



ROCKDALE - Industrial Hygiene Survey
1967-1973

411082 0435

~~CONFIDENTIAL~~ ~~NOT FOR RELEASE~~ ~~EXCEPT BY AUTHORITY OF THE SECRETARY OF HEALTH, EDUCATION AND WELFARE~~

ROCKDALE WORKS

DATE: MAY 27 - JUNE 1, 1973

INDUSTRIAL HYGIENE SURVEY

Ident.	Operation or Location	Contaminant	Method	Evaluation Results	Remarks
1	Inlet Production Bldg. 34 - General	Various	Visual & Sensory	Good	IN GENERAL ATMOSPHERE IS BUILDING CLEAR AND NO IRRITATION NOTICEABLE - FUMES OCCASIONALLY VISIBLE INSIDE FURNACE FLUING AND DRUMMING AND ALSO IN AREA NEAR SKIM ROOM
2	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	Cl ₂ .00ppm HCl .00ppm CO .00ppm ABOVE READINGS TAKEN ON WEST SIDE OF NO. 2 DC CASTING AREA - NO FUMES VISIBLE - NO IRRITATION NOTICEABLE
3	Homogenizing Furnace	CO	Detector Tubes	Good	BOTH FURNACES IN OPERATION - SLIGHT DRA OF NATURAL GAS NOTICEABLE AROUND FURNACE NO. 1 ON CATWALK .00ppm FOR NO. 1 - CO ON FLOOR .00ppm ON CATWALK .00ppm FOR NO. 2 - CO ON FLOOR .00ppm ON CATWALK .00ppm
4	Cutting Oil Supply Tank	Oil Vapor	Visual	Fair	OIL VAPOR VISIBLE COMING FROM TANK - WIND TENDED TO BLOW OIL VAPOR INTO BLOC 34
5	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE EXHAUST HOD - EXHAUST SYSTEM OPERATING - EXHAUST GOOD
6	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Fair	NO IRRITATION NOTICEABLE FLOOR OF ROOM COVERED WITH SKIM - HOTTEST SKIMMING (GREATEST AMOUNT OF FUMES NOTICABLE) - EXHAUST SYSTEM FAIR - SLIGHT IRRITATION NOTICEABLE IN ROOM - HCl .00ppm - FUMES AND DUST VISIBLE OUTSIDE ROOM WHEN HOT SKIM FIRST DUMBED ON FLOOR OF ROOM
7	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT IN OPERATION - NO DUST VISIBLE - NO WORK IN PROGRESS - EXHAUST SYSTEM FOR SKIM GOOD
7-A	Asbestos Mixing Area	Asbestos	Visual	Good	NO ASBESTOS MINING IN PROGRESS EXHAUST SYSTEM FOR MIXING OPERATIONAL FAIR
8	Rectifier Station	Mercury Vapor	Detector Tube	Good	5-21-73 MERCURY VAPOR .00mg/m ³ - NO WORK IN PROGRESS NO DROPLETS OF MERCURY VISIBLE IN ROOM - EXHAUST SYSTEM OPERATING - EXHAUST FAIR
9	Potrooms - General	Dust & Fumes	Visual	Good	6-1-73 SLIGHT HAZE OF DUST AND FUMES VISIBLE IN ALL ROOMS CONCENTRATION HIGHEST IN ROOMS 12 AND 20 BUT CHIMNEY PLACEMENT - GENERALLY GOOD BUT OVER EXHAUST - GENERALLY FAIR
10	Bath Storage	Dust	Visual & Sensory	Good	SMALL AMOUNT OF DUST VISIBLE - DUST MAINLY CAUSED BY WIND - NO IRRITATION NOTICEABLE
11	Poth Crushing	Dust	Visual-Smoke Tube	Good	CAUTION IN OPERATION - SMALL AMOUNT OF DUST VISIBLE DUST MAINLY CAUSED BY WIND - EXHAUST HODS WHICH WERE IN OPERATION WERE FAIR

MINISTOR

CHB

411082 0436

DATE: JUNE 1, 1973

411082 0437

Ident	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER IN OPERATION - BAG FILTER UNITS No. 2 AND No. 3 IN OPERATION - NO DUST VISIBLE COMING FROM EITHER UNIT
13	Ore Unloading	Dust	Visual	Good	UNLOADING IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN BUILDING - WIND TENDED TO KEEP BUILDING RELATIVELY FREE OF DUST
14	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - FUMES OCCASIONALLY VISIBLE NEAR ELECTROMELT FURNACES FUMES ALSO VISIBLE IN STUD WELDING AREA - NO IRRITATION NOTICEABLE
15	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL HIGH
16	Stub Press & Wheelabrator	Dust	Visual	Poor	No. 2 STUB PRESS IN OPERATION - NOISE LEVEL AT OPERATOR'S POSITION 103-105 dBA SMALL AMOUNT OF DUST VISIBLE IN AREA
17	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES VISIBLE COMING FROM MIXER No. 2 SLIGHT ODOOR OF HOT PITCH NOTICEABLE IN AREA
18	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	CLEANING OPERATION IN PROGRESS - MODERATE TO HEAVY DUST VISIBLE ALONG ENTIRE LENGTH OF SHAKER CONVEYOR EXHAUST HUB AT WEST END OF CONVEYOR OPERATING EXHAUSTS FAIR
19	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE IN AREAS WHERE PICKING AND UNPACKING OPERATIONS IN PROGRESS - DUST COMING FROM BUTT MILL ALSO VISIBLE IN BLOW LO - ALL FURNACE BUILDINGS WELL VENTILATED - CO IS APPROX
20	Dutt Unloading & Crushing	Dust	Visual	Fair	BOTH OPERATIONS IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN UNLOADING AREA - UNLOADING EXHAUST HUBS OPERATING - EXHAUST GOOD - LIGHT TO MODERATE DUST VISIBLE IN CRUSHER AREA DUST COMING FROM HOPPER AND CRACKS AT BASE OF CRUSHER MODERATE TO HEAVY DUST VISIBLE DURING CRUSHING OF MIXERS No. 1, 2, AND 9 - UPPER EXHAUST DUCT ON MIXER No. 1 WORKING HEAVY FUMES VISIBLE DURING DUMPING OF MIXERS No. 1 AND 9
21	Mixer Floor	Dust & Pitch Fumes	Visual	Poor	STRONG ODOOR OF HOT PITCH NOTICEABLE IN AREA

SURVEYOR

NHK

DATE: MAY 21 & JUNE 1, 1973

411082 0438

Ident	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	SMALL AMOUNT OF FUMES VISIBLE NEAR EAST END OF J-1 NO FUMES VISIBLE COMING FROM M-5 - EXHAUST SYSTEM OPERATING - EXHAUST GOOD
23	Press Room	Fumes	Visual	Good	BOTH PRESSES IN OPERATION - SMALL AMOUNT OF FUMES VISIBLE EACH TIME MIX ENTERS A PRESS - OPER. OF HOT PITCH NOTICEABLE IN BOTH ROOMS - BOTH ROOMS WELL VENTILATED
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	5-27-73 SMALL PORTABLE SABER SAW CUTTING MARINITE - NO DUST VISIBLE - EXHAUST SYSTEM OPERATING - EXHAUST GOOD - TABLE SAW CUTTING WOOD - NO DUST VISIBLE - EXHAUST GOOD
25	Garage - General	Fumes CO	Visual Detector Tube	Good	NO VEHICLES IN OPERATION - NO FUMES VISIBLE BUILDING WELL VENTILATED - CO .00ppm
26	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO ACID MIST VISIBLE NO IRRITATION
27	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	SEVERAL WELDING OPERATIONS IN PROGRESS - SMALL AMOUNTS OF FUMES VISIBLE - NO IRRITATION NOTICEABLE - EXHAUST HOODS WHICH WERE IN OPERATION WERE GOOD - BUILDING WELL VENTILATED
28	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	MARINITE HEADERS BEING FABRICATED USING LATHE AND DRILL PRESS - NO DUST VISIBLE - EXHAUST SYSTEM OPERATING - EXHAUST GOOD
29	Blacksmith Shop	CO	Detector Tube	Good	COAL-FIRED FORGE IN OPERATION - CO 15 ppm AREA WELL VENTILATED
30	Weld Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE DOOR CLOSED .00ppm DURING 7:50 AM READINGS TAKEN DIRECTLY IN FRONT OF DEGREASER WITH EXHAUST SYSTEM OPERATING - EXHAUST FAIR - UNIT NOT IN USE
31	Atomizer - General	Dust	Visual	Good	SMALL AMOUNT OF DUST VISIBLE EACH TIME A DRUM LEAVES SCALES IN BLDG 4cd - NO DUST VISIBLE IN OTHER AREAS

SURVEYOR

CHP

1

STATUS OF REMEDIAL ACTION

<u>Ident.</u>	<u>Status</u>
4	Oil vapor exhaust system installed in June.
6	Preliminary design for new skim room scheduled for completion by end of 1973.
15	Wheelabrator rebuilding now scheduled for completion by October, 1973. Rubber bumpers on overhead trolleys also to be installed by December, 1973.
16	Mufflers have been installed on air solenoid valves. Cast iron chutes to be rubber lined by December, 1973.
18	Personnel exposure to be eliminated by shift reassignment. Engineering approach to be developed by end of year.
20	Cleanout door on screw conveyor redesigned; to be installed in August, 1973.
21	Preliminary design for discharge chute doors complete. RFA to be submitted in September, 1973.

AGC:ak
7-30-73

411082 0439

~~TBB~~
~~PRA/EDC~~
~~WAD~~
~~RPE~~
~~DLB~~ ^{out}
V.W. Ruck - 2
~~RH-7~~
~~ERT~~
TBB-f

DATE: MARCH 29, 1973

ROCKDALE WORKS
INDUSTRIAL HYGIENE SURVEY

CONFIDENTIAL

Sl. No.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
1	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	In General, Atmosphere in Building Clear of Fumes. Occasionally Visible During Furnace Flushing and Shutdowns - No Irritation Noticeable.
2	Furnace Area & Casting	Cl ₂ CO	Detector Tubes	Good	Cl ₂ approx. 10 ppm. CO approx. 5 ppm. Above Resumes Taken in No. 2 HOC Casting Area. No Fumes Visible - No Irritation Noticeable.
3	Homogenizing Furnace	CO	Detector Tubes	Good	Both Furnaces in Operation. For No. 1 - CO on floor approx. 10 ppm. On Ceiling approx. 5 ppm. For No. 2 - CO on floor approx. 5 ppm. On Ceiling approx. 10 ppm.
4	Cutting Oil Supply Tank	Oil Vapor	Visual	Fair	Oil Vapor Visible Coming From Tank. When Airborne Vapor Toward Center of Room.
5	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	No Fumes or Caustic Spray Visible Outside Exhaust Hood - Exhaust System Operating - Exhaust Good. No Irritation Noticeable.
6	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	Roomy Atmosphere Not in Operation - Main Exhaust Hood Good - Exhaust in Room in Air Room - No Dust or Fumes Visible in Room - Floor on Air Damp - Good on Humidity Noticeable in Air - Slight on Floor in Room on Room - HD 10 ppm.
7	Brick Cutting Area	Dust from Brick Saw	Visual	Good	Saw Not in Operation - No Dust Visible in Room. Exhaust System for Saw Good.
7-A	Asbestos Mixing Area	Asbestos	Visual	Good	No Asbestos Mixing in Progress. Exhaust System for Mixing Operation Fair.
8	Refrigeration Station	Mercury Vapor	Detector Tube	Good	Mercury Vapor approx. 10 ug/m ³ - No Work in Progress. No Asbestos Mixing Visible in Room - Exhaust System for Mixing Operation Fair.
9	Potrooms - General	Dust & Fumes	Visual	Good	Slight Haze of Dust and Fumes Visible in All Rooms. Concentration Maximum in Rooms 11, 12 and 20. Pot Cover Placement - Generally Good.
10	Bath Storage	Dust	Visual & Sensory	Good	Small Amount of Dust Visible in Area - Courtyard in Storage Area Cleanest in Recent Months. No Irritation Noticeable.
11	Bath Crushing	Dust	Visual-Smoke Tube	Good	Crushing in Operation - Small Amount of Dust Visible in Building - Exhaust Hoods Which Were in Operation Were Fair.

SURVEYOR

AMR

DATE: MARCH 27 - 30, 1973

411082 0442

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	Bath Crushing Bag Filter	Dust	Visual	Fair	CRUSHING IN OPERATION - ONLY UNITS No. 2 AND No. 3 IN OPERATION - NO DUST VISIBLE COMING FROM UNIT No. 2 - A MODERATE AMOUNT OF DUST STILL VISIBLE COMING FROM UNIT No. 3 UNLOADING IN PROGRESS - DUST IN BUILDING RISES FROM MODERATE TO HEAVY EACH TIME A CAR HOOKER OPERATES WHEN WAS NOT KNOWN ENOUGH TO CONSISTENTLY CLEAR BUILDING OF DUST
13	Ore Unloading	Dust	Visual	Fair	
14	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - FUMES OCCASIONALLY VISIBLE NEAR LOOSELY PLACED FURNACES - FUMES ALSO VISIBLE IN STUB WELDING AREA - NO IRRITATION NOTICEABLE
15	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL HIGH
16	Stub Press & Unbolting Station	Dust	Visual	Good	ONLY STUB PRESS IN OPERATION SMALL AMOUNT OF DUST VISIBLE IN AREA
17	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES VISIBLE COMING FROM MIXER No. 1 SLIGHT ODD OF HOT FIRE NOTICEABLE IN AREA
18	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	3-30-73 CLEANING OPERATION IN PROGRESS - MODERATE TO HEAVY DUST VISIBLE ALONG ENTIRE LENGTH OF SHAKER CONVEYOR EXHAUST HOOD AT WEST END OF CONVEYER NOT IN OPERATION DUST VISIBLE IN AREAS WHERE PACKING AND UNPACKING OPERATIONS IN PROGRESS - ALL FURNACE BUILDINGS WELL VENTILATED - CO 5 ppm
19	Ring Furnace	Dust CO	Visual Detector Tube	Good	BOTH OPERATIONS IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN UNLOADING AREA - UNLOADING EXHAUST HOOD OPERATING EXHAUST GOOD - MODERATE TO HEAVY DUST VISIBLE IN CRUSHER AREA
20	Butt Unloading & Crushing	Dust	Visual	Fair	SMALL AMOUNT OF DUST VISIBLE IN AREA - NO FUMES VISIBLE - STRONG ODD OF HOT FIRE NOTICEABLE IN AREA
21	Mixer Floor	Dust & Pitch Fumes	Visual	Good	

SURVEYOR

C.H.

