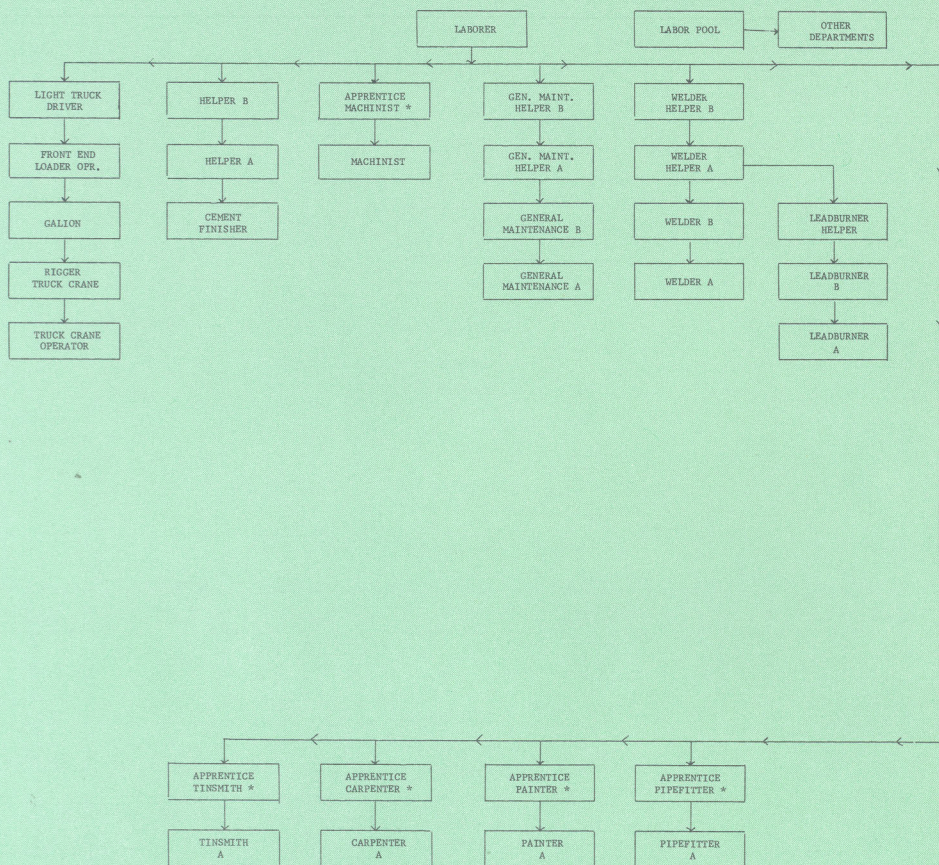
LINE OF PROMOTION  
MINING DEPARTMENT



NOTE: EACH SECTION SHOWN IS A SEPARATE LINE OF PROMOTION. THE FIRST STEP IN ANY OF THESE LINES MAY BE BID BY ANY EMPLOYEE IN ANY OTHER LINE OF PROMOTION, THE SENIOR MAN IN THE MINE BEING GIVEN PREFERENCE, PROVIDED NO EMPLOYEE SHALL BID DOWN OR ACROSS GRADE MORE THAN ONCE IN ANY CALENDAR YEAR.



LINE OF PROMOTION  
MECHANICAL DEPARTMENT



NOTE: \* APPRENTICESHIP CLASSIFICATIONS CAN BE ENTERED FROM ANY CATEGORY, SUBJECT TO  
QUALIFICATIONS AND COMPETENCY.



## THESE ARE OUR DEPARTMENTS

### MINING

As of March 1, 1972, the open pit at Weed Heights was 6,200 feet long, 2,500 feet wide, and 700 feet deep. From the time the first truck load of material was removed, to the above date, a total of over 267,408,000 tons of ore and waste have been hauled from the pit, sufficient to circumnavigate the globe with a train of ore cars.

Selective mining is obtained at Weed Heights by maintaining a maximum height of twenty-five feet for the benches. This allows separation of ore from waste, and separation of ore of various copper content.



**Drilling and Blasting:** In 1955 Mine Personnel experimented successfully with the use of fertilizer grade ammonium nitrate for blasting. Since all the rock must be drilled and blasted before removal, blasting costs were a big factor. The successful use of this grade of ammonium nitrate, mixed with diesel oil, has considerably affected blasting costs in a number of mining operations in the United States. Blast holes are drilled with a Bucyrus-Erie Model 40-R and a truck mounted Reich Drill and rotary drills, using 7 $\frac{7}{8}$  inch bits. These machines average around 50 feet per hour. Drill holes 30 feet deep are placed 22 to 25 feet apart. Ordinarily, 30 holes are blasted at one time.

