(31)

PROCESS/FACILITY MINE PLANT KING CITY

COMPLETED BY R.O MARSTEN DATE 12/72

VII. - STORAGE TANKS

Tank No.	Size (Gal)	* Type	Contents	Sp Gr	MW	Odor	Mat'l of Const.	Dia. (ft)	Ht. (ft)	Press (psig)
1	880	A	DIESEL FUEL				STEEL			
2	880	A	DIESEL FUEL				"			
3	550	A	GASOLINE				"			
4	550	A	GASOLINE				"			
5	6000	A	WATER				"	10'	10'	

* Type A - Atmospheric, PV - Pressure Vented, PNV - Pressure Non Vented, FR - Floating Roof, B - Bin, S - Silo

PLAINTIFF'S EXHIBIT
Union Carbide 30

Pollution Abatement Devices

DEISEL FUEL TANKS ARE DYKED
GASOLINE TANKS ARE 10ft ABOVE GROUND NOT DYKED

Handling and Cleaning (Emissions)

A 1053/4

PROCESS SURVEY - ENVIRONMENTAL IMPACT ANALYSIS

PROCESS MINE PLANT KING CITY
COMPLETED BY R.O. MARSTEN DATE 12/72

IX - NOISE EMISSIONS

A. Abnormal Noise Emissions (above 85 Decibels, dBA)

Source	Location (In/Out Doors)	Sound Pressure (dBA)	At Distance (ft)	Exposure (Hrs/Shift)
FRONT END LOADER	OUT	*		6 1/2
CAT DOZER	OUT	*		6 1/2
SCREENING OPERATION	OUT	*		1

B. Sound Pressure and Range in Usual Work Areas (Provide data if available)

Location	Sound Pressure (dBA)	Range (dBA)	Remarks

C. Noise Emissions to Public

Source	Location Measured	Sound Pressure (dBA)	Distance from Plant Boundary	Hrs/day

D. Abnormal Noise Abatement Plans or Protective Measures

* NO SOUND SURVEY DATA AVALIABLE HOWEVER SIMILIAR EQUIPMENT 90+ DECIBLES IN CAB

OPERATORS REQUIRED TO WEAR EAR MUFFS

A10575

ENVIRONMENTAL PROTECTION/PROCESS SURVEY-ENVIRONMENTAL IMPACT ANALYSIS

OCESS/FACILITY MINE PLANT KING CITY COMPLETED BY R.O. MARSTEN DATE 12/72 Page ___ of ___

A1053.0

IV. AIR EMISSIONS

(1) Stream No. A- 1

(2) Component	Wt %	(3) Usual Lb/Day	(4) Abnormal Lb/Hour
ASBESTOS			
Total			

(5) Abnormal Emissions: Frequency ___
Duration ___

(6) Name FUGITIVE DUST 6A SCFM —
(7) Discharge To- Air Flare Incinerator ___
(8) Frequency-~~Continuous~~ ~~Hr/D D/Wk Wk/Mo Mo/Yr~~ WHILE MINING ___
(9) Outlet: Dimension — in. Pipe, Duct, Stack; Height —
(10) Temperature AMBIENT °F (11) Visibility-None, Mist, [Solids], Steam, Color ___
(12) Odor - [None] Slight, Moderate, Strong; Quality ___
(13) Emission Reduction Device WATER SPRAYS Installed 1972
(14) Reduces What? DUST (15) Efficiency —
(16) How Abnormal Emissions Detected and Corrected ___

(17) Notes ALL SAMPLES SHOW <5 PARTICLES/ML 5 MICRONS OR GREATER

(1) Stream No. A- 2-4-8

(2) Component	Wt %	(3) Usual Lb/Day	(4) Abnormal Lb/Hour
DIESEL EXHAUST			
Total			

(5) Abnormal Emissions: Frequency ___
Duration ___

(6) Name DIESEL EXHAUST 6A SCFM
(7) Discharge To- Air Flare Incinerator
(8) Frequency-Continuous 8 Hr/D ~~D/Wk Wk/Mo Mo/Yr~~ ___
(9) Outlet: Dimension ___ In. Pipe, Duct, Stack; Height ___
(10) Temperature ___ °F (11) Visibility-None, Mist, Solids, Steam, Color #1 TO #4 RINGELMAN
(12) Odor-None, [Slight], Moderate, Strong; Quality ___
(13) Emission Reduction Device ___ Installed ___
(14) Reduces What? ___ (15) Efficiency ___
(16) How Abnormal Emissions Detected and Corrected ___