DATE: MARCH 30, 1973

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	No Fumes Visible Coming From Either J-1 OR M-5 - EXHAUST SYSTEM OPERATING - EXHAUST GOOD
23	Press Room	Fumes	Visual	Good	BOTH PRESSES OPERATING - SMALL AMOUNT OF FUMES VISIBLE EACH TIME MIX ENTERS A PRESS - STAGNANT OVER OR NOT GIVEN NOTICEABLE IN BOTH ROOMS - BOTH ROOMS ARE ONLY VENTILATED
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	WOOD BEING CUT ON BOWSAW AND DRILLED ON DRIILL PRESS - NO DUST VISIBLE AROUND EITHER OPERATION
25	Garage - General	Fumes CO	Visual Detector Tube	Good	EXHAUST SYSTEM OPERATING - EXHAUST GOOD NO VEHICLES IN OPERATION - NO FUMES VISIBLE CO 10 ppm - BUILDING WELL VENTILATED
26	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
27	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	SEVERAL WELDING OPERATIONS IN PROGRESS - SMALL AMOUNTS OF FUMES VISIBLE - NO IRRITATION NOTICEABLE EXHAUST HOOKS WHICH WERE IN OPERATION WERE GOOD BUILDING WELL VENTILATED
28	Marinette Finishing Room	Dust	Visual Smoke Tube	Good	No Equipment In Operation No Dust Visible EXHAUST SYSTEM GOOD
29	Blacksmith Shop	CO	Detector Tube	Good	COAL-FIRED FURNACE IN OPERATION - CO 15 ppm - FORCE EXHAUST SYSTEM FAIR - GAS-FIRED FORCE IN OPERATION - CO 5 ppm - 1 AREA WALL VENTILATED
30	Mold Repair Room Degreaser	Trichloroethylene	Detector Tube	Poor	TRICHLOROETHYLENE - DOOR CLOSED - 0.04 ppm DOOR OPEN 12.5 ppm READINGS TAKEN ORABLY IN FRONT OF DEGREASER WITH EXHAUST SYSTEM OPERATING - EXHAUST FAIR - UNIT IN USE
31	Atomizer - General	Dust	Visual	Good	Small Amount Of Dust Visible On Scales In Area for No Dust Visible In Other Areas

SURVEYOR

CHS

ROCKDALE WORKS

CONFIDENTIAL

INDUSTRIAL HYGIENE SURVEY

DATE: Feb. 28 - MAR. 1, 1973

411082 0444

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
1	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	IN GENERAL ATMOSPHERE IN BUILDING CLEAR - FUMES OCCASIONALLY VISIBLE DURING FURNACE FLUING AND SHAMMING NO IRRITATION NOTICEABLE - DUST ALSO OCCASIONALLY VISIBLE IN CONSTRUCTION AREA IN SOUTH END OF BUILDING CL ₂ .00ppm HCl .00ppm CO 5ppm
2	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	ABOVE READINGS TAKEN IN NO. 2 HOC CASTING AREA NO FUMES VISIBLE - NO IRRITATION NOTICEABLE BOTH FURNACES IN OPERATION - SLIGHT OODOR OF NATURAL GAS NOTICEABLE AROUND FEE No. 1 FEE No. 1 - CO ON FLOOR .00ppm ON CATWALK .00ppm FEE No. 2 - CO ON FLOOR .00ppm ON CATWALK .00ppm
3	Homogenizing Furnace	CO	Detector Tubes	Good	
4	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	NO OIL VAPOR VISIBLE COMING FROM TANK
5	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE EXHAUST HOOD - EXHAUST SYSTEM OPERATING - EXHAUST GOOD
6	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	NO IRRITATION NOTICEABLE ROTARY BARREL NOT IN OPERATION - MAIN EXHAUST HOOD GOOD - EXHAUST HOOD IN PT. 2000 - NO DUST OR FUMES VISIBLE IN ROOM - NO IRRITATION NOTICEABLE - SKIM ON FLOOR IN NORTH END OF ROOM HCl .00ppm
7	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT IN OPERATION - NO DUST VISIBLE IN ROOM - EXHAUST SYSTEM FOR SAW GOOD
7-A	Asbestos Mixing Area	Asbestos	Visual	Good	NO ASBESTOS MIXING IN PROGRESS EXHAUST SYSTEM FOR MIXING OPERATION FAIR
8	Rectifier Station	Mercury Vapor	Detector Tube	Good	2-22-73 MERCURY VAPOR .00mg/m ³ - NO WORK IN PROGRESS NO DISPERSED OF MERCURY VISIBLE IN ROOM - EXHAUST SYSTEM OPERATING - EXHAUST FAIR
9	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE OF DUST AND FUMES VISIBLE IN ALL ROOMS CONCENTRATION HIGHEST IN ROOMS 10 AND 12 HOT COVER ASSEMBLY - GENERALLY GOOD HOT COVER CRIBBING - GENERALLY FAIR
10	Bath Storage	Dust	Visual & Sensory	Good	SMALL AMOUNT OF DUST VISIBLE - DUST MAINLY CAUSED BY WIND BLOWING FINELY POWDERED BATH PRESENT IN COURTYARD NO IRRITATION NOTICEABLE
11	Bath Crushing	Dust	Visual-Smoke Tube	Good	CRUSHER IN OPERATION - SMALL AMOUNT OF DUST VISIBLE IN BUILDING - DUST MAINLY CAUSED BY WIND - EXHAUST HOODS WHICH WERE IN OPERATION WERE FAIR TO GOOD

SURVEYOR CHB

DATE: Feb. 21, 1973

411082 0445

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	Bath Crushing Bag Filter	Dust	Visual	FAIR	CRUSHER IN OPERATION - ONLY UNITS No. 2 & No. 3 IN OPERATION - NO DUST VISIBLE COMING FROM UNIT No. 2. MODERATE AMOUNT OF DUST VISIBLE COMING FROM UNIT No. 3 UNLOADING IN PROGRESS - DUST VISIBLE WHEN CAR HOPPERS FIRST OPENED - HOWEVER THE WIND TENDED TO KEEP THE BUILDING RELATIVELY FREE OF DUST
13	Ore Unloading	Dust	Visual	Good	
14	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - FUMES OCCASIONALLY VISIBLE NEAR LOOSELY PLACED FURNACES - FUMES ALSO VISIBLE IN SUB WELDING AREA - NO IRRITATION NOTICEABLE
15	Wheelabrator	Noise	Audio	FAIR	NOISE LEVEL STILL HIGH
16	Stub Press & Unbolting Station	Dust	Visual	Good	NEITHER OPERATING IN PROGRESS SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS
17	Potlining-Mixer Area	Dust & Fumes	Visual	FAIR	SMALL AMOUNT OF DUST VISIBLE IN AREA - FUMES VISIBLE COMING FROM ALL THREE MIXERS - STRONG OODOR OF HOT ATCH NOTICEABLE IN AREA
18	Carbon Plant Electrode Cleaning	Dust	Visual	FAIR	CLEANING OPERATIONS IN PROGRESS - DUST VISIBLE ALONG ENTIRE LENGTH OF SHAKER CONVEYOR - EXHAUST HOOD AT WEST END OF CONVEYOR OPERATING - EXHAUST POOR DUST VISIBLE IN AREAS WHERE PACKING AND UNPACKING OPERATIONS IN PROGRESS - SOUTH END OF BLOC LO ALSO CONTAINED DUST COMING FROM CRUSHER AREA - ALL FURNACE BUILDINGS WELL VENTILATED - CO TAPER
19	Ring Furnace	Dust CO	Visual Detector Tube	Good	BOTH OPERATIONS IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN UNLOADING AREA - UNLOADING EXHAUST HOOD OPERATING - EXHAUST GOOD - MODERATE TO HEAVY DUST VISIBLE IN CRUSHER AREA DUST TAPER TO NOISE INTO SOUTH END OF BLOC LO
20	Butt Unloading & Crushing	Dust	Visual	FAIR	SMALL AMOUNT OF DUST VISIBLE IN AREA - NO FUMES VISIBLE - SLIGHT OODOR OF HOT PITCH NOTICEABLE IN AREA
21	Mixer Floor	Dust & Pitch Fumes	Visual	Good	

SURVEYOR

CJR

DATE: FEB 28, 1973

Ident	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	No Fumes Visible Coming From Either J-1 Or M-5 - Exhaust System Operating - Exhaust Good
23	Press Room	Fumes	Visual	Good	Both Presses Operating - Small Amount Of Fumes Visible Each Time Mix Enters A Press - Slight Odor Of Hot Iron Noticeable In Both Rooms - Burn Rooms Properly Ventilated
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	Wood Being Cut On Radial Arm Saw - No Dust Visible Exhaust System Good - Marinite Being Cut On Band Saw
25	Garage - General	Fumes CO	Visual Detector Tube	Fair	No Dust Visible - Exhaust System Good Two Gasoline-Powered Vehicles Operating In Building For Approximately One Minute - No Fumes Visible - During And Immediately After Vehicle Operation CO Stopped Five Minutes After Vehicle Operation Ceased CO 10 ppm - Building Properly Ventilated
26	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
27	Machins Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	Several Welding Operations In Progress - Small Amounts Of Fumes Visible - No Irritation Noticeable - Exhaust Hood Which Were In Operation Were Good - Building Well Ventilated
28	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	No Equipment In Operation No Dust Visible Exhaust System Good
29	Blacksmith Shop	CO	Detector Tube	Good	Gas Area Forge In Operation - CO 10 ppm Area Well Ventilated
30	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Fair	Trichloroethylene - Door Closed 10 ppm Door Open Some Readings Taken Directly In Front Of Degreaser With Exhaust System Operating - Exhaust Fair - Unit In Use
31	Atomizer - General	Dust	Visual	Good	No Dust Visible In Any Area

SURVEYOR

CAR

Status of Remedial Action

<u>Ident.</u>	<u>Status</u>
4	Oil vapor exhaust system being installed; completion expected by end of June.
12	New bag filters have since been installed.
13	A baffled chute is to be designed and installed for trial by end of July.
15	Equipment ordered for Wheelabrator revision; completion expected by end of August.
17	Preliminary engineering for fume control to be completed during June.
18	Personnel exposure to be eliminated by shift reassignment. Engineering approach to be developed in second half of 1973 with Pittsburgh Environmental Engineering.
20	Improper replacement of cleanout door on screw conveyor causes leaks. Door seal and means of closure will be redesigned.
25	Exhaust fume collector use not mandatory during brief (1-2 min.) engine operation.
30	High vapor readings indicate need to replace trichloroethylene; will be done immediately.

A. G. Clayton

AGC:ak
5-21-73

411082 0447

JONES, W.C., ~~W.D.~~^{W.D.} ~~BOY~~^{E. Kitchin Boy} - 2 TB Bone - 7
INDUSTRIAL HYGIENE SURVEY ~~from~~ ~~Boys~~ DATE: Jan 10 - 1968

765, 4C, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000, 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1031, 1032, 1033, 1034, 1035, 1036, 1037, 1038, 1039, 1040, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1048, 1049, 1050, 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059, 1060, 1061, 1062, 1063, 1064, 1065, 1066, 1067, 1068, 1069, 1070, 1071, 1072, 1073, 1074, 1075, 1076, 1077, 1078, 1079, 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1087, 1088, 1089, 1090, 1091, 1092, 1093, 1094, 1095, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1114, 1115, 1116, 1117, 1118, 1119, 1120, 1121, 1122, 1123, 1124, 1125, 1126, 1127, 1128, 1129, 1130, 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1138, 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149, 1150, 1151, 1152, 1153, 1154, 1155, 1156, 1157, 1158, 1159, 1160, 1161, 1162, 1163, 1164, 1165, 1166, 1167, 1168, 1169, 1170, 1171, 1172, 1173, 1174, 1175, 1176, 1177, 1178, 1179, 1180, 1181, 1182, 1183, 1184, 1185, 1186, 1187, 1188, 1189, 1190, 1191, 1192, 1193, 1194, 1195, 1196, 1197, 1198, 1199, 1200,

411082 0448

211

Ident	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	Bath Crushing Bag Filter	Dust	Visual	Fair	2-1-73 CAUSING IN OPERATION - ALL 3 BAG FILTER UNITS IN OPERATION - NO DUST VISIBLE COMING FROM UNITS NO. 1 & 2 MODERATE AMOUNT OF DUST VISIBLE COMING FROM UNIT NO. 3
13	Ore Unloading	Dust	Visual	Good	UNLOADING IN PROGRESS - MODERATE TO HEAVY DUST VISIBLE FOR SHORT PERIODS WHEN CAR HOPPERS FIRST OPENED - A STRONG NORTHWEST WIND TENDED TO KEEP BUILDING RELATIVELY FREE OF DUST
14	Redding Room-General	Dust & Fumes	Visual	Good	1-31-73 SMALL AMOUNT OF DUST VISIBLE IN AREA - FUMES OCCASIONALLY VISIBLE NEAR ELECTROMELT FURNACES IN AREA NEAR FURNACES CO 5pm
15	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL HIGH
16	Stub Press & Unbelting Station	Dust	Visual	Good	ONLY STUB PRESS IN OPERATION SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS
17	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN HEEN - SMALL AMOUNT OF FUMES VISIBLE COMING FROM MIXER NO. 2 SLIGHT ODD OF HOT PITCH NOTICEABLE IN HEEN
18	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	CLEANING OPERATIONS NOT IN PROGRESS - HOWEVER MODERATE TO HEAVY DUST VISIBLE IN AREA - DUST MAINLY CAUSED BY WIND BLOWING FROM THE BUILDING - EXHAUST FLEW AT WEST END OF CARBON PLANT NOT IN OPERATION
19	Ring Furnace	Dust	Visual Detector Tube	Good	DUST VISIBLE IN AREAS WHERE PACKING AND UNPACKING OPERATIONS IN PROGRESS - ALL FURNACE BUILDINGS WELL VENTILATED - CO 5pm
20	Butt Unloading & Crushing	Dust	Visual	Fair	UNLOADING NOT IN PROGRESS - UNLOADING EXHAUST HEED NOT IN OPERATION - CAUSING IN OPERATION CRUSHING SCRAP MODERATE TO HEAVY DUST VISIBLE IN AREA NEAR CAUSHER
21	Mixer Floor	Dust & Tech Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - NO FUMES VISIBLE - STRONG ODD OF HOT PITCH NOTICEABLE IN AREA

SURVEYOR

NMR

DATE: JAN 31 8 12 11 AM '73

411082 0450

Ident	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	1-31-73 NO FUMES VISIBLE COMING FROM EITHER J-4 OR M-5 - EXHAUST SYSTEM OPERATING - EXHAUST GOOD
23	Press Room	Fumes	Visual	Good	ONLY 4 HPM PRESS IN OPERATION - SMALL AMOUNT OF FUMES VISIBLE EACH TIME MIX ENTERS PRESS - SLIGHT DOOR OR HOT AIR NOTICABLE IN BORN ROOMS - BOTH ROOMS ARE VENTILATED
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	WOOD BEING CUT ON HAND PLANER SAW - NO DUST VISIBLE - EXHAUST SYSTEM OPERATING - EXHAUST GOOD
25	Garage - General	Fumes CO	Visual Detector Tube	Good	GASOLINE-POWERED TRUCK IN OPERATION FOR APPROXIMATELY 2 MINUTES - NO FUMES VISIBLE - CO 15 ppm AREA NOT AS WELL VENTILATED AS USUAL
26	Electric Shop-General	Air Mist	Visual & Sensory	Good	NO ACID MIST VISIBLE NO IRRITATION
27	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	SEVERAL WELDING OPERATIONS IN PROGRESS - SMALL AMOUNTS OF FUMES VISIBLE - NO IRRITATION NOTICEABLE - EXHAUST HOODS WHICH WERE IN OPERATION WERE GOOD - BUILDING WELL VENTILATED
28	Marinette Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION NO DUST VISIBLE EXHAUST SYSTEM GOOD
29	Blacksmith Shop	Dust	Detector Tube	Good	COAL-FIRED FURNACE IN OPERATION - FEW FUMES EXHAUST SYSTEM CO 5 ppm AREA WELL VENTILATED
30	Mold Repair Room Degreaser	Trichloroethylene	Detector Tube	Good	TRICHLOROETHYLENE - DOOR CLOSED 10:00 AM DOOR OPEN 5:00 PM READINGS TAKEN DIRECTLY IN FRONT OF DEGREASER WITH EXHAUST SYSTEM OPERATING - EXHAUST FAIR - 1/2 IN. NOT WISE
31	Atomizer - General	Dust	Visual	Good	2-1-73 ONLY DUST VISIBLE WAS A SMALL AMOUNT NEAR SEALS IN BLDG 401

SURVEYOR

4.11A

STATUS OF REMEDIAL ACTION

<u>Ident.</u>	<u>Status</u>
6	New Skim Room is being designed; frequent maintenance is now required.
8	Revised work rules now require immediate cleanup when work is interrupted.
10	No feasible control measures available; daily sweeping is standard procedure.
12	New bag filters have been ordered.
15	Equipment ordered for Wheelabrator revision; completion expected during third quarter.
18	Initial engineering now in progress for dust collector on conveyor.
20	Dust feeder air slide problems are affecting dust collection; replacement by screw feeder to be complete within next two weeks.