Each blast hole is loaded with 100 to 300 pounds of pre-mixed ammonium nitrate, mixed with diesel oil. Reinforced primacord is used inside the blast holes, with plain primacord used in the trunk line tying the holes together.

**Haulage:** After an area has been blasted, the shovel is moved into the bench face to remove the broken ground. Five P&H 1500 electric shovels now equipped with 6-yard buckets plus one 10-yard P&H are used for removal of ore and waste. Material is loaded into Dart dump trucks, having a capacity of 65 tons. A fleet of 30 of these Dart trucks is employed in the mining operation at Weed Heights.

**Water Wells:** To keep the water level dropping in advance of mining operations, a series of wells 300 to 700 feet deep were drilled around the perimeter of the pit. These wells not only serve the purpose of lowering the water level in the pit proper, but also furnish the enormous quantity of water required daily for plant operations and furnish the residences of Weed Heights with the requisite domestic water supply. Samples of the water are taken each month and sent to the Nevada State Board of Health.

## METALLURGICAL PLANT

**Primary Crushing:** Haulage trucks coming from the shovels in the pit loaded with ore dump their loads at the Primary Crusher into the 54-inch gyratory. Here the ore is broken into a minus 6-inch size. After crushing, the ore is loaded through a 60-inch pan feeder onto No. 1 conveyor belt, and is transported to either the sulphide or oxide coarse ore





storage bin, depending on the type of ore being mined. Each of these storage bins has a capacity of some 12,000 tons of ore (about 10,000 live). Pan feeders located under the storage bins handle the ore on its way to secondary crushing. Utilization of storage of ore in the coarse ore storage allows, to a certain extent, operation of the secondary crushers independently of both mining operations and primary crushing.

The 54-inch gyratory crusher has a capacity of handling 1500 tons of ore per hour.

**Secondary Crushing:** The secondary crushing system consists of one standard crusher and three shorthead crushers. Ore from the coarse ore storage is fed onto a conveyor belt, delivering it to the standard crusher where it is crushed to a maximum  $1\frac{1}{2}$  inch size. The  $7/16$  inch screens ahead of the standard crusher allow material under  $7/16$ " to by-pass the standard crusher and go directly to the conveyor which feeds the leaching tanks or the sulphide fine ore storage area.

After the ore has passed through the standard crusher — now a minus  $1\frac{1}{2}$ " — it is transported by conveyor belts and by means of a traveling tripper is loaded into three storage bins, each having a capacity of 300 tons, these storage bins feeding the shorthead crushers.

From each of the 300-ton storage bins, the ore is fed by pan feeders into an inverted "Y" chute which divides the ore stream and sends it over two vibrating screens. Here again any material which is smaller than  $7/16$ " passes through the vibrating screens directly to the conveyor belt feeding the leaching tanks or sulphide storage area. The ore which is larger than  $7/16$ " goes over the screens into the shorthead crushers, the three shorthead crushers operating in parallel.

The ore having passed through the shorthead crushers is again conveyed to the 300-ton storage bins and is again discharged over the  $7/16$ " vibrating screens, where minus  $7/16$ " material goes directly to the conveyor belt feeding the leaching tanks or the sulphide storage area.

The shorthead crushers are operated in what we term a closed circuit, that is, all ore remains in the circuit of storage bins, to vibrating screens, to shorthead crushers, until it all passes through the  $7/16$ " screens, and into the flow to leaching tanks or sulphide storage area.











*Note: At this point we will separate the treatment of sulphide and oxide ores, since from this point the two ores are processed differently.*

### OXIDE ORE

**Agglomeration:** The minus 7/16" ore, after it has passed onto the conveyor belt which carries it to the leaching tanks, is sprayed with a definite amount of water in order to bring the average moisture content up to 7 to 9 per cent. Our main reason for doing this is to prevent segregation of the very fine material ( $-200$  mesh). It also serves a very useful purpose in preventing dusting when the ore is placed in the leaching tanks.

**Bedding and Leaching:** The crushed copper ore is transported by a 1521-foot conveyor belt to the loading bridge for bedding into the leaching tanks. The loading bridge can travel on its running rails over the full length of all eight leaching tanks and also over the fine ore sulphide storage area. By means of a tripper on the loading bridge, the crushed ore is distributed in the tanks proper. Each leaching tank holds about 12,500 dry tons of crushed ore.