(17) Notes ___

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ENVIRONMENTAL PROTECTION/PROCESS SURVEY-ENVIRONMENTAL IMPACT ANALYSIS

ROCESS/FACILITY MINE PLANT KING CITY COMPLETED BY R.O. MARSDEN DATE 12/72 Page ____ of ____

A 1:03:7

IV. AIR EMISSIONS

(1) Stream No. A- 3 (2) Component	Wt %	(3) Usual Lb/Day	(4) Abnormal Lb/Hour
Total			

(5) Abnormal Emissions: Frequency ____
Duration ____

(6) Name ORE SCREENING DUST 6A SCFM —
(7) Discharge To- [Air] Flare Incinerator
(8) Frequency-Continuous 9 Hr/D D/Wk Wk/Mo Mo/Yr 5 M
(9) Outlet: Dimension — in. Pipe, Duct, Stack; Height —
(10) Temperature AMBIENT °F (11) Visibility-None, Mist [Solids] Steam, Color
(12) Odor - [None] Slight, Moderate, Strong; Quality
(13) Emission Reduction Device WATER SPRAYS Installed
(14) Reduces What? ASBESTOS DUST (15) Efficiency
(16) How Abnormal Emissions Detected and Corrected
VISUAL - RESPERATORS WORN ON WINDY DAYS AT OPERATOR DISCRETION
(17) Notes WATER IS SPRAYED ON ORE PILE + SCREENING + LOADING OPERATION AT RATE 2500 GPH

(1) Stream No. A-5 (2) Component	Wt %	(3) Usual Lb/Day	(4) Abnormal Lb/Hour
Total			

(5) Abnormal Emissions: Frequency ____
Duration ____

(6) Name GASOLINE EXHAUST 6A SCFM
(7) Discharge To- Air Flare Incinerator
(8) Frequency-Continuous ____ Hr/D D/Wk Wk/Mo Mo/Yr
(9) Outlet: Dimension ____ in. Pipe, Duct, Stack; Height
(10) Temperature ____ °F (11) Visibility-None, Mist, Solids, Steam, Color
(12) Odor-None, Slight, Moderate, Strong; Quality
(13) Emission Reduction Device ____ Installed
(14) Reduces What? ____ (15) Efficiency
(16) How Abnormal Emissions Detected and Corrected
(17) Notes

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PROCESS/FACILITY MINE PLANT KING CITY COMPLETED BY R.O. MARSTEN DATE 12/72 Page ____ of ____

8/20: A

IV. AIR EMISSIONS

(1) Stream No. A- 6-7			
(2) Component	Wt %	(3) Usual Lb/Day	(4) Abnormal Lb/Hour
Total			

(5) Abnormal Emissions: Frequency ____
Duration ____

(6) Name FUGITIVE DUST 6A SCFM
(7) Discharge To- [Air] Flare Incinerator ____
(8) Frequency-Continuous 15 Hr/D ~~D/Wk Wk/Mo~~ 5 Mo/Yr
(9) Outlet: Dimension ____ in. Pipe, Duct, Stack; Height ____
(10) Temperature AMBIENT °F (11) Visibility-None, Mist, [Solids], Steam
Color WHITE
(12) Odor - [None] Slight, Moderate, Strong; Quality ____
(13) Emission Reduction Device WATER SPRAY Installed ____
(14) Reduces What? ASBESTOS DUST (15) Efficiency ____
(16) How Abnormal Emissions Detected and Corrected ____
(17) Notes DURING THE 55 MILE HAUL FROM THE MINE TO THE MILL ASBESTOS IS BLOWN FROM THE TRUCK TO THE ATMOSPHERE - ALSO ROAD DUST RESULTS FROM TRAVEL IN DRY WEATHER

(1) Stream No. A-			
(2) Component	Wt %	(3) Usual Lb/Day	(4) Abnormal Lb/Hour
Total			

(5) Abnormal Emissions: Frequency ____
Duration ____

(6) Name ____ 6A SCFM
(7) Discharge To- Air Flare Incinerator ____
(8) Frequency-Continuous ____ Hr/D D/Wk Wk/Mo Mo/Yr ____
(9) Outlet: Dimension ____ In. Pipe, Duct, Stack; Height ____
(10) Temperature ____ °F (11) Visibility-None, Mist, Solids, Steam,
Color ____
(12) Odor-None, Slight, Moderate, Strong; Quality ____
(13) Emission Reduction Device ____ Installed ____
(14) Reduces What? ____ (15) Efficiency ____
(16) How Abnormal Emissions Detected and Corrected ____
(17) Notes ____