A. G. Clayton

AGC:ak
3-6-73

411082 0451

~~TBB~~

~~LVE~~

RRAN

~~V.W. Pato 2~~

~~W.N. Dawson 7~~

~~RPE~~

~~R#W~~

QTB

TBB-f

CONFIDENTIAL ROCKDALE WORKS INDUSTRIAL HYGIENE SURVEY

DATE: 12-12-72

Cont.	Location or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
1	Target Production Bldg. 34 - General	Various	Visual & Sensory	Good	IN GENERAL, ATMOOSPHERE IN BUILDING CLEAR. FUMES OCCASIONALLY VISIBLE DURING FURNACE FURNING - NO IRRITATION NOTICEABLE
2	Furnace Area & Cooling	Cl ₂ CO	Detector Tubes	Good	CO 0.0ppm HCl 0.0ppm CO 5 ppm ABOVE READINGS TAKEN IN NO. 2 HOC CASTING AREA - NO IRRITATION NOTICEABLE
3	Homogenizing Furnace	CO	Detector Tubes	Good	ONLY FURNACE NO. 2 IN OPERATION - SLIGHT ODOUR OF NATURAL GAS NOTICEABLE IN AREA - AREA NOT AS WELL VENTILATED AS USUAL CO - ON FLOOR 10 ppm - ON CATWALK 10 ppm
4	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	NO OIL VAPOR VISIBLE COMING FROM TANK
5	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE EXHAUST HOOD - EXHAUST SYSTEM OPERATING - EXHAUST GOOD
6	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Fair	NO IRRITATION NOTICEABLE ROTARY DRUM IN OPERATION - SMALL AMOUNT OF DUST AND FUMES VISIBLE IN ROOM - MAIN EXHAUST HOOD GOOD - HOOD IN FLOOR AREA OF PIT WET - COOL OR AMMONIA NOTICEABLE - SLIGHT IRRITATION NOTICEABLE - SUMMER AIR IN BETWEEN FLOOR OF ROOM - HCl 0.0ppm SAW NOT IN OPERATION - NO DUST VISIBLE IN ROOM
7	Brick Cutting Area	Dust from Brick Saw	Visual	Good	EXHAUST SYSTEM FOR SAW GOOD
7-A	Asbestos Mixing Area	Asbestos	Visual	Good	NO ASBESTOS MIXING IN PROGRESS EXHAUST SYSTEM FOR MIXING OPERATING FAIR
8	Rectifier Station	Mercury Vapor	Detector Tube	Fair	MERCURY VAPOR 0.0mg/m ³ - NO WORK IN PROGRESS OPERATING OF MERCURY VISIBLE IN SINK - EXHAUST SYSTEM OPERATING - EXHAUST FAIR
9	potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE OF DUST AND FUMES VISIBLE IN ALL ROOMS - CONCENTRATION HIGHEST IN ROOMS 2, 10, 20 AND 21, BUT COVER PLACEMENT - GENERALLY GOOD 12-27-72
10	Bath Storage	Dust	Visual & Sensory	Good	NO DUST VISIBLE
11	Bath Crushing	Dust	Visual-Smoke Tube	Good	NO IRRITATION CRUSHER IN OPERATION - SMALL AMOUNTS OF DUST OCCASIONALLY VISIBLE IN BUILDING - EXHAUST HOODS WHICH WERE IN OPERATION WERE FAIR

411082 0453

SURVEYOR - G.H.

DATE: Dec. 24, 1954

Ident	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER IN OPERATION - 2 OF 3 BAG FILTER UNITS IN OPERATION - NO DUST VISIBLE COMING FROM EXHAUST UNIT
13	Ore Unloading	Dust	Visual	Fair	UNLOADING IN PROGRESS - HEAVY DUST VISIBLE EACH TIME A CAR HOPPER OPENED - WIND TENDED TO CLEAR MOST OF DUST OUT OF BUILDING
14	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - FUMES OCCASIONALLY VISIBLE NEAR LEAD-TO-MELT FURNACES - FUMES ALSO VISIBLE IN STUB-WRECKING AREA - NO IRRITATION NOTICEABLE
15	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL HIGH
16	Stub Press & Unbolting Station	Dust	Visual	Good	NEITHER OPERATION IN PROGRESS SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS
17	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - NO FUMES VISIBLE - SLIGHT ODOOR OF HOT PITCH NOTICEABLE IN AREA
18	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	CLEANING OPERATION IN PROGRESS - DUST VISIBLE ALONG ENTIRE LENGTH OF SHAKER CONVEYER - EXHAUST HOOD AT WEST END OF CONVEYER OPERATING - EXHAUST FAIR
19	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE IN AREAS WHERE PACKING AND UNPACKING OPERATIONS IN PROGRESS - ALL FURNACE BUILDINGS WELL VENTILATED - CO 10 PPM
20	Butt Unloading & Crushing	Dust	Visual	Fair	BOTH OPERATIONS IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN UNLOADING AREA - EXHAUST HOOD OPERATING - EXHAUST GOOD - MODERATE TO HEAVY DUST VISIBLE IN AREA NEAR CRUSHER
21	Mixer Floor	Dust & Pitch Fumes	Visual	Good	MIXERS NOT IN OPERATION - SMALL AMOUNT OF DUST VISIBLE IN AREA - NO FUMES VISIBLE - SLIGHT ODOOR OF HOT PITCH NOTICEABLE

411082 0454

SURVEYOR

CAR

DATE: 11-27-71

Cont	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixer to Press	Fumes	Visual	Good	NEITHER J-1 OR M-5 IN OPERATION - NO MIST OR FUMES VISIBLE IN AREA - EXHAUST SYSTEM NOT IN OPERATION
23	Press Room	Fumes	Visual	Good	NEITHER PASSES IN OPERATION - NO FUMES VISIBLE SLIGHT ODEOR OF HOT IRON NOTICABLE IN BOTH ROOMS PACER ROOMS NOT AS WELL VENTILATED AS USUAL
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	12-28-71 TABLE SAW CUTTING WOOD - NO DUST VISIBLE - EXHAUST SYSTEM GOOD - MARINITE BEING DRILLED ON DRILL PRESS - SMALL AMOUNT OF DUST VISIBLE NEAR DRILL - EXHAUST SYSTEM OPERATING - EXHAUST FIRED
25	Garage - General	Fumes CO	Visual Detector Tube	Good	NO VEHICLES IN OPERATION - NO FUMES VISIBLE AREA NOT AS WELL VENTILATED AS USUAL CO 5 ppm
26	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
27	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	SEVERAL WELDING OPERATIONS IN PROGRESS - SMALL AMOUNTS OF FUMES VISIBLE - EXHAUST Hoods BEING USED AT MOST OPERATIONS - EXHAUST GOOD - NO IRRITATION NOTICABLE BUILDING WELL VENTILATED
28	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION NO DUST VISIBLE EXHAUST SYSTEM GOOD
29	Blacksmith Shop	CO	Detector Tube	Good	GAS-FIRED FORCE IN OPERATION - CO 10 ppm AREA WELL VENTILATED
30	Mold Repair Room Degreaser	Trichloro ethylene	Detector Tube	Good	TRICHLOROETHYLENE - DUCT CLOSED - 9 ppm Room Air - 10 ppm READING TAKEN DIRECTLY IN FRONT OF DEGREASER WITH EXHAUST SYSTEM OPERATING - EXHAUST FAIR - UNIT IN USE
31	Atomizer - General	Dust	Visual	Good	No Dust Visible In Any Area

SURVEYOR

C.H.R.

411082 0455

STATUS OF REMEDIAL ACTION

<u>Ident.</u>	<u>Status</u>
6	Proposal for new skim room being developed; RFA to be submitted in near future
8	Tighter control practices for handling of mercury now being instituted
13	Experimental baffles being designed; instal- lation to be complete during second quarter, 1973
15	Wheelabrator unit being redesigned for total enclosure; overhaul to be completed during second half of 1973
18	Initial work on dust collector for conveyor provided for in 1973 budget
20	Dust leaks have since been corrected by routine maintenance

WJC

1/23/73

411082 0456

CONFIDENTIAL ROCKDALE WORKS ~~FOR THE USE OF DEPT. OF LAB.~~ DATE: OCT. 21, 1955, 1972 INDUSTRIAL HYGIENE SURVEY REPORT - 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
1	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	IN GENERAL, ATMOSPHERE IN BUILDING CLEAR - FUMES OCCASIONALLY VISIBLE DURING FURNACE FLAMING - SUANT IRRITATION OCCASIONALLY NOTICEABLE FOR BRIEF PERIODS AT WIDELY SCATTERED LOCATIONS IN THE BUILDING DURING FURNACE FLAMING
2	Furnace Area & Casting	Cl ₂ CO	Detector Tubes	Good	CO 1.0 ppm THERM HCL 1.0 ppm CO 5.0 ppm ABOVE READING ON WEST SIDE OF THE 531 UNIT FOR FURNACE NO. 7 DURING CASTING - NO IRRITATION NOTICEABLE
3	Homogenizing Furnace	CO	Detector Tubes	Good	ONLY FURNACE NO. 2 IN OPERATION
4	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	CO ON FLOOR 1.0 ppm ON CORRIDOR 1.0 ppm
5	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	NO OIL VAPOR VISIBLE COMING FROM TANK EXHAUST SYSTEM OPERATING - EXHAUST GOOD - NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE EXHAUST HOOD
6	Skim Room	Dust & Fumes HCL	Visual & Sensory Detector Tube	Good	NO IRRITATION NOTICEABLE ROTARY BARREL NOT IN OPERATION - NO DUST OR FUMES VISIBLE IN ROOM - HOT SKIM ON FLOOR IN NORTH END OF ROOM HCL 1.0 ppm CO 1.0 ppm
7	Brick Cutting Area	Dust from Brick Dev	Visual	Good	SAW NOT IN OPERATION - NO DUST VISIBLE IN ROOM EXHAUST SYSTEM FOR SAW GOOD
T-A	Asbestos Mixing Area	Asbestos	Visual	Good	NO ASBESTOS MIXING IN PROGRESS EXHAUST SYSTEM FOR MIXING OPERATION FAIR
8	Refrigerator Station	Mercury Vapor	Detector Tube	Good	MERCURY VAPOR 0.0 mg/m ³ - NO WORK IN PROGRESS NO DUST OR FUMES VISIBLE IN ROOM EXHAUST SYSTEM OPERATING - EXHAUST FAIR
9	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE OF DUST AND FUMES VISIBLE IN ALL ROOMS POT COVER PLACEMENT - GENERALLY GOOD POT COVER CARRIED - GENERALLY FAIR
10	Bath Storage	Dust	Visual & Sensory	Good	NO DUST VISIBLE NO IRRITATION
11	Bath Crushing	Dust	Visual-Smoke Tube	Good	CRUSHER NOT IN OPERATION - NO DUST VISIBLE ALL EXHAUST HOODS IN OPERATION EXHAUST FAIR TO GOOD

411082 0457

DATE: OCT. 24 + 25, 1972

Ident	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	Bath Crushing Bag Filter	Dust	Visual	Good	10-25-72 CRUSHER NOT IN OPERATION - ALL BAG FILTER UNITS OPERATING - NO DUST VISIBLE COMING FROM ANY UNIT
13	Ore Unloading	Dust	Visual	Good	UNLOADING NOT IN PROGRESS - NO DUST VISIBLE IN BUILDING
14	Rodding Room-General	Dust & Fumes	Visual	Good	10-24-72 SMALL AMOUNT OF DUST VISIBLE IN AREA - FUMES OCCASIONALLY VISIBLE NEAR ELECTROMELT FURNACES - FUMES ALSO VISIBLE IN STUB-WELDING AREA - NO IRRITATION NOTICEABLE
15	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL HIGH
16	Stub Press & Untbolting Station	Dust	Visual	Good	UNBOLTING OPERATION NOT IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS
17	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES VISIBLE COMING FROM MIXERS No. 1 & 2 SLIGHT ODDOR OF HOT PITCH NOTICEABLE IN AREA
18	Carbon Plant Electrode Cleaning	Dust	Visual	Good	CLEANING OPERATION NOT IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN AREA - EXHAUST HOOD AT WEST END OF SHAKER CONVEYOR OPERATING - EXHAUST FAIR
19	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE IN AREAS WHERE PACKING AND UNPACKING OPERATIONS IN PROGRESS - ALL FURNACE BUILDINGS WELL VENTILATED - CO 10 ppm
20	Butt Unloading & Crushing	Dust	Visual	Good	NEITHER OPERATION IN PROGRESS - UNLOADING EXHAUST HOOD NOT IN OPERATION - SMALL AMOUNTS OF DUST OCCASIONALLY VISIBLE IN BOTH AREAS - NEW DUST COLLECTOR OPERATING
21	Mixer Floor	Dust & Pitch Fumes	Visual	Fair	MODERATE AMOUNT OF FUMES VISIBLE DURING DUMPING OF MIXER No. 1 - SMALL AMOUNT OF DUST VISIBLE DURING CHARGING OF MIXER No. 1 - ODDOR OF HOT PITCH NOTICEABLE IN AREA

411082 0458

SURVEYOR

CNR

DATE: OCT. 24, 1972

Ident	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	Small Amounts of Fumes Occasionally Visible Coming From Both J-4 and M-5 - Exhaust System Operating Exhaust Good
23	Press Room	Fumes	Visual	Good	Both Presses in Operation - Small Amount of Fumes Visible Each Time Hot Mix Enters A Press - Slight Odor of Hot Pitch Noticeable - Both Press Rooms Well Ventilated
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	Band-saw and Planer in Operation - No Dust Visible - Exhaust System Operating - Exhaust Good
25	Garage - General	Fumes CO	Visual Detector Tube	Good	One Vehicle in Operation Approximately One Minute No Fumes Visible - CO 15 ppm - Building Well Ventilated
26	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
27	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	Several Welding Operations in Progress - Small Amounts of Fumes Visible - No Irritation Noticeable - Exhaust Hoods Which Were in Operation Were Good - Building Well Ventilated
28	Marinette Finishing Room	Dust	Visual Smoke Tube	Good	No Equipment in Operation No Dust Visible Exhaust System Good
29	Blacksmith Shop	CO	Detector Tube	Good	Gas-Welding Forge in Operation - CO 10 ppm Coal-Fired Forge in Operation - CO 10 ppm Area Well Ventilated
30	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	Trichloroethylene - Door Open 5 ppm Area Closed - Off-Alarmes Taken Directly in Front of Degreaser with Exhaust System Operating - Exhaust Fair - Unit in Use
31	Atomizer - General	Dust	Visual	Fair	Dust Visible Around Scales in Bag 404 - Atomizer Powder Spilling From Overfull Barrels Was the Cause On This Day The Dust i/B Permanent Resolution cleaned up End of Every Shift Per Jim Smith 11/1/72

411082 0459

STATUS OF REMEDIAL ACTION

<u>Ident.</u>	<u>Status</u>
15	Wheelabrator modernization to include noise abatement. Completion may be delayed to second quarter, 1973.
21	Automation of mixer floor was cancelled. Evaluation of other alternatives being made by Mechanical Engineering.
31	Engineering considering means of controlling flow of powder to drums automatically.