Ore is leached with sulphuric acid solution over a period of from 85 to 120 hours. The process is a leaching of the copper in the ore by the sulphuric acid solution, the solution picking up the copper content and leaving the barren remainder in solid form.

The copper-bearing solution is drawn out of the leaching tank and pumped into storage tanks, where it is held until required at the precipitation launders.

The remaining material in the leaching tanks, which is now barren of copper mineral, and which is known as "tailings," is washed for a period of about 32 hours with wash water to remove any remaining sulphuric acid solution, and is then removed from the tanks by the excavator. The 8-ton bucket on the excavator digs the tailings from the tank, placing them in a two-compartment hopper, from which they are discharged into Dart haulage trucks and transported to the tailings dump at the North of the property.

**Precipitation:** The copper-bearing solution, copper sulphate, is drawn from the storage tanks to the precipitation launders, where it is percolated upwards through properly processed light gauge scrap iron to precipitate the copper. Here, a chemical replacement occurs, the copper in the solution is precipitated, and the iron goes into solution. The waste solution (ferrous sulphide) is drained from the precipitation launders and flows to the evaporation area, where it is collected and allowed to evaporate.

The copper which has been precipitated (which is about 85% pure copper) is removed from the precipitation launders by the clamshell bucket on the overhead crane and washed through trommel screens to remove any scrap iron remaining in the material. The copper is then allowed to drain in the trommel pits for 10 to 18 hours, to reduce the moisture content. The copper is then placed on drying vats for 24 hours and by the use of gas burners, the moisture content is reduced to about 15%.

After the drying period, the copper is loaded into side dump trailers and transported to Wabuska, where it is loaded into railroad cars and shipped to The Anaconda Company's smelter at Anaconda, Montana.

### **SULPHIDE ORE**

After the sulphide ore is crushed in the secondary crushing plant, it is transported over the same 1521-foot conveyor belt used for oxide ore to the sulphide fine ore storage area.



Sixteen belt feeders, arranged in banks of eight feeders, located beneath the fine ore storage area, deposit the ore onto 24-inch conveyor belts serving the flotation plant. This ultra-modern plant is capable of handling 13,800 wet tons of ore per day.

The ore is conveyed into two 10' x 14' rod mills where it is ground to 10-mesh. This is pumped to four 11' x 15' ball mills where it is very finely ground in order to liberate the particles of copper minerals. This finely ground material is then introduced into flotation cells. By introducing air into the flotation cells and by means of mechanical agitation and chemical reagents, a mass of froth is created. The fine particles of copper mineral attaching themselves to the froth are floated off and the gangue (waste) material is depressed and disposed of as "tailings."

This tailing is pumped to wet cyclones where it is separated about half and half into coarse and fine fractions. These also are introduced into flotation cells to produce concentrates. The tailings from these cells are discarded.

The concentrate produced is passed through a re-grind circuit where the material is further finely ground, again liberating any of the very, very fine particles of copper. From this point, the concentrate is then passed through other banks of flotation cells for cleaning and re-cleaning and scavenger purposes. The final concentrate produced is thickened in a large tank and from this point it is taken to vacuum filters in order to reduce moisture content. The concentrate leaves these filters with approximately 15 to 18% moisture. It is then passed through a rotary dryer where the moisture content is further reduced to approximately 8%. This concentrate (28 to 35% copper) is loaded into specially designed tractor-trailer units for transportation to the rail-head at Wabuska, about 12 miles distant from the plant, and from that point is shipped by rail to Anaconda's smelter at Anaconda, Montana.

### **Sulphur Processing:**

Sulphur is received by rail at Wabuska. From there it is hauled by truck to the plant where it is either placed in stockpile or dumped in a 150-ton receiving bin. The sulphur is nearly 100% pure and minus 1" in size.

From the receiving bin, it is transported by conveyor belts to 250-ton storage bins ahead of each of three reactor trains.

The reactors are cylindrical steel furnaces, lined with 9 inches of insulating brick and 4½" of fire brick, where the

sulphur is burned at a temperature of about 1600 degrees F. The liberated sulphur then combines with oxygen from the air, forming sulphur dioxide gas. The  $\text{SO}^2$  gas is passed through a cooling chamber where it is cooled with water sprays.

The gas is then passed through the Peabody scrubber for further cooling and then through mist Cottrell precipitators to remove mist.