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A 1053 DATE 12/22

VI. RESIDUES/MISCELLANEOUS EMISSIONS

(1) Stream No. R-1		(3) Usual Lb/Day	(4) Abnormal Lb/hour
(2) Component	Wt%		
LUNCH SCRAPS			
CANS OIL			
ETC			
Total			

(5) Abnormal Production: Frequency ____ Duration ____

(6) Name TRASH

(7) Disposal Means-Incinerator, Boiler, [Landfill], Underground, Sale, Contract, Tailing Ponds

(8) Frequency-Continuous 5 ~~Hr/D D/Wk Wk/Mo~~ Mo/Yr

(9) Physical Form-Viscous, Liquid, Oil, Chunks, Slurry, Semi, [Solids]

(10) Problems in Disposal (Note Disposal Location) [None], Odor, Toxic, Radiation, Dusting, Others (Describe)

(11) Notes BURIED IN OVER BURDEN PILES

(1) Stream No. R-2		(3) Usual ~~Lb/Day~~	(4) Abnormal Lb/hour
(2) Component	Wt%		
OVERBURDEN			
AT PRESENT RATE			
OF PRODUCTION			
57,000 TONS PER			
YEAR GENERATED			
Total			

(5) Abnormal Production: Frequency — Duration ____

(6) Name OVERBURDEN

(7) Disposal Means-Incinerator, Boiler, [Landfill], Underground, Sale, Contract, Tailing Ponds

(8) Frequency-Continuous ____ Hr/D D/Wk Wk/Mo Mo/Yr

(9) Physical Form-Viscous, Liquid, Oil, Chunks, Slurry, Semi, [Solids]

(10) Problems in Disposal (Note Disposal Location) [None], Odor, Toxic Radiation, Dusting, Others (Describe)

(11) Notes OVERBURDEN TRUCKED TO ONE OF 4 WASTE DUMPS EITHER SIDE OF MINE. NO RECLAMATION OF PILES STARTED TO DATE

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PROCESS/FACILITY MINE PLANT KING CITY COMPLETED BY R.O. MARSTEN Page ___ of ___ DATE 12/22

0090:4

VI. RESIDUES/MISCELLANEOUS EMISSIONS

(1) Stream No. R- 3		(3) Usual Lb/Day	(4) Abnormal Lb/hour
(2) Component	Wt%		
+ 12" ROCK FROM GRIZZLY			
+ 1½ ROCK FROM SCREEN			
AT PRESENT RATE			
OF OPERATION			
6300 NT GENERATED			
PER YEAR			
Total			

(5) Abnormal Production: Frequency ___ Duration ___

(6) Name OVERSIZE ROCK

(7) Disposal Means-Incinerator, Boiler, [Landfill] Underground, Sale, Contract, Tailing Ponds ___

(8) Frequency-Continuous ___ Hr/D D/Wk Wk/Mo Mo/Yr ___

(9) Physical Form-Viscous, Liquid, Oil, Chunks, Slurry, Semi, [Solid]

(10) Problems in Disposal (Note Disposal Location) [None] Odor, Toxic Radiation, Dusting, Others (Describe) ___
DISPOSED OF BY DUMPING ON CLOSEST WASTE DISPOSAL AREA

(11) Notes NO LAND RECLAMATION STARTED ON WASTE PILES

(1) Stream No. R- 4		(3) Usual Lb/Day	(4) Abnormal Lb/hour
(2) Component	Wt%		
LUNCH BAGS ETC			
Total			

(5) Abnormal Production: Frequency ___ Duration ___

(6) Name WASTE

(7) Disposal Means-Incinerator, Boiler, [Landfill] Underground, Sale, Contract, Tailing Ponds ___

(8) Frequency-Continuous ___ Hr/D D/Wk Wk/Mo Mo/Yr ___

(9) Physical Form-Viscous, Liquid, Oil, Chunks, Slurry, Semi, [Solid]

(10) Problems in Disposal (Note Disposal Location) None, Odor, Toxic Radiation, Dusting, Others (Describe) ___

(11) Notes ___

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PROCESS/FACILITY MINE PLANT KING CITY COMPLETED BY R.O. MARSTEN Page ____ of ____
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A 10591