A. G. Clayton

AGC:ak
11-17-72

411082 0460

~~4B13~~
~~KAC~~
~~WAD~~
~~FRTA~~ ~~REDA~~
T.W. Richer - ~~REDA~~
~~R.P. Carter~~ - 7
~~DLB~~
TB13 - 6

411082 0461

ROCKDALE WORKS

CONFIDENTIAL

INDUSTRIAL HYGIENE SURVEY

DATE: SEPT. 28 & 29, 1972

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
1	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	9-29-72 Good	In General, Atmosphere In Building Clear - Fumes Occasionally Visible During Furnace Firing And Near Skim Room - Slight Irritation Noticeable In Area Near Skim Room
2	Furnace Area & Casting	CL ₂ HCl CO	Detector Tubes	9-29-72 Good	CO Spikes - No Chlorine Being Used - CO Reading Taken West Side Of Fee 7 & 1 Casting Area During Casting - No Irritation Noticeable
3	Homogenizing Furnace	CO	Detector Tubes	9-29-72 Good	Bath Furnaces In Operation - Slight Odor Of Natural Gas Noticeable Around Fee No. 1 Fee No. 1 - CO On Floor 10 ppm On Catwalk 10 ppm Fee No. 2 - CO On Floor 10 ppm On Catwalk 10 ppm
4	Cutting Oil Supply Tank	Oil Vapor	Visual	9-29-72 Good	No Oil Vapor Visible Coming From Tank
5	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	9-29-72 Good	Exhaust System Operating - Exhaust Good - No Fumes Or Caustic Spray Visible Outside Exhaust Hood
6	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	9-29-72 Poor	No Irritation Noticeable Rotary Barrel In Operation - Main Exhaust Hood Good - Exhaust Holes In Pit Area - Conveyor In Pit Covered With Hot Steam - Conveyor Not Venting - Heavy Fumes Visible Rising From Pit - Fumes Very Irritating HCl 10 ppm - Small Amount Of Steam On Floor In North End Of Room
7	Brick Cutting Area	Dust from Brick Saw	Visual	9-29-72 Good	Saw Not In Operation - No Dust Visible In Room Exhaust System For Saw Good
7-A	Asbestos Mixing Area	Asbestos	Visual	9-29-72 Good	No Asbestos Mixing In Progress Exhaust System For Mixing Operation Fair
8	Rectifier Station	Mercury Vapor	Detector Tube	9-29-72 Good	Mercury Vapor .001 mg/m ³ - No Work In Progress No Droplets Of Mercury Visible In Room Exhaust System Operating - Exhaust Fair
9	Potrooms - General	Dust & Fumes	Visual	9-29-72 Good	Slight Haze Of Dust And Fumes Visible In All Rooms Concentration Highest In Rooms 9 And 10 Pot Cover Placement - Generally Good Pot Cover Condition - Generally Fair
10	Bath Storage	Dust	Visual & Sensory	9-29-72 Good	Small Amount Of Dust Visible - Slight Irritation Noticeable In Areas Containing Wet Bath
11	Bath Crushing	Dust	Visual-Smoke Tube	9-29-72 Good	Crusher In Operation - Small Amount Of Dust Visible In Building - All Exhaust Hoods In Operation Exhaust Fair To Good

SURVEYOR

CHP

411082 0462

DATE: SEP. 21. 29. 1972

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER IN OPERATION - ALL BAG FILTER UNITS OPERATING 9-29-72
13	Ore Unloading	Dust	Visual	Good	NO DUST VISIBLE COMING FROM ANY UNIT UNLOADING IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE INSIDE BUILDING - CONCENTRATION HIGHEST WHEN CAR MOVERS FIRST OPERATED - STRONG WIND WAS BLOWING MOST OF DUST OUT OF BUILDING
14	Rodding Room-General	Dust & Fumes	Visual	Good	9-21-72 SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNTS OF FUMES OCCASIONALLY VISIBLE NEAR ELECTRODE FURNACES FUMES ALSO VISIBLE IN STUB-WELDING AREA - NO IRRITATION NOTICEABLE
15	Wheelabrator	Noise	Audio	Fair	Noise LEVEL STILL HIGH Numbers?
16	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA
17	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES VISIBLE COMING FROM MIXER No. 1 SLIGHT ODDOR OF HOT PITCH NOTICEABLE IN AREA
18	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	CLEANING OPERATION IN PROGRESS - DUST VISIBLE ALONG THE ENTIRE LENGTH OF THE SHAKER CONVEYOR - EXHAUST HOOD AT WEST END OF CONVEYOR OPERATING - EXHAUST FAIR
19	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE IN AREAS WHERE PACKING AND UNPACKING OPERATIONS IN PROGRESS - ALL FURNACE BLINDINGS WELL VENTILATED - CO 10 PPM
20	Butt Unloading & Crushing	Dust	Visual	Fair	GREEN SCRAP BEING CAUSHED - UNLOADING EXHAUST HOOD OPERATING - EXHAUST GOOD - MODERATE AMOUNT OF DUST VISIBLE NEAR CRAMMER AND BETWEEN CRAMMER AND UNLOADING HOOD - NEW DUST COLLECTOR OPERATING
21	Mixer Floor	Dust & Pitch Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES VISIBLE DURING DUMPING OF MIXER No. 3 - SLIGHT ODDOR OF HOT PITCH NOTICEABLE IN AREA

SURVEYOR

CAR

411082 0463

DATE: SEPT. 28, 1972

Ident	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	No Fumes Visible Escaping From J-1 OR M-5 EXHAUST SYSTEM OPERATING - EXHAUST GOOD
23	Press Room	Fumes	Visual	Good	ONLY HPM PASSES IN OPERATION - SMALL AMOUNT OF FUMES VISIBLE EACH TIME HOT MIX ENTERS THE PRESS - SLIGHT ODOOR OF HOT FUMES NOTICEABLE - ROOM WELL VENTILATED
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	MARINITE BEING CUT AND DRILLED ON THE BANDSAW AND DRILL PRESS - NO DUST VISIBLE ABOVE ENTER OPERATION - RADIAL-ARM SAW CUTTING WOOD - NO DUST VISIBLE - EXHAUST SYSTEM OPERATING - EXHAUST GOOD
25	Garage - General	Fumes CO	Visual Detector Tube	Good	PICKUP TRUCK IN OPERATION APPROXIMATELY 3 MINUTES - TRUCK NOT CONNECTED TO EXHAUST SYSTEM - NO FUMES VISIBLE CO 15 ppm - BUILDING WELL VENTILATED
26	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
27	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	NO WELDING OPERATIONS IN PROGRESS - NO FUMES VISIBLE NO IRRITATION NOTICEABLE - EXHAUST HOODS WHICH WERE IN OPERATION WERE GOOD - BUILDING WELL VENTILATED
28	Marinette Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION NO DUST VISIBLE EXHAUST SYSTEM OPERATING - EXHAUST GOOD GAS-FIRED FORGE IN OPERATION - CO 10 ppm
29	Blacksmith Shop	CO	Detector Tube	Good	AREA WELL VENTILATED TACHYCAROTHELYNE - DOOR CLOSED .00 ppm DOOR OPEN .65 ppm READINGS TAKEN DIRECTLY IN FRONT OF DISBURSER WITH EXHAUST SYSTEM OPERATING - EXHAUST FAIR - UNIT NOT IN USE
30	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	
31	Atomizer - General	Dust	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN BAY 403 - WORK IN PROGRESS TO REPAIR CRACK OF THIS DUST - NO DUST VISIBLE IN OTHER AREAS - GROUND IN AREA OF SERVICE TRUCK W/RT SLIGHT ODOOR NOTICEABLE

SURVEYOR

C.H.R.

STATUS OF REMEDIAL ACTION

<u>Ident.</u>	<u>Status</u>
6	Mechanical Engineering evaluating problems and possible courses of action.
15	Wheelabrator modernization to include noise abatement. Completion expected during first quarter, 1973.
18	Practical means of dust collection for conveyor being sought; included in 1974 capital expenditures forecast.
20	Mechanical and Process Engineering Departments attempting to correct operating problems in new dust collector system.

A. G. Clayton

AGC:ak
10-24-72

411082 0465

DATE: AUG 27 1972

Ident	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	B-th Crushing Bag Filter	Dust	Visual	FAIR	CRUSHING IN PROGRESS - ALL DUST FILTER UNITS OPERATING NO DUST VISIBLE COMING FROM UNIT No. 1 AREA ALSO A MODERATE AMOUNT OF DUST VISIBLE COMING FROM UNIT No. 2 UNLOADING AREAS - DUST HERE BUILDING AND IT WAS HEAVIER BETWEEN UNITS 13 AND 20 FURNACE MODERATE TO HEAVY - DUST CONCENTRATION HEAVIEST WHEN CAR PRESS FIRST CHARGED - DUST TRAIL TO HEAVY IN AREA OF CAR PRESS WHEN CHARGING TRUCKS IN THE AREA
13	Ore Unloading	Dust	Visual	POOR	
14	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNTS OF FUMES OCCASIONALLY VISIBLE NEAR THE ELECTRODE FURNACES FUMES ALSO VISIBLE IN STEEL-WELDING AREA - NO IRRITATION NOTICEABLE
15	Wheelabrator	Noise	Audio	FAIR	NOISE LEVEL STILL HIGH
16	Stub Press & Unbolting Station	Dust	Visual	Good	NEITHER OPERATION IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS
17	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES VISIBLE COMING FROM MIXERS No. 1 AND No. 2 SLIGHT OXIDE OF HOT AREA NOTICEABLE IN AREA
18	Carbon Plant Electrode Cleaning	Dust	Visual	FAIR	CLEANING OPERATION IN PROGRESS - DUST VISIBLE ALONG THE LENGTH OF THE SHAKER CONVEYOR - EXHAUST HOOD AT WEST END OF CONVEYOR OPERATING - EXHAUST FAIR
19	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE IN AREAS WHERE FURNACE HAD UNLOADING OPERATIONS IN PROGRESS - ALL FURNACE BUILDINGS WELL VENTILATED CO 5 ppm
20	Butt Unloading & Crushing	Dust	Visual	Good	NEITHER OPERATION IN PROGRESS - SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS - UNLOADING EXHAUST HOOD OPERATING EXHAUST GOOD
21	Mixer Floor	Dust & Pitch Fumes	Visual	Good	DUST VISIBLE IN AREA DURING CHARGING OF MIXER No. 3 AND No. 13 - NO FUMES VISIBLE - SLIGHT COOR OF HOT PITCH NOTICEABLE IN AREA

411082 0467

continuing AIRS

DATE: AUG 29 1972

ent	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	No Fumes Visible Escaping From J-1 OR M-5 EXHAUST SYSTEM OPERATING - EXHAUST GOOD
23	Press Room	Fumes	Visual	Good	BOTH PRESSES OPERATING - SMALL AMOUNTS OF FUMES VISIBLE EACH TIME HOT MIX ENTERS A PRESS - SLIGHT OIL ON HOT STEEL NOTICEABLE - BOTH PRESS ROOMS WELL VENTILATED
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	BANDSAW IN OPERATION CUTTING MARINITE - EXHAUST SYSTEM OPERATING - EXHAUST GOOD - NO DUST VISIBLE IN BUILDING
25	Garage - General	Fumes CO	Visual Detector Tube	Good	ONE GASOLINE-POWERED VEHICLE IN OPERATION APPROXIMATELY 1 MINUTE - VEHICLE EXHAUST ATTACHED TO BUILDING EXHAUST SYSTEM - NO FUMES VISIBLE - BUILDING WELL VENTILATED - CO. 0.05%
26	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
27	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	SEVERAL WELDING OPERATIONS IN PROGRESS - FUMES VISIBLE NEAR MOST - NO IRRITATION NOTICEABLE - EXHAUST HANGS WHICH WERE IN OPERATION WERE GOOD - BUILDING WELL VENTILATED
28	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	LATHE IN OPERATION - EXHAUST SYSTEM OPERATING EXHAUST GOOD - NO DUST VISIBLE IN ROOM
29	Blacksmith Shop	CO	Detector Tube	Good	NO FORGES OR EQUIPMENT IN OPERATION AREA WELL VENTILATED
30	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE HOPPER WITH BURNER ON - OPERATING WITH BURNER CLOSED - READINGS TAKEN DIRECTLY IN FRONT OF DEGREASER WITH EXHAUST SYSTEM OPERATING - EXHAUST FAIR - (Unit In Use AT TIME OF TESTS)
31	Atomizer - General	Dust	Visual	Good	No Dust Visible In Any Area - Ground In Area OF SEPTIC TANK WET - OIL ALSO NOTICEABLE IN AREA

411082 0468

STATUS OF REMEDIAL ACTION

<u>Ident.</u>	<u>Status</u>
4	Oil vapor exhaust system designed; to be installed by end of this year.
6	Mechanical Engineering evaluating problems and possible courses of action.
11 and 12	Problem being investigated; housekeeping and maintenance to be improved.
13	Possible use of an enclosed chute being evaluated.
15	Wheelabrator modernization to include noise abatement. Completion expected during first quarter, 1973.
18	Capital expenditure forecast for 1974 includes money for dust collection system on conveyor. Practical means of dust collection still being sought.

A. G. Clayton

AGC:ak
9-18-72

411082 0469

CONFIDENTIAL

ROCKDALE WORKS
INDUSTRIAL HYGIENE SURVEY

DATE: JULY 21, 1972
DUB, PRC, PRA, TBB-f

ent.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
1	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	IN GENERAL, ATMOSPHERE IN BUILDING CLEAR - SMALL AMOUNTS OF FUMES OCCASIONALLY VISIBLE FROM FURNACE FLUING
2	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	NO IRRITATION NOTICEABLE Cl ₂ 2 ppm HCl 0 ppm CO 15 ppm ABOVE SAMPLES TAKEN ON SOUTH SIDE OF R-55 UNIT BETWEEN FEES NO. 1 & 2 - NO FUMES VISIBLE - NO IRRITATION NOTICEABLE
3	Homogenizing Furnace	CO	Detector Tubes	Good	BOTH FURNACES IN OPERATION - SIGHT ONLY OF NATURAL GAS NOTICEABLE AROUND FEE NO. 1 FEE NO. 1 - CO ON FLOOR 5 ppm ON CATWALK 0 ppm FEE NO. 2 - CO ON FLOOR 5 ppm ON CATWALK 5 ppm SMALL AMOUNT OF OIL VAPOR VISIBLE COMING FROM TANK
4	Cutting Oil Supply Tank	Oil Vapor	Visual	Fair	WIND BLOWING VAPOR TOWARD CENTER OF BLDG. 34
5	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	EXHAUST SYSTEM OPERATING - EXHAUST GOOD - NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE EXHAUST HOOD
6	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Fair	NO IRRITATION NOTICEABLE ROTARY CHARGE IN OPERATION - MAIN EXHAUST HOOD GOOD - EXHAUST HOOD IN PIT FLOOR - DUST AND FUMES VISIBLE RISING FROM PIT - WATER ON FLOOR OF PIT - SIGHT IRRITATION NOT NOTICEABLE IN PIT - HCl 0.04 ppm SMALL AMOUNT OF FUMES IN NORTH END OF ROOM
7	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT IN OPERATION - NO DUST VISIBLE IN ROOM EXHAUST HOOD FOR SAW GOOD
7-A	Asbestos Mixing Area	Asbestos	Visual	Good	NO ASBESTOS MIXING IN PROGRESS EXHAUST SYSTEM FOR MIXING OPERATION FAIR
8	Rectifier Station	Mercury Vapor	Detector Tube	Fair	MERCURY VAPOR 0.04 mg/m ³ - NO WORK IN PROGRESS A NUMBER OF DROPLETS OF MERCURY VISIBLE IN SINK EXHAUST SYSTEM OPERATING - EXHAUST FAIR
9	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE OF DUST AND FUMES VISIBLE IN ALL ROOMS CONCENTRATION HIGHEST IN ROOMS 14, 15, AND 132 NOT COVER PLACEMENT - GENERALLY GOOD BEST COVER PLACEMENT - GENERALLY FAIR
10	Bath Storage	Dust	Visual & Sensory	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - DUST MAINLY CAUSED BY WIND AND VEHICLES STIRRING UP A LAYER OF MERCURY BATH MATERIAL COVERING THE COURTYARD - NO IRRITATION
11	Bath Crushing	Dust	Visual-Smoke Tube	Good	CRUSHER IN OPERATION - SMALL AMOUNT OF DUST VISIBLE IN BUILDING - DUST MAINLY COMING FROM OUTSIDE BUILDING ALL EXHAUST HOODS IN OPERATION - EXHAUST FAIR TO GOOD

411082 0470

CHP

DATE: JULY 28, 1972

dent	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER IN OPERATION - ALL BAG FILTER UNITS OPERATING - NO DUST VISIBLE COMING FROM ANY UNIT
13	Ore Unloading	Dust	Visual	Good	UNLOADING IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN BUILDING - DUST MAINLY CAUSED BY WIND BLOWING THROUGH BUILDING
14	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNTS OF FUMES OCCASIONALLY VISIBLE NEAR ELECTRODE FURNACES
15	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL HIGH
16	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS
17	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES VISIBLE COMING FROM MIXERS NO. 1 AND NO. 2 SLIGHT ODOOR OF HOT PITCH NOTICEABLE IN AREA
18	Carbon Plant Electrode Cleaning	Dust	Visual	Good	CLEANING OPERATION NOT IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN AREA - EXHAUST HOOD AT WEST END OF SHAKER CONVEYOR OPERATING - EXHAUST FAIR
19	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE IN AREAS WHERE PACKING AND UNPACKING OPERATION IN PROGRESS - IN Bldg. 60 DUST ALSO VISIBLE COMING FROM CRUSHER AREA - FURNACE BUILDINGS WELL VENTILATED
20	Butt Unloading & Crushing	Dust	Visual	Fair	NEITHER OPERATION IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN UNLOADING AREA - EXHAUST HOOD NOT IN OPERATION - MODERATE TO HEAVY DUST VISIBLE IN AREA NEAR CRUSHER - SOURCE OF DUST UNKNOWN - DUST TENDS TO DRIFT INTO Bldg. 60
21	Mixer Floor	Dust & Pitch Fumes	Visual	Good	DUST VISIBLE IN AREA DURING CHARGING OF MIXERS NO. 13 - SMALL AMOUNT OF FUMES VISIBLE IN AREA DURING DUMPING OF MIXERS NO. 3 AND 13 - SLIGHT ODOOR OF HOT PITCH NOTICEABLE IN AREA