The sulphur dioxide gas is now passed through one of the towers of the acid plant for drying purposes. It is then passed into the contact acid plant proper where, by means of proper heat control and heat balance, and by means of catalysts, it is converted to sulphur trioxide ( $\text{SO}^3$ ). The  $\text{SO}^3$  gas is then passed through the 98% acid tower, where because of contact with a small percentage of water, sulphuric acid is produced.





## **PERSONNEL**

The Personnel Department is located in the General Office Building. In addition to the functions of interviewing and hiring job applicants and administering housing in Weed Heights, the Personnel Department is willing and capable of helping you, as an employee, in any problem concerning your job and your benefits as an employee of The Anaconda Company.

This department has the responsibility of administering all fringe benefits, including group life insurance; retirement and pension plans; employee recreational facilities; vacations; workmen's compensation, and unemployment compensation.

Fire protection and plant security are administered by the Personnel Department.

## **ACCOUNTING AND TIMEKEEPING DEPARTMENT**

The Accounting and Timekeeping Department is located in the General Office Building.

Questions concerning earnings, payroll deductions, and payroll savings will be readily answered for you by this department.

## **WAREHOUSE**

To keep a property the size of Weed Heights operating continuously, with the large amount of equipment and machinery employed, requires a well-organized and efficiently operated purchasing and disbursing department.

It is the function of the Warehouse Department to purchase and maintain sufficient supplies and parts necessary for the entire operation, and in so doing, to obtain the best prices available to assist in controlling operating costs.

## MECHANICAL

Maintaining equipment and machinery in the metallurgical plant to continue maximum operating efficiency requires ingenuity and adaptability. In addition to the important job of plant maintenance, the Mechanical Department has the responsibility of all townsite maintenance. The carpenter shop, paint shop, pipe shop, lead shop, and tin shop are under the supervision and control of the Mechanical Department. Additionally, the plant "labor pool," where most new employees commence their working career with the Company, is under this Department. This crew of workmen performs all clean-up work, both in the plant and in the townsite, as well as performing clean-up and repair work in the leaching tanks. From the "labor pool" employees are moved into the operating departments.

In conjunction with the repair and maintenance work performed by the Mechanical Department, a completely modern and fully equipped Machine Shop was set up. Here almost any replacement part can be machined and repaired in order to keep the operation running with a minimum amount of delay.

Much could be said about the Mechanical Department, its duties and responsibilities; however, it would require more space than this booklet to cover it fully.

## GARAGE

A complete repair shop is maintained by the Company at Weed Heights for the upkeep of all mobile and mine equipment. Any repair or maintenance job on gasoline or diesel engines, transmissions, differentials, or overhaul on the trucks, shovels, bulldozers, motor patrols and drills can be done by Anaconda's own mechanics at the shop.

To keep the shovels, bulldozers, drills, cranes, and motor patrols used by the Mining Department in first class operating condition, a crew of specialized mechanics is required.

Specialized heavy-duty mechanics and helpers are also required to repair and maintain the heavy haulage trucks, as well as all other mobile equipment, both gas and diesel.

Many of the mechanics in Anaconda's Garage have been specially trained on the job for their particular work, it being the policy of the Company to give every employee an opportunity to learn while he is working, to further his own skills.



## ELECTRICAL

As might well be imagined, in an operation of this size, a large amount of electrical energy is consumed to operate literally hundreds of electric motors and other pieces of electrical equipment. This equipment is located throughout the Plant area, Mine area, Townsite and Wabuska and consists of large crusher motors, blower motors, conveyor motors, crane motors, electric shovels, motor generator sets, D.C. motors, diesel generator sets, various auxiliary motor drives, together with switchboards and various automatic control equipment, and in addition, receiving substation and distribution lines throughout the project. The Electrical Department maintains and repairs all of this equipment.

In order to assure continuous operation, a planned schedule of maintenance and overhaul of electrical equipment is provided. The Electrical Department is divided into several sections, in order to process the various types of work. The Repair Shop is equipped to perform the necessary repairs to motors and control equipment; rewinding of motors and generators is done in the Winding Shop; the Instrument and Test Shop services a considerable number of instruments throughout the Plant, and, in addition, performs electrical tests when necessary; the Radio Shop services the two-way radio communication equipment and also three Television Translators which provide television reception for the area.

Shift electricians maintain a constant vigilance over all equipment while in operation, while maintenance electricians inspect the equipment when not in operation. The outside crew maintains the overhead lines that form the local distribution system and also performs all types of new construction work.

As can be seen, the work performed by the Electrical Department is diversified, and, in some cases, requires special training. The Department provides this special training on the job and also provides training for men with no outside experience who may enter the Department.