VI. RESIDUES/MISCELLANEOUS EMISSIONS

(1) Stream No. R- 5		(3) ~~Usual~~ ~~Lb/Day~~ Tons/Season	(4) Abnormal Lb/hour
(2) Component	Wt%		
ASBESTOS ORE		25 g	
Total			

(5) Abnormal Production: Frequency ____
Duration ____

(6) Name SPILL FROM TRUCKS HAULING FROM MINE
(7) Disposal Means-Incinerator, Boiler, Landfill, Underground, Sale, Contract, Tailing Ponds ____
(8) Frequency-Continuous 5 ~~Hr/D D/Wk Wk/Mo~~ Mo/Yr
(9) Physical Form-Viscous, Liquid, Oil, Chunks, Slurry, Semi, [Solids]
(10) Problems in Disposal (Note Disposal Location) None, Odor, Toxic, Radiation, Dusting, Others (Describe)
DURING THE 55 MILE HAUL FROM THE MINE TO THE MILL ORE IS BLOWN FROM THE LOAD TO THE ROAD ALSO SOME SPILL FROM BOTTOM
(11) Notes DUMP TRUCK GATES DROPS ON ROAD MOST FALLS ON FIRST 10 MILES OF PRIVATE ROAD VERY LITTLE ON ROAD THROUGH KING CITY

(1) Stream No. R- 6		(3) ~~Usual~~ Lb/Day Tons/Season	(4) Abnormal Lb/hour
(2) Component	Wt%		
ASBESTOS ORE		25 g	
Total			

(5) Abnormal Production: Frequency TWICE PER YEAR
Duration 12½ TON EACH

(6) Name ACCIDENTAL DUMP
(7) Disposal Means-Incinerator, Boiler, Landfill, Underground, Sale, Contract, Tailing Ponds PUSHED TO SIDE OF ROAD
(8) Frequency-Continuous ____ Hr/D D/Wk Wk/Mo Mo/Yr
(9) Physical Form-Viscous, Liquid, Oil, Chunks, Slurry, Semi, [Solids]
(10) Problems in Disposal (Note Disposal Location) None, Odor, Toxic Radiation, Dusting, Others (Describe)
DURING THE HAUL FROM MINE TO MILL THERE ARE AN AVERAGE OF 2 ACCIDENTAL DUMPS ON THE ROAD DUE TO
(11) Notes MALFUNCTIONS IN THE ELECTRICAL DUMP CONTROL SYSTEM (EACH 12½ TONS) MATERIAL IS GENERALLY PUSHED TO SIDE OF ROAD

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PROCESS/FACILITY MINE PLANT KING CITY COMPLETED BY R.O.MARSTEN DATE 12/72

A 10502

V. WATER DISCHARGES

(1) Stream No. W- 1		(3) Usual	(4) Abnormal
(2) Component	Wt%	Lb/Day	Lb/Hour
Total			

(5) Abnormal Discharge: Frequency ____
Duration ____

(6) Name WASTE OIL 6A GPM
(7) Discharged to - Sewer, stream, drainage ditch, pond WASTE A
(8) Frequency-Continuous ____ Hr/D D/Wk Wk/Mo Mo/Yr ____
(9) Temperature ____ °F (10) Problems: In Treating or From D
Discharge-None, Odor, Visibility, Toxicity, Metals, Non-Degra
Oxygen Demand, Inorganics ____
(11) Waste Reduction Equipment NONE
(12) Reduces What? —
(13) Efficiency or Amount Recovered —
(14) How Abnormal Discharge Detected and Corrected —
(15) Range of flow of receiving stream CFS ____
(16) Notes WASTE OIL COLLECTED IN CONTAINE AND DUMPED ONTO WASTE PILES

(1) Stream No. W-		(3) Usual	(4) Abnormal
(2) Component	Wt%	Lb/Day	Lb/Hour
Total			

(5) Abnormal Discharge: Frequency ____
Duration ____

(6) Name ____ 6A GPM
(7) Discharged to- Sewer, stream, drainage ditch, pond ____
(8) Frequency - Continuous ____ Hr/D D/Wk Wk/Mo Mo/Yr ____
(9) Temperature ____ °F (10) Problems: In Treating or From Dis
Discharge-None, Odor, Visibility, Toxicity, Metals, Non-Degrade
Oxygen Demand, Inorganics ____
(11) Waste Reduction Equipment ____
(12) Reduces What? ____
(13) Efficiency or Amount Recovered ____
(14) How Abnormal Discharge Detected and Corrected ____
(15) Range of flow of receiving stream CFS ____
(16) Notes ____