SURVEYOR

CHIR

411082 0471

DATE: JULY 22, 1972

Event	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	No Fumes Visible Escaping From J-4 ON M-5 EXHAUST SYSTEM OPERATING - EXHAUST GOOD
23	Press Room	Fumes	Visual	Good	BOTH PRESSES OPERATING - SMALL AMOUNTS OF FUMES VISIBLE EACH TIME HOT MIX ENTERS A PRESS - SLIGHT CORA OF HOT PITCH NOTICEABLE - BOTH PRESSES ROOMS WELL VENTILATED
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	No EQUIPMENT IN OPERATION No DUST VISIBLE EXHAUST SYSTEM NOT IN OPERATION
25	Garage - General	Fumes CO	Visual Detector Tube	Good	ONE GASOLINE-POWERED VEHICLE IN OPERATION APPROXIMATELY 1 MINUTE - NO FUMES VISIBLE - AREA WELL VENTILATED CO 20 PPM
26	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No ACID MIST VISIBLE No IRRITATION
27	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	No WELDING OPERATIONS IN PROGRESS - NO FUMES VISIBLE - NO IRRITATION - EXHAUST HOODS WHICH WERE IN OPERATION WERE GOOD - BUILDING WELL VENTILATED
28	Marinette Finishing Room	Dust	Visual Smoke Tube	Good	No EQUIPMENT IN OPERATION No DUST VISIBLE EXHAUST SYSTEM GOOD
29	Blacksmith Shop	CO	Detector Tube	Good	No FORGES OR EQUIPMENT IN OPERATION AREA WELL VENTILATED
30	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Fair	TRICHLOROETHYLENE - DUE TO OPEN 125 AMP OVERCURRENT PROTECTORS TAKEN DIRECTLY IN FRONT OF DEGREASER WITH EXHAUST SYSTEM OPERATING - EXHAUST FAIR - UNIT NOT IN USE AT TIME OF TEST
31	Atomizer - General	Dust	Visual	Good	No DUST VISIBLE IN ANY AREA

SURVEYOR

CRK

Status of Remedial Action

<u>Ident.</u>	<u>Status</u>
4	Control of cutting oil fumes to be attained with overhaul and automation of Loma Saw and oil supply system by end of 1972.
6	Revision of skim reclamation system postponed pending company development of improved system elsewhere.
8	Mercury has since been removed from sink. Importance of thorough clean-up is being stressed to operators.
15	Wheelabrator modernization to include noise abatement. Completion expected during first quarter, 1973.
20	New dust collector being installed now.
30	Dirty solvent is being replaced more frequently to reduce excessive vaporization caused by buildup of grease in the solvent.

A. G. Clayton

AGC:ak
8-18-72

411082 0473

8/17

Are there, or
could there be,
general criteria
used for
"good", "fair",
"poor or inadequate",
etc.

Several of these
listed as "fair"
appear questionable.
Is that a reasonable
criticism?

"Doc" W.

CONFIDENTIAL

ROCKDALE WORKS ~~INDUSTRIAL~~ HYGIENE SURVEY

DATE: JULY 3, 1972

ent.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
1	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	IN GENERAL ATMOSPHERE IN BUILDING CLEAR
2	Furnace Area & Casting	Cl ₂ CO	Detector Tubes	FAIR	NO IRRITATION NOTICEABLE CO ₂ 4 ppm HCl 4 ppm CO 15 ppm ABOVE SAMPLES TAKEN ON WEST SIDE OF FURNACE R-181 UNIT FUMES VISIBLE COMING FROM UNIT (OCCASIONAL IRRITATION NOTICEABLE) FEE No. 2 OPERATING - FEE No. 1 UNDERGOING REPAIRS
3	Homogenizing Furnace	CO	Detector Tubes	Good	FEE No. 2 - CO ON FLOOR 10 ppm ON CATWALK 5 ppm
4	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	NO OIL VAPOR VISIBLE
5	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	EXHAUST SYSTEM OPERATING - EXHAUST GOOD - NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE EXHAUST
6	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	FAIR	GOOD - NO IRRITATION NOTICEABLE ROTARY BRICK IN OPERATION - MAIN EXHAUST HOOD FAIR - EXHAUST HOD IN PIT - FUMES VISIBLE RISING FROM PIT (SLIGHT IRRITATION NOTICEABLE) - HCl 0.0 ppm - SKIM ON FLOOR IN NORTH END OF BLDG.
7	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT IN OPERATION - NO DUST VISIBLE IN ROOM EXHAUST HOOD FOR SAW GOOD
8	Asbestos Mixing Area	Asbestos	Visual	Good	NO MIXING OF ASBESTOS IN PROGRESS EXHAUST SYSTEM FOR MIXING OPERATION FAIR
9	Rectifier Station	Mercury Vapor	Detector Tube	Good	MERCURY VAPOR 0.0 mg/m ³ - NO WORK IN PROGRESS NO DROPLETS OF MERCURY VISIBLE IN ROOM EXHAUST SYSTEM OPERATING - EXHAUST FAIR
10	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE OF DUST AND FUMES VISIBLE IN ALL ROOMS CONCENTRATION HIGHEST IN ROOMS 16, 12, 20, AND 22 AT COVER ANCHMENT - GENERALLY GOOD NOT COVER CONDITION - GENERALLY FAIR
11	Bath Storage	Dust	Visual & Sensory	Good	NO DUST VISIBLE
12	Bath Crushing	Dust	Visual-Smoke Tube	FAIR	NO IRRITATION CAMPER NOT IN OPERATION - INTERIOR OF BUILDING FAIRLY DUSTY - MOST OF DUST CAUSED BY WIND BLOWING OVER A FAIRLY THICK LAYER OF FURNACE ASH MATERIAL PRESENT ON FLOOR INSIDE BUILDING NO. 10 IN THE COURTYARD OUTSIDE - EXHAUST HOODS WERE FAIR

411082 0475

DATE: JULY 3, 1972

Ident	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	Bath Crushing Bag Filter	Dust	Visual	Good	CRAUSHER NOT IN OPERATION - ALL BAG FILTER UNITS OPERATING - NO DUST VISIBLE COMING FROM ANY UNIT
13	Ore Unloading	Dust	Visual	Good	UNLOADING NOT IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN BUILDING - DUST MAINLY CAUSED BY WIND BLOWING THROUGH BUILDING
14	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES OCCASIONALLY VISIBLE NEAR ELECTROMET FURNACES
15	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL HIGH
16	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS
17	Potlining-Mixer Area	Dust & Fumes	Visual	Fair	DURING DUMPING OF MIXER NO. 1 FUMES VISIBLE COMING FROM MIXER AND UNLOADING CONVEYOR - STRONG ODR OF HOT PITCH NOTICEABLE IN AREA - MODERATE AMOUNT OF DUST VISIBLE NEAR MIXER NO. 1 WHILE IT WAS BEING RECHARGED
18	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	CLEANING OPERATION IN PROGRESS - DUST VISIBLE ALONG ENTIRE LENGTH OF JUNCTIONS - DUST CONCENTRATION RANGED FROM MODERATE TO HEAVY - EXHAUST HOOD AT WEST END OF CONVEYOR OPERATING - EXHAUST FAIR
19	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE IN AREAS WHERE PITCHING AND UNLOADING OPERATION IN PROGRESS - FURNACE BUILDINGS WELL VENTILATED CO 10 ppm
20	Butt Unloading & Crushing	Dust	Visual	Fair	NEITHER OPERATION IN PROGRESS - UNLOADING EXHAUST HOOD NOT IN OPERATION - MODERATE TO HEAVY DUST VISIBLE IN AREA NEAR CRAUSHER - STRONG ODR OF HOT PITCH - DUST TENDS TO DRIFT INTO SOUTH END OF BLDG. 60
21	Mixer Floor	Dust & Pitch Fumes	Visual	Fair	DUST VISIBLE IN AREA DURING CHARGING OF MIXER NO. 1 - FUMES VISIBLE IN AREA DURING DUMPING OF MIXER NO. 1 AND 17 - FUMES HEAVIEST FROM MIXER NO. 1 WHEN THEY CAME UP FROM DOWNSIDE SEVERAL FEET ABOVE STREET IN AREA OF HOT PITCH NOTICEABLE IN AREA

SURVEYOR

CNR

411082 0476

DATE: JULY 3 1972

dent	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	No Fumes Visible Escaping From J-4 or M-5 Exhaust System Operating - Exhaust Good
23	Press Room	Fumes	Visual	Good	Bottom Presses Operating - Small Amounts of Fumes Visible Each Time Hot Mix Enters A Press - Slight odor of hot air noticeable - Both Press Rooms Well Ventilated
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	Band Saw In Operation Cutting MARINITE - No Dust Visible In Area Near Saw - Exhaust System Operating - Exhaust Good
25	Garage - General	Fumes CO	Visual Detector Tube	Good	No Equipment In Operation - No Fumes Visible Area Well Ventilated - CO 0.0ppm
26	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
27	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	Several Welding Operations In Progress - Small Amounts of Fumes Visible - Slight Irritation Noticeable Near An Aluminum Welding Operation - Exhaust Hood Which Wears In Operation Were Good - Building Well Ventilated
28	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	No Equipment In Operation No Dust Visible In Room Exhaust System Good
29	Blacksmith Shop	CO	Detector Tube	Good	Coal-fired Forge In Operation - Exhaust Good Area Well Ventilated CO 0.0ppm
30	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	FAIR	Trichloroethylene - Door Open 12.5 ppm. Door Closed .0ppm. Readings Taken Directly In Front Of Degreaser With Exhaust System Operating - Exhaust Fair - Unit In Use At Time Of Tests
31	Atomizer - General	Dust	Visual	FAIR	Small Amount of Dust Visible In Room No. 3 - Dust Escaping From Holes In The Rubber Sleeve Used In Filling Machine - Water Visible In Semicircle Area - Slight odor noticeable in Area

SURVEYOR CNR

411082 0477

STATUS OF REMEDIAL ACTION

<u>Ident.</u>	<u>Status</u>
2	Filter box was leaking; has since been replaced.
6	Revision of skim reclamation system postponed pending company development of improved system elsewhere.
11	Housekeeping has been improved since survey.
15	Wheelabrator modernization to include noise abatement. Completion expected during first quarter, 1973.
17	Request submitted to Maintenance Department to check operation of exhaust system dampers.
18	Carbon cleaning machine modernization is planned in 1973; some improvement expected in exhaust system.
20	New dust collector for butt crusher and related equipment to be installed this quarter.
21	Alternative improvements to fume collection system being considered by Mechanical Engineering.
30	High vapor levels result from buildup of grease in solvent. Dirty solvent will be replaced more frequently to minimize vaporization.
31	Engineering Work Order in process to reduce dusting in packout area. Septic tank cleaned out soon after survey.

A. G. Clayton

AGC:ak
7-27-72

411082 0478

CONFIDENTIAL

INDUSTRIAL HYGIENE SURVEY

DATE: MAY 26, 1972

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
1	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	IN GENERAL ATMOSPHERE IN BUILDING CLEAR
2	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	NO IRRITATION NOTICEABLE NO CASTING IN PROGRESS - NO FURNACE FLUING IN PROGRESS NO CHLORINE IN USE - IN CASTING AREA BETWEEN FCS 3 & 4
3	Homonogenizing Furnace	CO	Detector Tubes	Good	CO - 10 ppm BOTH FURNACES OPERATING - SINKING OVER OF NATURAL GAS NOTICABLE AROUND FCS No. 1
4	Cutting Oil Supply Tank	Oil Vapor	Visual	Fair	CO - 10 ppm FCS No. 1 - CO ON FLOOR SYSTEM ON CUTWALK 15 ppm FCS No. 2 - CO ON FLOOR SYSTEM ON CUTWALK 15 ppm OIL VAPOR VISIBLE COMING FROM TANK - WIND
5	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	BLOWING VAPOR TOWARD CENTER OF BUILDING 34 EXHAUST SYSTEM OPERATING - EXHAUST GOOD - NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE EXHAUST
6	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Fair	NO IRRITATION NOTICEABLE ROTARY FURNACE IN OPERATION - EXHAUST SYSTEM EITHER NOT OPERATING OR OPERATING - EXHAUST HOLD IN IT OUT OF SYSTEM - DUST AND FUMES VISIBLE RISING FROM IT - SIGHT COULD BE NOTICEABLE IN AT SMALL DISTANCE - SAMPLED & ANALYZED - ALL OK
7	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT IN OPERATION - NO DUST VISIBLE IN ROOM EXHAUST HOLD FOR SAW GOOD
7-A	Asbestos Mixing Area	Asbestos	Visual	Good	NO MIXING OF ASBESTOS IN PROGRESS EXHAUST SYSTEM FOR MIXING OPERATION FAIR
8	Rectifier Station	Mercury Vapor	Detector Tube	Good	MERCURY VAPOR 0.0 mg/m ³ - NO WORK IN PROGRESS NO DRAPETS OF MERCURY VISIBLE IN ROOM EXHAUST SYSTEM OPERATING - EXHAUST FAIR
9	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE OF DUST AND FUMES VISIBLE IN ALL ROOMS CONCENTRATION HIGHEST IN ROOMS 12 AND 26 PER COVER PLACEMENT - GENERALLY GOOD NOT COVERED - GENERALLY FAIR
10	Bath Storage	Dust	Visual & Sensory	Good	NO DUST VISIBLE
11	Bath Crushing	Dust	Visual-Smoke Tube	Good	NO IRRITATION CRUSHER OPERATING - SMALL AMOUNT OF DUST VISIBLE IN BUILDING - DUST MAINLY CAUSED BY WIND BLOWING THROUGH BUILDING - ALL EXHAUST HOLD, OPERATING - EXHAUST FAIR

411082 0479

STANDARD

DATE: MAY 26, 1972

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	Bath Crushing Bag Filter	Dust	Visual	Good	CAUSHER OPERATING - ALL BAG FILTER UNITS OPERATING - NO DUST VISIBLE COMING FROM ANY UNIT
13	Ore Unloading	Dust	Visual	Fair	UNLOADING IN PROGRESS - INTERIOR OF BUILDING FAIRLY DUSTY - DUST MAINLY CAUSED BY WIND BLOWING THROUGH BUILDING - DUST CONCENTRATED HIGHEST WHEN CRUSHERS FIRST CHARGED
14	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES OCCASIONALLY VISIBLE NEAR ELECTRODE CRUSHERS - FUMES VISIBLE AROUND STUB WELDING MACHINE NO IRRITATION NOTICEABLE
15	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL HIGH
16	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS
17	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES VISIBLE COMING FROM MIXER NO. 1 SLIGHT ODOR OF HOT PITCH NOTICEABLE IN AREA
18	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	CLEANING OPERATION IN PROGRESS - DUST VISIBLE ALONG ENTIRE LENGTH OF SHAFER CONVEYOR - EXHAUST HOPE AT WEST END OF CONVEYOR OPERATING - EXHAUST FAIR
19	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PACKING AND UNPACKING OPERATIONS IN PROGRESS - FURNACE BUILDINGS WELL VENTILATED - CO 5 ppm
20	Butt Unloading & Crushing	Dust	Visual	Good	BUTT UNLOADING NOT IN PROGRESS - UNLOADING EXHAUST HOPE OPERATING - EXHAUST GOOD - CRUSHER NOT IN OPERATION HOWEVER DUST CONCENTRATING IN AREA NEAR CRUSHER ROARED FROM LIGHT TO MODERATE
21	Mixer Floor	Dust & Pitch Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES VISIBLE WHEN MIXER NO. 5 DUMPED - SLIGHT ODOR OF HOT PITCH NOTICEABLE IN AREA

411082 0480

SURVEYOR

CNR

DATE: MAY 26, 1972

Ident	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	No Fumes Visible Escaping From J-4 OR M-5 EXHAUST SYSTEM OPERATING - EXHAUST GOOD
23	Press Room	Fumes	Visual	Good	BOTH PRESSES OPERATING - SMALL AMOUNTS OF FUMES VISIBLE EACH TIME HOT MIX ENTERS A PRESS - SLIGHT OODR OF HOT PITCH NOTICEABLE - BOTH PRESSES ROOMS WELL VENTILATED
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	Saw in Operation Cutting Wood - Drill Press in Operation DRILLING MARINITE - EXHAUST SYSTEM OPERATING - EXHAUST GOOD - NO DUST VISIBLE IN BUILDING
25	Garage - General	Fumes CO	Visual Detector Tube	Good	ONE GASOLINE-POWERED VEHICLE IN OPERATION FOR SHORT PERIOD NO FUMES VISIBLE - BUILDING WELL VENTILATED - INSTALLATION OF EXHAUST SYSTEM STILL INCOMPLETE - CO IS GOOD
26	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
27	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	ONE WELDING OPERATION IN PROGRESS WITHOUT USE OF EXHAUST HOOD - SMALL AMOUNT OF FUMES VISIBLE - NO IRRITATION NOTICEABLE - EXHAUST HOODS WHICH WERE IN OPERATION WERE GOOD - BUILDING WELL VENTILATED
28	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION NO DUST VISIBLE IN ROOM EXHAUST SYSTEM OPERATING - EXHAUST GOOD
29	Blacksmith Shop	CO	Detector Tube	Good	ONE GAS-FIRED FORGE IN OPERATION AREA WELL VENTILATED CO IS GOOD
30	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Fair	TRICHLOROETHYLENE SOLVENT - READING TAKEN DIRECTLY IN FRONT OF DEGREASER WITH EXHAUST HOOD OPEN AND EXHAUST SYSTEM OPERATING - EXHAUST FAIR - UNIT NOT IN USE AT TIME OF TEST
31	Atomizer - General	Dust	Visual	Good	No Dust Visible In Any Area

SURVEYOR

7110

STATUS OF REMEDIAL ACTION

<u>Ident.</u>	<u>Status</u>
4	Control of cutting oil fumes to be attained with overhaul and automation of Loma saw and oil supply system by end of 1972.
6	Revision of skim reclamation system postponed pending company development of improved system elsewhere.
13	Alternative courses of action under consideration by Mechanical Engineering; none selected as yet.
15	Wheelabrator modernization to include noise abatement. Completion expected during first quarter, 1973.
18	Carbon cleaning machine modernization is planned; improvement expected in exhaust system.
30	Cause for high reading is being investigated. Results will determine corrective action needed.

A. G. Clayton

AGC:ak
7-12-72

411082 0482

Route:

~~HAID~~
~~HAID~~
V.W. Rake - 2
D.L. Backenstose - 7
R P C
R H W
T B B

file

CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: APRIL 13, 1972.

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
1	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	IN GENERAL ATMOSPHERE IN BUILDING CLEAR - SOME FUMES OCCASIONALLY VISIBLE DURING FURNACE FLUXING
2	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	NO IRRITATION NOTICEABLE ON 10ppm HCl 10ppm CO 5ppm READINGS TAKEN IN CASTING AREA OF FCS 34 - SOME FUMES VISIBLE COMING FROM FCS 4 FILTER BOX - NO IRRITATION
3	Homogenizing Furnace	CO	Detector Tubes	Good	BOTH FURNACES OPERATING - STRONG ODOOR OF NATURAL GAS NOTICEABLE AROUND FCS No. 1 FCS No. 1 - CO ON FLOOR 10ppm ON CATWALK 5ppm FCS No. 2 - CO ON FLOOR 5ppm ON CATWALK 5ppm
4	Cutting Oil Supply Tank	Oil Vapor	Visual	Fair	OIL VAPOR VISIBLE COMING FROM TANK - WIND BLOWING VAPOR TOWARD CENTER OF BLDG 34 - CONDENSED OUTSIDE BUILDING ALONG TANK AND FLOOR INSIDE BUILDING NEAR SAW WET WITH WHAT APPEARED TO BE OIL
5	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE EXHAUST HOOD - EXHAUST SYSTEM OPERATING - EXHAUST GOOD
6	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	NO IRRITATION NOTICEABLE ROTARY BARREL NOT IN OPERATION - MAIN EXHAUST HOOD GOOD EXHAUST HOOD IN PIT NOT OPERATING - FUMES ON PIT DAMP - IRRITANT NOTICEABLE IN PIT - LARGE AMOUNT OF SMOKE ON FLOOR IN NORTH END OF ROOM - NO DUST OR FUMES VISIBLE - HCl 10ppm
7	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT IN OPERATION - NO DUST VISIBLE IN ROOM EXHAUST HOOD FOR SAW GOOD
7-A	Asbestos Mixing Area	Asbestos	Visual	Good	NO MIXING OF ASBESTOS IN PROGRESS EXHAUST SYSTEM FOR MIXING OPERATION FAIR
8	Recycler Station	Mercury Vapor	Detector Tube	Fair	MEASURING VAPOR 0.0mg/m ³ - DROPLETS OF MERCURY VISIBLE IN TANK - NO WORK IN PROGRESS - EXHAUST SYSTEM OPERATING - EXHAUST FAIR
9	Potrooms - General	Dust & Fumes	Visual	Fair	SLIGHT HAZE OF DUST AND FUMES VISIBLE IN ALL ROOMS CONCENTRATION HIGHEST IN ROOMS 14, 12, 13, 20, 22, & 134 POT COVER PLACEMENT - GENERALLY GOOD POT COVER LOCATION - GENERALLY FAIR
10	Bath Storage	Dust	Visual & Sensory	Good	NO DUST VISIBLE NO IRRITATION
11	Bath Crushing	Dust	Visual-Smoke Tube	Good	CAUSTIC OPERATING - SMALL AMOUNT OF DUST VISIBLE IN BUILDING - DUST MAINLY CAUSED BY WIND BLOWING THROUGH BUILDING - EXHAUST HOODS WHICH WERE IN OPERATION WERE FAIR

411082 0484

CONTINUED

Page 1

DATE: April 13, 1972

Pat	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	Bath Crushing Bag Filter	Dust	Visual	Good	CAUSHER OPERATING - 2 OF 3 BAG FILTER UNITS OPERATING - NO DUST VISIBLE COMING FROM EITHER UNIT
13	Ore Unloading	Dust	Visual	Fair	UNLOADING IN PROGRESS - INTERIOR OF BUILDING VERY DUSTY - DUST MAINLY CAUSED BY WIND BLOWING THROUGH BUILDING - DUST CONCENTRATION HIGHEST WHEN CAR HOPPERS FIRST OPENED
14	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNTS OF FUMES OCCASIONALLY VISIBLE NEAR ELECTROMELT FURNACES
15	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL HIGH
16	Stub Press & Unbolting Station	Dust	Visual	Good	NEITHER OPERATION IN PROGRESS SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS
17	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES VISIBLE COMING FROM MIXER No. 2 SLIGHT ODDOR OF HOT PITCH NOTICEABLE IN AREA
18	Carbon Dust Electrostatic Cleaning	Dust	Visual	Good	CLEANING NOT IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN AREA - EXHAUST HOOD AT WEST END OF SPARKER NOT OPERATING
19	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE IN AREAS WHERE PACKING AND UNPACKING OPERATIONS IN PROGRESS - FURNACE BUILDINGS WELL VENTILATED - CO 5 ppm
20	Butt Unloading & Crushing	Dust	Visual	Fair	BUTT UNLOADING NOT IN PROGRESS - UNLOADING EXHAUST HOOD OPERATING - EXHAUST GOOD - CAUSHER NOT IN OPERATION HOWEVER DUST CONCENTRATION IN AREA NEAR CAUSHER RAISED FROM MODERATE TO HEAVY
21	Mixer Floor	Dust & Pitch Fumes	Visual	Fair	SMALL AMOUNT OF DUST VISIBLE IN AREA - FUMES VISIBLE EACH TIME A MIXER DUMPS - FUMES HEAVIEST WHEN MIXER NGAAR WEST END OF FLOOR DUMPS - MIXERS No. 8 & 9 PARTICULARLY BAD - STEAM ODDOR OF HOT PITCH NOTICEABLE IN AREA

SURVEYOR

117

DATE: April 13, 1972

Station	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	No Fumes Visible Escaping From J-1 or M-5 Exhaust System Operating - Exhaust Good
23	Press Room	Fumes	Visual	Good	Both Presses Operating - Small Amounts of Fumes Visible Each Time Hot Mix Enters A Press - Slight Odor of Hot Pitch Noticeable - Both Press Rooms Well Ventilated
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	No Equipment in Operation No Dust Visible
25	Garage - General	Fumes CO	Visual Detector Tube	Good	Exhaust System Operating - Exhaust Good CO 15ppm - No Fumes Visible - One Gasoline Powered Vehicle in Operation - Building Well Ventilated Installation of Exhaust System Still Incomplete
26	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
27	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	Several Welding Operations in Progress - Small Amounts of Fumes Visible Near Most - Slight Irritation Occasionally Noticeable Near Those Without Exhaust Hoods - Exhaust Hoods Which Were in Operation Were Good - Building Well Ventilated
28	Marimite Finishing Room	Dust	Visual Smoke Tube	Good	No Equipment in Operation No Dust Visible in Room Exhaust System Good
29	Blacksmith Shop	CO	Detector Tube	Good	One Gas-Fired Forge in Operation Area Well Ventilated CO 0.0 ppm
30	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	Trichloroethylene - 0.0 ppm With Exhaust Hood Door Closed - 25 ppm With Hood Door Open - Readings Taken Directly in Front of Degreaser With Exhaust System Operating - Exhaust Fair - Unit Not in Use
31	Atomizer - General	Dust	Visual	—	Atomizer Not in Operation

SURVEYOR

2.1.7

411082 0486

STATUS OF REMEDIAL ACTION

<u>Ident.</u>	<u>Status</u>
4	Revisions in the Loma saw and cutting oil supply system by the end of 1972 are planned which will correct the problem.
8	Mercury has since been cleaned from sink.
9	New covers on order, expected delivery in July or August. Effort being made to improve placement of covers.
13	Various possible remedies being considered by Mechanical Engineering.
15	Wheelabrator modernization to include noise abatement. Completion expected during first quarter, 1973.
20	New dust collector for butt crusher and related equipment to be installed during 3rd quarter, 1972.
21	Alternative corrective measures being considered to improve fume collection efficiency.

AGC:ak
5-12-72

411082 0487

~~FBB~~
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V.W. Parker ✓
R.P. Carter 7
DXT
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RAC
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CONFIDENTIAL

**ROCKDALE WORKS
INDUSTRIAL HYGIENE SURVEY**

DATE: MARCH 21, 1972

	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
1	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	IN GENERAL ATMOSPHERE IN BUILDING CLEAR - SOME FUMES OCCASIONALLY VISIBLE DURING FURNACE FLOWING
2	Furnace Area & Casting	CL ₂ HCL CO	Detector Tubes	Good	NO IRRITATION NOTICEABLE CL ₂ 0.0ppm HCL 0.0ppm CO 5ppm READINGS TAKEN IN CASTING AREA OF FCS 1-2 NO FUMES VISIBLE - NO IRRITATION NOTICEABLE
3	Homogenizing Furnace	CO	Detector Tubes	Good	ONLY FCS NO. 2 IN OPERATION - ODOR OF NATURAL GAS NOTICEABLE AROUND FURNACE CO ON FLOOR 0.0ppm ON CATWALK 0.0ppm
4	Cutting Oil Supply Tank	Oil Vapor	Visual	Fair	OIL VAPOR VISIBLE COMING FROM TANK - WIND BLOWING VAPOR TOWARD CENTER OF BUILDING 34
5	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE EXHAUST HOOD - EXHAUST SYSTEM OPERATING - EXHAUST GOOD
6	Skim Room	Dust & Fumes HCL	Visual & Sensory Detector Tube	Fair	ROTARY BARREL IN OPERATION - MAIN EXHAUST HOOD GOOD - EXHAUST HOOD IN PIT POOR - FUMES VISIBLE RISING FROM PIT EACH TIME A BARREL IS DUMPED - SUGGEST IRRITATION NOTICEABLE - SMALL AMOUNT OF SOLID FLOOR IN NEAR END OF ROOM - HCL 0.0ppm
7	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT IN OPERATION - NO DUST VISIBLE IN ROOM EXHAUST HOOD FOR SAW GOOD
T-A	Asbestos Mixing Area	Asbestos	Visual	Good	NO MIXING OF ASBESTOS IN PROGRESS EXHAUST SYSTEM FOR MIXING OPERATING FAIR
8	Reciprocating Station	Mercury Vapor	Detector Tube	Fair	3-30-72 MERURY VAPOR 0.0mg/m ³ - DROPLETS OF MERCURY VISIBLE IN SINK - EXHAUST SYSTEM OPERATING - EXHAUST FAIR - NO WORK IN PROGRESS
9	Potrooms - General	Dust & Fumes	Visual	Good	SIGHT HAZE OF DUST AND FUMES VISIBLE IN ALL ROOMS CONCENTRATION HIGHEST IN ROOMS 12 & 13C POT COVER PLACEMENT - GENERALLY GOOD POT COVER CONDITION - GENERALLY FAIR
10	Bath Storage	Dust	Visual & Sensory	Good	NO DUST VISIBLE NO IRRITATION
11	Bath Crushing	Dust	Visual-Smoke Tube	Good	CRUSHER OPERATING - SMALL AMOUNT OF DUST VISIBLE IN BUILDING - EXHAUST HOODS WHICH WERE OPERATING WERE FAIR

411082 0489

CHURCHMAN

ALD

DATE: MARCH 30, 1972

Ident	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER OPERATING - 2 OF 3 BAG FILTER UNITS OPERATING - NO DUST VISIBLE COMING FROM EITHER UNIT
13	Ore Unloading	Dust	Visual	Fair	UNLOADING IN PROGRESS - INTERIOR OF BUILDING VERY DUSTY - DUST MAINLY CAUSED BY WIND BLOWING THROUGH BUILDING - DUST CONCENTRATION HIGHEST WHEN CAR MOVES FIRST OVER
14	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNTS OF FUMES OCCASIONALLY VISIBLE NEAR ELECTRODE FURNACE
15	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL HIGH
16	Stub Press & Unbolting Station	Dust	Visual	Good	NEITHER OPERATION IN PROGRESS SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS
17	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES VISIBLE COMING FROM MIXER NO. 2 SLIGHT ONCE OF HOT PITCH NOTICEABLE IN AREA
18	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	CLEANING OPERATION IN PROGRESS - HEAVY DUST VISIBLE ALONG ENTIRE LENGTH OF SHAVER CONVEYOR - EXHAUST HOOD AT WEST END OF CONVEYOR POOR
19	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PARKING AND UNLOADING OPERATIONS IN PROGRESS - FURNACE BUILDINGS WELL VENTILATED - CO 5 ppm
20	Butt Unloading & Crushing	Dust	Visual	Fair	BUTT UNLOADING NOT IN PROGRESS - UNLOADING EXHAUST HOOD OPERATING - EXHAUST GOOD - CRUSHER IN OPERATION CRUSHING GREEN SCRAP - DUST CONCENTRATION IN AREA NEAR CRUSHER LOWERED FROM MODERATE TO HEAVY
21	Mixer Floor	Dust & Pitch Fumes	Visual	Fair	SMALL AMOUNT OF DUST VISIBLE IN AREA - FUMES VISIBLE FROM TIME A MIXER DUMPED - FUMES HEAVIEST WHEN A MIXER NEAR THE WEST END OF FLOOR IS DUMPED - STRONG ONCE OF HOT PITCH NOTICEABLE IN AREA

411082 0490

SURVEYOR

C. M. D.

DATE: MARCH 27, 1972

Item	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	No Fumes Visible Escaping From J-4 OR M-5 EXHAUST SYSTEM OPERATING - EXHAUST GOOD
23	Press Room	Fumes	Visual	Good	BOTH PRESSES OPERATING - SMALL AMOUNTS OF FUMES VISIBLE EACH TIME HOT MIX ENTERS A PRESS - SLIGHT ODOOR OF HOT MIXER NOTICEABLE - BOTH PRESS ROOMS FULLY VENTILATED
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	3-29-72 NO EQUIPMENT IN OPERATION NO DUST VISIBLE EXHAUST SYSTEM NOT IN OPERATION
25	Garage - General	Fumes CO	Visual Detector Tube	Good	CO 10 ppm - NO EQUIPMENT IN OPERATION NO FUMES VISIBLE - BUILDING WELL VENTILATED INSTALLATION OF EXHAUST SYSTEM STILL INCOMPLETE
26	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
27	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	SEVERAL WELDING OPERATIONS IN PROGRESS - SMALL AMOUNTS OF FUMES VISIBLE NEAR MOST - SLIGHT IRRITATION NOTICED AROUND THOSE WITHOUT AIR EXHAUST HOODS - EXHAUST HOODS WHICH WERE IN OPERATION WERE GOOD - BUILDING WELL VENTILATED
28	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION NO DUST VISIBLE IN ROOM EXHAUST SYSTEM GOOD
29	Blacksmith Shop	CO	Detector Tube	Good	ONE GAS-PIPED FORGE IN OPERATION AREA WELL VENTILATED CO 2 ppm
30	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE 8 ppm - READING TAKEN DIRECTLY IN FRONT OF DEGREASER WITH EXHAUST HOOD DOOR OPEN AND EXHAUST SYSTEM OPERATING - EXHAUST FAIR UNIT NOT IN USE
31	Atomizer - General	Dust	Visual	—	Atomizer Not In Operation

SURVEYOR

C.H.R.