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Plant Name KING CITY

Date 12/72

Completed by R.O. MARSTEIN

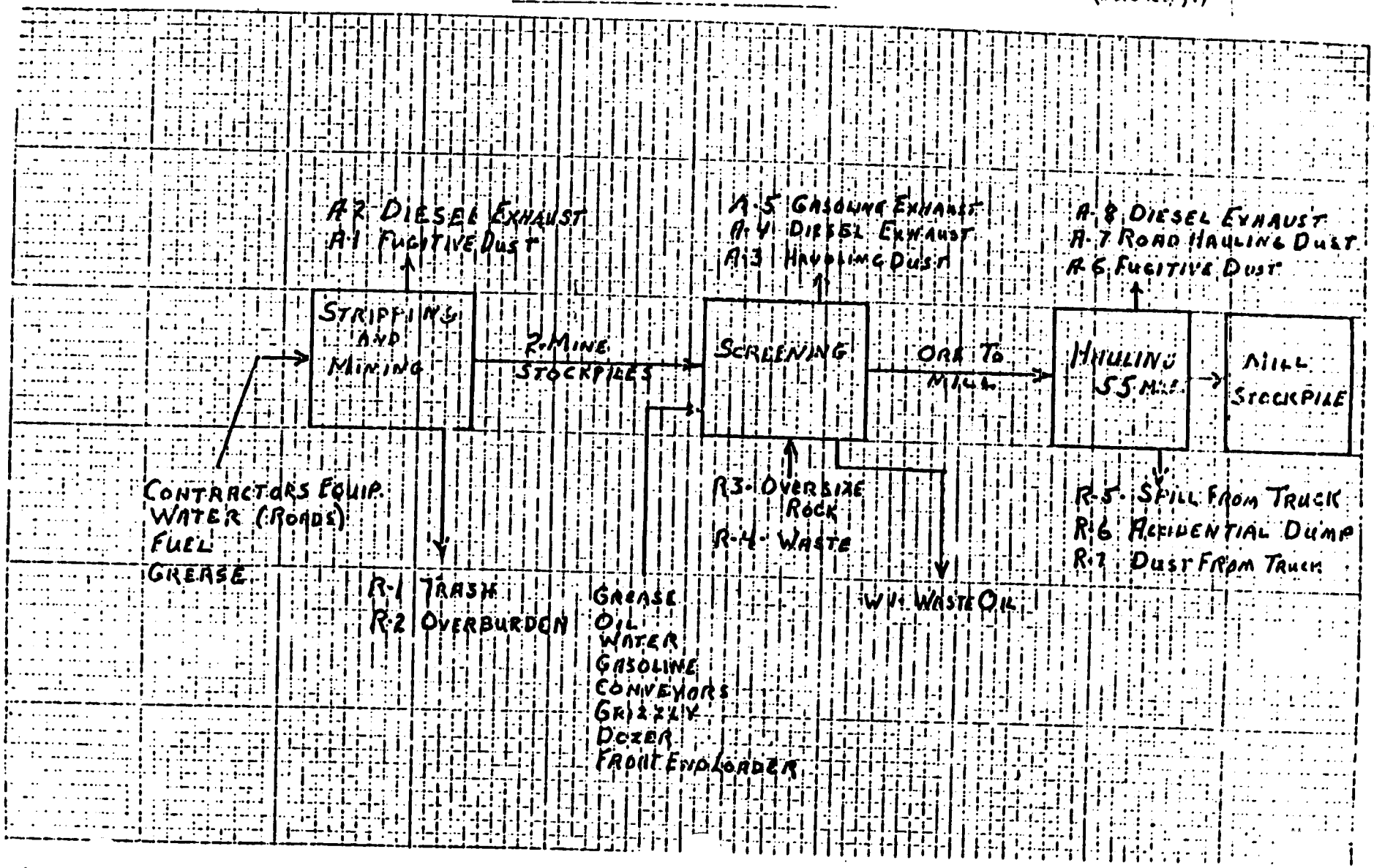
~~Process~~ Facility/Mine KING CITY

Production Rate at Capacity 1500 While Mining ~~(lb/day~~ or tons/day)

Production Time 62 DAYS = 2½ yrs (hrs/day or days/year)

~~Supply~~ Batch Rate (batches/yr)

I. SIMPLIFIED BLOCK DIAGRAM



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