411082 0491

STATUS OF REMEDIAL ACTION

<u>Ident.</u>	<u>Status</u>
4	Revisions in the system by end of 1972 should correct the problem.
6	New skim reclamation system being developed elsewhere; improvement in exhaust to be incorporated.
8	Mercury has since been cleaned up.
13	Various possible remedies being considered.
15	Part of plant-wide noise control program being developed by Engineering Department.
18	Carbon cleaning machine modernization is planned; improvement expected in exhaust system.
20	New dust collector to be installed by end of June for butt crusher and related equipment.
21	Current revisions to mix transfer equipment expected to alleviate spillage, which is apparent source of fumes.

A. G. Clayton

A. G. Clayton

4-27-72

411082 0492

DATE: Feb 21, 1972

Ident	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	Bath Crushing Bag Filter	Dust	Visual	Good	CAUSHER OPERATING - ALL 3 BAG FILTER UNITS OPERATING - NO DUST VISIBLE COMING FROM ANY UNIT
13	Ore Unloading	Dust	Visual	Good	UNLOADING IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN BUILDING - DUST MAINLY CAUSED BY WIND BLOWING THROUGH BUILDING - DUST CONCENTRATED NEAREST VEHICULAR HOIST OPERATOR
14	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNTS OF FUMES OCCASIONALLY VISIBLE NEAR ELECTRODE FURNACES
15	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL HIGH
16	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN PITCH AREAS
17	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES VISIBLE COMING FROM MIXER No. 2 SLIGHT CHIR OF HOT PITCH NOTICEABLE IN AREA
18	Carbon Plant Electrode Cleaning	Dust	Visual	Good	CLEANING OPERATION NOT IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN AREA - DUST MAINLY CAUSED BY WIND BLOWING THROUGH AREA
19	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PACKING AND UNPACKING OPERATIONS IN PROGRESS - FURNACE BUILDINGS WELL VENTILATED - CO SPARE
20	Bath Unloading & Crushing	Dust	Visual	Good	NEITHER OPERATION IN PROGRESS - UNLOADING EXHAUST HOOD OPERATING - EXHAUST GOOD - BUTT MILL UNLOADING REPAIR - SOME DUST VISIBLE IN AREA - DUST CONCENTRATED NEAREST IN AREA OF BUTT MILL
21	Mixer Floor	Dust & Pitch Fumes	Visual	Fair	SMALL AMOUNT OF DUST VISIBLE IN AREA - FUMES VISIBLE WHEN TIME A MIXER DUMPED - FUMES HEAVIEST WHEN A MIXER ON WEST END OF FLOOR DUMPED - STRONG ODOR OF HOT PITCH NOTICEABLE IN AREA

SURVEYOR

and

411082 0494

DATE: Feb 15 1977

Ident	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	No Fumes Visible Escaping From J-4 Or M-5 Exhaust System Operating - Exhaust Good
23	Press Room	Fumes	Visual	Good	Both Presses Operating - Small Amounts of Fumes Visible Each Time Hot Mix Enters A Press - Slight Odor of Hot Pitch Noticeable - Both Press Rooms Heavily Ventilated
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	No Equipment in Operation No Dust Visible Exhaust System Not in Operation
25	Garage - General	Fumes CO	Visual Detector Tube	Fair	CO 0-30 ppm - Vehicles Operating Intermittently No Fumes Visible - Building Well Ventilated - Installation of Exhaust System To Remove Vehicle Exhaust Gases in Progress
26	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
27	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	Several Welding Operations in Progress - Small Amounts of Fumes Visible Near No Irritation Noticeable - Exhaust Hoods which were in operation were Good - Building Well Ventilated
28	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	No Equipment in Operation - No Dust Visible in Room Exhaust System Good
29	Blacksmith Shop	CO	Detector Tube	Good	One Gas-fired Forge in Operation Area Well Ventilated CO 0.0 ppm
30	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	Trichloroethylene 35 ppm - Reading Taken Directly in Front of Degreaser with Exhaust Hood Door Open No Unit in Use - Exhaust System Operating Exhaust Fair
31	Atomizer - General	Dust	Visual	—	Atomizer Not in Operation

SURVEYOR

1110

411082 0495

STATUS OF REMEDIAL ACTION

Due to delays in obtaining the information, the status of remedial action will be reported with the March survey, which will be distributed within approximately a week.

In order to avoid future delays in distribution of this report, I request that department heads and others having responsibility for operation and maintenance of the areas covered herein keep me informed of any plans or progress toward solving the problems noted.

A. G. CLAYTON

AGC:ak
4-11-72

411082 0496

DATE: Jan. 24, 1979

Ident	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	Bath Crushing Bag Filter	Dust	Visual	Good	Causes Operation - 2 on the 3 Bag Filter Units Operating - No Dust Visible Coming From Entrance Unit
13	Ore Unloading	Dust	Visual	Good	Unloading in Progress - Small Amount of Dust Visible in Building
14	Rodding Room-General	Dust & Fumes	Visual	Good	Small Amount of Dust Visible in Area - Small Amounts of Fumes Occasionally Visible Near Electromagnet Furnaces
15	Wheelabrator	Noise	Audio	Fair	Noise Level Still High
16	Stub Press & Unbolting Station	Dust	Visual	Good	Small Amount of Dust Visible in Bath Areas
17	Potlining-Mixer Area	Dust & Fumes	Visual	Good	Small Amount of Dust Visible in Area No Fumes Visible
18	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	Cleaning Operation in Progress - Dust Visible From Entire Length of Shaker Conveyor - Exhaust Hood At Right End of Conveyor Operating - Exhaust Fan To Area
19	Ring Furnace	Dust CO	Visual Detector Tube	Good	Dust Visible Only in Areas Where Picking And Unloading Operations in Progress - Due To Cold Weather Fumes Not As Well Ventilated As Usual - No CO in
20	Bath Unloading & Crushing	Dust	Visual	Good	Neither Observed in Progress - Small Amount of Dust Visible in Bath Areas - Unloading Exhaust Here Not in Operation
21	Mixer Floor	Dust & Pitch Fumes	Visual	Good	Small Amount of Dust Visible in Area No Fumes Visible

SURVEYOR

CHD

411082 0498

DATE: Jul. 27, 1971

dent	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	No Fumes Visible Escaping From J-4 CR M-5 EXHAUST SYSTEM OPERATING - EXHAUST GOOD
23	Press Room	Fumes	Visual	Good	BOTH PRESSSES OPERATING - SMALL AMOUNTS OF FUMES VISIBLE EACH TIME HOT MIX ENTERS PRESS - SILENT FLOW OF HOT FIRM MEASURABLE - DUE TO COLD WEATHER PRESS ROOMS NOT AS WELL VENTILATED AS USUAL
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	BANDSAW OPERATING - CUTTING WOOD - NO DUST VISIBLE - EXHAUST SYSTEM OPERATING - EXHAUST GOOD
25	Garage - General	Fumes CO	Visual Detector Tube	Good	NO EQUIPMENT IN OPERATION - NO FUMES VISIBLE DUE TO COLD WEATHER AREA NOT AS WELL VENTILATED AS USUAL - CO IS GOOD
26	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO ACID MIST VISIBLE NO IRRITATION
27	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	SEVERAL WELDING OPERATIONS IN PROGRESS - SMALL AMOUNTS OF FUMES VISIBLE NEAR MIST - NO IRRITATION MEASURABLE EXHAUST HOODS WHICH WERE IN OPERATION VENTILATED - DUE TO COLD WEATHER BUILDING NOT AS WELL VENTILATED AS USUAL
28	Marinlite Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION NO DUST VISIBLE IN ROOM EXHAUST SYSTEM GOOD
29	Blacksmith Shop	CO	Detector Tube	Good	NO WEAK IN PROGRESS IN AREA NO FUMES OPERATING CO - GOOD
30	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE - 0.04 PM WITH HAND BURN CLOTHES IN ROOM WITH HAND BURN CLOTHES - REPAIRS FINE DIRECTION IN FRONT OF DEGREASER - EXHAUST SYSTEM OPERATING EXHAUST FINE - VENTILATED AT TIME OF FINDING
31	Atomizer - General	Dust	Visual	—	Atomizer Not In Operation

411082 0499

SURVEYOR

CMB

Status of Remedial Action

<u>Ident.</u>	<u>Status</u>
2	Design modifications to eliminate leaks are planned. Door arch on Furnace 8 is scheduled to be repaired.
4	Revisions in the system by July 1 should correct the problem.
6	Further adjustment of dampers to balance exhaust are scheduled.
15	Repair of leaking air cylinders was scheduled during February.
18	Exhaust hood damper to be adjusted.

Please update these statements, if appropriate.

A. G. Clayton

AGC:ak
2-29-72

411082 0500

DATE: Dec 22-31, 1971

dent	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER OPERATING - ALL BAG FILTER UNITS OPERATING - NO DUST VISIBLE COMING FROM ANY UNIT
13	Ore Unloading	Dust	Visual	Fair	UNLOADING IN PROGRESS - INTERIOR OF BUILDING FAIRLY DUSTY - MOST OF DUST CAUSED BY WIND BLOWING THROUGH BUILDING
14	RODDING ROOM-GENERAL	Dust & Fumes	Visual	Good	13-28-71 SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES OCCASIONALLY VISIBLE NEAR ELECTRODE FURNACES
15	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL HIGH
16	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS
17	Polishing-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES VISIBLE COMING FROM MIXER NO. 1 - SLIGHT TRACE OF HOT PITCH NOTICEABLE IN AREA - INSTALLATION OF EXHAUST SYSTEM FOR MIXERS COMPLETED
18	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	CLEANING OPERATION IN PROGRESS - DUST VISIBLE ALONG ENTIRE LENGTH OF SHAKER CONVEYER - EXHAUST HOOD AT WEST END OF CONVEYER OPERATING - EXHAUST FAIR TO POOR
19	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PICKING AND UNPICKING OPERATIONS IN PROGRESS - IN GENERAL FURNACE BUILDINGS WELL VENTILATED - CO 5 ppm
20	Butt Unloading & Crushing	Dust	Visual	Good	UNLOADING NOT IN PROGRESS - UNLOADING EXHAUST HOOD IN OPERATION EXHAUST GOOD - CRUSHER IN OPERATION CAUSING SMOKE
21	Mixer Floor	Dust & Pitch Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS SMALL AMOUNT OF HOT PITCH VISIBLE SLIGHT ORAL OF HOT PITCH NOTICEABLE

SURVEYOR

CHR

411082 0502

DATE: Dec 31, 1971

ent	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	No Fumes Visible Exhaust From J-J On M-S Exhaust System Operating - Exhaust Good - Exhaust Hood At West End Of J-J Now Connected To Exhaust System
23	Press Room	Fumes	Visual	Good	Both Presses Operating - Small Amounts Of Fumes Visible Exhaust Hood Not Entering Room - Slight Dose Of Hot Air Noticeable - Due To Cold Weather Press Rooms Not As Well Ventilated As Usual
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	Hand Saw Operating - Sawing Wood - No Dust Visible In Building - Exhaust System Operating Exhaust Good
25	Garage - General	Fumes CO	Visual Detector Tube	Fair	Several Gasoline Powered Vehicles Operating Intermittently - No Fumes Visible - CO 45 To 60 ppm Due To Cold Weather Area Not As Well Ventilated As Usual 11:20 AM T.V. 11:30 AM
26	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
27	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	Several Welding Operations In Progress - Small Amounts Of Fumes Visible Near Mist - No Irritation Noticeable Exhaust Fans Which Operate In Operation Were Good - Due To Cold Weather Building Not As Well Ventilated As Usual
28	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	No Equipment In Operation No Dust Visible In Room Exhaust System Good
29	Blacksmith Shop	CO	Detector Tube	Good	Coal - Finner Forge In Operation - Exhaust On Forge Good CO In Area Surrounding Forge 10 ppm - Due To Cold Weather Area Not As Well Ventilated As Usual
30	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	Trichloroethylene 10 ppm - Reading Taken Directly In Front Of Degreaser With Exhaust Hood Directly Above Exhaust System Operating - Exhaust Fair - Unit In Use At Time Of Reading
31	Atomizer - General	Dust	Visual	Good	No Dust Visible In Any Area - Some Water Visible In Septic Tank Area - No Odor Noticeable 12-31-71

SURVEYOR

CMR

STATUS OF REMEDIAL ACTION

<u>Ident.</u>	<u>Status</u>
2	Design modifications are planned to eliminate leaks.
4	Revisions in the system by July 1 should correct the problem.
6	Dampers have since been adjusted to balance exhaust between pit and main hood.
13	No action planned at present.
15	Elimination of bolt-up and unbolting stations should improve noise levels somewhat. Repair of leaking air cylinders would also help.
18	Exhaust hood damper to be adjusted. No practical exhaust system available for conveyor. Respirators available to workers.
25	Exhaust system will be installed.

AGC:ak
2-8-72

411082 0504

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411082 0505

CONFIDENTIAL

ROCKDALE WORKS

DATE:

Nov. 20, 1971

INDUSTRIAL HYGIENE SURVEY

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
1	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	In General Atmosphere In Building Clean - Small Amounts Of Fumes Visible During Furnace Firing
2	Furnace Area & Coating	Cl ₂ HCl CO	Detector Tubes	Good	No Irritation Noticeable Cl ₂ .0 ppm HCl .0 ppm CO 10 ppm Readings Taken In Coating Area Between Fcs 1 & 2
3	Homogenizing Furnace	CO	Detector Tubes	Good	During Firing Of Fcs 1 Both Furnaces In Operation - Slight Odor Of Natural Gas Noticeable Active Furnace No. 1 Fcs No. 1 - CO 0.5 ppm 0.5 ppm Fcs No. 2 - CO 0.5 ppm 0.5 ppm
4	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No Oil Vapor Visible
5	Acoustic Cleaning Tank	Fumes & Acoustic Spray	Visual & Sensory Smoke Tube	Good	Exhaust System Operating - Exhaust Good No Fumes Or Acoustic Spray Visible Outside Exhaust Hood - No Irritation
6	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Fair	Room Bazel In Operation - Main Exhaust Hood Good Exhaust Hood In Operation - Fumes Visible In Air Slight Irritation Noticeable In Air - HCl In Pit .5 ppm Slight Skin Or Eye Irritation In Room
7	Brick Cutting Area	Dust from Brick Saw	Visual	Good	Saw Not In Operation - No Dust Visible In Room Exhaust Hood For Saw Good - Exhaust In Airborne Mixing Area Fair To Good
8	Reciprocating Station	Mercury Vapor	Detector Tube	Good	Mercury Vapor .001 mg/m ³ - No Beakers Or Mercury Visible In Room - No Work In Progress - Exhaust System In Operation - Exhaust Fair
9	Workrooms - General	Dust & Fumes	Visual	Good	Slight Haze Of Dust And Fumes Visible In All Rooms Pot Cover Placement - Generally Good Pot Cover Condition - Generally Fair
10	Bath Storage	Dust	Visual & Sensory	Good	No Dust Visible
11	Bath Crushing	Dust	Visual-Smoke Tube	Good	No Irritation Caution Not In Operation - Small Amount Of Dust Visible In Building - Exhaust Hoods Operating Exhaust Fair To Good

SURVEYOR

MIR

411082 0506

DATE: Nov. 30, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	Bath Crushing Bag Filter	Dust	Visual	Good	Covered Not In Operation - All Bag Filtered Units Operating - No Dust Visible Coming From Any Unit
13	Ore Unloading	Dust	Visual	Good	Unloading In Progress - Small Amount Of Dust Visible In Building - Dust Mainly Caused By Wind Blowing Through Building
14	Rodding Room-General	Dust & Fumes	Visual	Good	Small Amount Of Dust Visible In Area - Small Amount Of Fumes Visible At Times Near Electromagnet Furnaces
15	Wheelabrator	Noise	Audio	Fair	Noise Level Still High EAR Protection Devices Must Be Worn By Workers In Area <i>Not fully being worn?</i>
16	Stub Press & Unbolting Station	Dust	Visual	Good	Small Amount Of Dust Visible In Both Areas
17	Potlining-Mixer Area	Dust & Fumes	Visual	Fair	Heavy Dust And Fumes Visible Coming From mixer No. 1 Small Amount Of Fumes Visible Coming From mixer No. 2 Installation Of Exhaust System For mixers In Progress
18	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	Cleaning Operation In Progress - Dust Visible Along Entire Length Of SUMMER CONVEYOR - Exhaust Hood At West End Of CONVEYOR OPERATING - Exhaust Fair To Area
19	Ring Furnace	Dust CO	Visual Detector Tube	Good	Small Amounts Of Dust Visible Only In Areas Where Furnace And Unpacking Operations In Progress - In General Furnace Buildings Well Ventilated - CO 5 PPM
20	Butt Unloading & Crushing	Dust	Visual	Good	Neither Operation In Progress - Small Amount Of Dust Visible In Both Areas - Unloading Exhaust Hood Not In Operation
21	Mixer Floor	Dust & Pitch Fumes	Visual	Good	Small Amount Of Dust Visible In Area No Fumes Visible Slight Odor Of Hot Pitch Noticeable

411082 0507

SURVEYOR

1117

DATE: Nov 30 1971

411082 0508

Item	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixers to Press	Fumes	Visual	Fair	No Fumes Visible Escaping From M.S. - Exhaust System Not Operating - Canister Used - Fumes Visible Escaping At West End Of J-4 Waste Exhaust Hood Was Shut Off At Night - Canister Used - Poor
23	Press Room	Fumes	Visual	Good	Room Passes Operating - Small Amounts Of Fumes Visible From Time Hot Mix Exhaust Pass - Shut Out Or Not Opened - Due To Cool Weather Pass Remains Not As Well Ventilated As Usual
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	No Equipment In Operation - No Dust Visible
25	Garage - General	Fumes CO	Visual Detector Tube	Poor	Exhaust System Not Operating - Small Amount Of Fumes Visible - Fume Due To Three Running Heavy Vehicles Operating - CO 75-125 ppm - Due To Cool Weather Building Was Not As Well Ventilated As Usual
26	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
27	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	Several Welding Operations In Progress - Small Amount Of Fumes Visible Near Most - No Irritation Noticed - Exhaust Hoods When Used Operating Were Good - Due To Cool Weather Building Not As Well Ventilated As Usual
28	Marinette Finishing Room	Dust	Visual Smoke Tube	Good	Large In Operation - No Dust Visible In Room
29	Blacksmith Shop	CO	Detector Tube	Good	Exhaust System Operating - Exhaust Good - One Gas-Fired Forge Operating At Low Heat - In Area Surrounding Forge Inadequate Ventilation Area CO 20 ppm
30	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	Due To Cool Weather Area Not As Well Ventilated As Usual - Take Measures To Improve Ventilation - Records Taken Directly In Front Of Degreaser With Hood Open And Exhaust System Operating - Exhaust Fair - Unit In Use At Time Of Reading
31	Atomizer - General	Dust	Visual	Good	Atomizing Operations Not In Progress - No Dust Visible In Any Area - Some Water Visible In Spray Tank

SURVEYOR

STATUS OF REMEDIAL ACTION

<u>Item.</u>	<u>Status</u>
6	Balancing of dampers between pit and main exhaust hoods should improve fume removal.
15	Noise reduction expected when welded stub connection system installed (RFA approved).
17	Collection system installation was completed about mid-December.
19	No practical dust collection system available. Respirators available but not mandatory.
22	J-4 exhaust hood has since been repaired.
25	RFA for new garage with exhaust system is being prepared.

A.G.C.

January 4, 1972

411082 0509

ЭГЭВЭЙЭН

TS, ME, ~~WHD~~, V.W. Fisher - 2; R. ~~W. Fisher~~ - 7, ~~II~~
~~Dr. S. H.~~
INDUSTRIAL HYGIENE SURVEY

~~205~~ TBB date: Oct. 12, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
1	Ingot Production 1034. 34 - General	Various	Visual & Sensory	Good	Little odor. No smoke in the room. Good when it comes to fumes. A little odor in the room.
2	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	Very little. Not as good as previously taken in Casting Area. But not as bad as before. Slightly better.
3	Homogenizing Furnace	CO	Detector Tube	Good	Very little. Not as good as previously taken in Casting Area. But not as bad as before. Slightly better.
4	Cutting Oil Supply Tank	Oil Vapor	Visual	Fair	Very little. Not as good as previously taken in Casting Area. But not as bad as before. Slightly better.
5	Caustic Cleaning Tank	Fumes & Caustic Spr.	Visual & Sensory Smoke Tube	Good	Very little. Not as good as previously taken in Casting Area. But not as bad as before. Slightly better.
6	Skid Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Fair	Very little. Not as good as previously taken in Casting Area. But not as bad as before. Slightly better.
7	Brick Cutting Area	Dust from Brick Saw	Visual	Good	Very little. Not as good as previously taken in Casting Area. But not as bad as before. Slightly better.
8	Rectifier Station	Mercury Vapor	Detector Tube	Good	Very little. Not as good as previously taken in Casting Area. But not as bad as before. Slightly better.
9	Potrooms - General	Dust & Fumes	Visual	Good	Very little. Not as good as previously taken in Casting Area. But not as bad as before. Slightly better.
10	Bath Storage	Dust	Visual & Sensory	Good	Very little. Not as good as previously taken in Casting Area. But not as bad as before. Slightly better.
11	Bath Crutching	Dust	Visual-Smoke Tube	Good	Very little. Not as good as previously taken in Casting Area. But not as bad as before. Slightly better.

411082 0510

100

INDUSTRIAL HYGIENE SURVEY

DATE: Oct. 22, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	Path Crushing Rag Filter	Dust	Visual	Good	Crusher Not In Operation - Rag Filter Units Operating - No Dust Visible Coming From Any Unit
13	Ore Unloading	Dust	Visual	Good	Unloading In Progress - Small Amount Of Dust Visible In Building - Dust Mainly Caused By Wind Blowing Through Building
14	Rodding Room-General	Dust & Fumes	Visual	Good	Small Amount Of Dust Visible In Area Small Amount Of Fumes Visible At Times Near Electro-Melt Furnaces
15	Wheelabrator	Noise	Audio	Fair	Noise Level Still High Ear Protection Devices Must Be Worn By Workers In Area - TAB count they are being worn
16	Stub Press & Unbolting Station	Dust	Visual	Good	Small Amount Of Dust Visible Also In Both Areas
17	Potlining-Mixer Area	Dust & Fumes	Visual	Fair	Small Amount Of Dust Visible In Area - Fumes Visible Coming From Mixers Not No. 3 - Fumes Generally Tended To Remain In The Upper Part Of Building - Strong Odor Of Hot Fumes Noticeable
18	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	SEE NOTE 2 CLEANING OPERATION IN PROGRESS - Dust Visible Along Entire Length Of Sparger Conveyor - Fumes Observed At West End Of Conveyor Operating Exhaust Fair To Poor
19	Ring Furnace	Dust CO	Visual Detector Tube	Good	Dust Visible Only In Areas Where Furnace And Unpacking Operations In Progress - FURNACE BUILDINGS WELL VENTILATED - CO 5 ppm
20	Butt Unloading & Crushing	Dust	Visual	Fair	Unloading Not In Progress - Unloading Exhaust System Not In Operation - Crusher Not In Operation - However Heavy Dust Visible In Crusher Area - Dust Caused By Maintenance People Blowing Dust Off Equipment In Area
21	Mixer Floor	Dust & Pitch Fumes	Visual	Good	Small Amount Of Dust Visible In Area No Fumes Visible Slight Odor Of Hot Pitch Noticeable

SURVEYOR

MJP

411082 0511

INDUSTRIAL HYGIENE SURVEY

DATE: Oct. 12, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	J-1 And M-5 Not In Operation - M-5 Exhaust System Operating - Exhaust Good - J-1 Exhaust System Not Operating On Conveying Belts - Exhaust Fair - Summit Of West End Of J-1 Still Not Operative In Exhaust System - No Fumes Visible In Area
23	Press Room	Fumes	Visual	Good	No Fumes Visible - Slight Color Of Hot Pitch Noticeable
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	MINUTE BEING CUT ON BAND SAW No Dust Visible
25	Garage - General	Fumes CO	Visual Detector Tube	Fair	WITH GASOLINE POWERED FARM TRUCK AND SWEEPER OPERATING CO 75 PPM - WITHIN 10 MINUTES AFTER BEING CUT OFF CO 10 PPM - No Fumes Visible - Ventilation Well Ventilated
26	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
27	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	SEVERAL WELDING OPERATIONS IN PROGRESS - SMALL AMOUNTS OF FUMES VISIBLE NEAR MIST - NO IRRITATION NOTICEABLE - EXHAUST HOODS WHICH WERE IN OPERATION WERE GOOD - BUILDING WELL VENTILATED
28	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	No Equipment In Operation No Dust Visible In Room EXHAUST SYSTEM GOOD
29	Blacksmith Shop	CO	Detector Tube	Good	GAS FIRES FORGE IN OPERATION AREA WELL VENTILATED CO 5 PPM
30	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Fair	TRICHLOROETHYLENE 20 PPM - REMAINS FAIRLY DIRECTLY IN FRONT OF DEGREASER WITH FAN ON - ONE FAN EXHAUST SYSTEM OPERATING - EXHAUST FAIR - UNIT NOT IN USE AT TIME OF TEST
31	Atomizer - General	Dust	Visual	Good	No Dust Visible In Area - Small Amount Of Water Visible In Septic Tank Area - No odor Noticeable

SURVEYOR

J.H.P.

OCT. 22, 1951

NOTES:

1. Weather was partly cloudy, temperature in the 10's, and wind from the south at 10-20 mph.
2. at the time of this survey the Carbon Plant was in the midst of its weekly maintenance period. Therefore the conditions noted may not be representative of normal conditions.

411082 0513

November 17, 1971

STATUS OF REMEDIAL ACTION

<u>Ident.</u>	<u>Status</u>
6	Extensive revision of pit exhaust system needed; no engineering work requested as yet.
15	Noise reduction expected when welded stub connection system installed (RFA approved).
17	Collection system to be installed by early December.
15)	No practical dust collection systems available.
19)	Respirators available but not mandatory.
20	Exhaust installed on crusher; dust collection system to be added early in 1972.
22	Missing section of exhaust duct to be installed in very near future.

411082 0514

11/3/71

L.S.;

Rockdale apparently had
their own little criteria
for rating environmental
conditions and, of which
we were not aware.

It would appear that,
at long last, some improvement
in reporting is on the horizon,
The next survey should tell.

Tom

FROM A. G. CLAYTON

TO MEMORANDUM

ROCKDALE WORKS

November 1, 1971

CONFIDENTIAL

RE: INDUSTRIAL HYGIENE SURVEYS

Evaluation of areas inspected and application of Industrial Hygiene surveys are being somewhat revised. We intend to continue pointing out problems but also want to indicate corrective measures being taken. We have re-evaluated criteria for Poor ratings in light of Occupational Safety and Health Act standards. Some areas not directly affecting occupational health and safety will be dropped from the survey report. The September survey was completed before these changes were made. The revisions will be reflected in the October survey.

Those of you who are responsible for operation or maintenance of areas rated Fair or Poor are requested to attach a note stating what remedial action is under way. These will be summarized in a statement attached to the following month's report to show that we are not ignoring our problems.

Poor ratings will appear only when OSHA standards are unquestionably being violated. Examples would be chlorine detected in excess of 1.0 ppm or heavy carbon dust or pitch fumes obviously exceeding the Threshold Limit Value. At the same time, stronger emphasis should be put on upgrading situations rated Fair, since they are the ones that generally cause complaints and potentially may lead to an OSHA inspection.

The dump and sewage plant will be eliminated from the report, since they have no direct effect on the working environment. Both will continue to be inspected. The Engineering Manager will be notified of conditions at the dump requiring attention. A separate report on the sewage plant inspection will be routed to those directly concerned.

Hopefully, these changes will enable the survey to be less an irritant to some and more an aid to all in pinpointing and solving our environmental problems.

A. G. Clayton

A. G. CLAYTON

cc: T. B. Bonney - Pittsburgh

Copies routed to: (1) H. F. Chrisco
G. W. Hutton
H. A. Bower
E. B. Parker
J. H. Goldman
G. J. Myers
D. M. Nystrom
A. E. Menke
A. G. Clayton

(2) J. H. Greene
H. D. Franklin
D. D. McGregor
J. D. Shinn
A. G. Clayton
C. H. Ross, Jr.

411082 0516



FROM: A. G. CLAYTON
ROCKDALE WORKS

TO: MR. T. B. BONNEY
HEALTH AND ENVIRONMENT DEPARTMENT
PITTSBURGH OFFICE

November 1, 1971

RE: INDUSTRIAL HYGIENE SURVEYS

Thank you for your constructive comments, via both Mr. Backenstose and your memo of August 9. I would like to answer some of the questions in your memo.

It is my understanding that you and Mr. Semken established the locations, format, and evaluation criteria some years ago. We have heretofore been reluctant to change these, but are now doing so at your suggestion.

Since the survey is only a spot-check of conditions, we make no claim of representative determination of contaminants (e.g. detector tube readings of Cl_2 in the Ingot Plant). However, a review of several months' surveys should indicate representative conditions. In the past, we arbitrarily assigned Poor ratings where measured or subjectively estimated contaminant levels reached or exceeded 50% of the TLV.

While noise levels cannot be subjectively rated in decibels, the surveyor can note whether any significant change has occurred from previously measured levels. Perhaps, in areas where noise levels are normally high, the rating should be based on the proportion of men wearing ear protection.

Several areas (potlining-mixer area, electrode cleaning, butt unloading and crushing, and mixer-to-press conveyor, for example) will be improved by engineering changes, RFA's for which have been written. Since the wheels of progress sometimes turn slowly, improvement in their ratings are not soon to be expected. The statement of remedial action to be added to future surveys will, I hope, document our corrective program.

We will welcome any further comments you may have regarding the surveys.

Allan

A. G. CLAYTON

AGC:S

411082 0517



CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: SEPT. 27-28, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks (9-21-71)
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	IN GENERAL ATMOSPHERE CLEAR - SMALL AMOUNT OF FUMES VISIBLE DURING FURNACE OFFICE NO. 3 - FAIRLY HEAVY DUST AND A SLIGHT IRRITATION NOTICE IN AREA WHERE SALT WAS BEING LOADED INTO HOT CARS
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	CO 0.0ppm HCl 0.0ppm CO 0.0ppm REMARKS TAKEN IN CASTING AREA BETWEEN FEES 7 & 8 AVERAGE FURNACE OFFICE NO. 3
	Homogenizing Furnace	CO	Detector Tube	Good	NEITHER FURNACE IN OPERATION
	Cutting Oil Supply Tank	Oil Vapor	Visual	FAIR	MAINTENANCE WORK IN PROGRESS ON BOTH FURNACES OIL VAPOR VISIBLE COMING FROM TANK WIND TENDED TO BLOW VAPOR INTO BLDG 34
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	EXHAUST SYSTEM OPERATING - EXHAUST GOOD NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE EXHAUST HOOD - NO IRRITATION
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	FAIR	ROTARY DRUM IN OPERATION - MAIN EXHAUST HOOD GOOD - EXHAUST HOOD IN ITSELF - AT TIMES A SMALL AMOUNT OF DUST AND FUMES VISIBLE IN AREA - IRRITATION ALSO DETECTABLE ROOM - 5 HCL 0.0ppm ROOM - 5 HCL 0.0ppm
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT IN OPERATION - NO DUST VISIBLE IN ROOM EXHAUST HOOD ON SAW REASSIGNED - EXHAUST GOOD EXHAUST IN AREA FAIR - AREA FAIR TO POOR
	Rectifier Station	Mercury Vapor	Detector Tube	Good	MERCURY VAPOR 0.0mg/m ³ - NO DROPLETS OF MERCURY VISIBLE IN ROOM - NO WORK IN PROGRESS EXHAUST SYSTEM OPERATING - EXHAUST FAIR
	Potrooms - General	Dust & Fumes	Visual	Good	(9-27-71) SLIGHT HAZE OF DUST AND FUMES VISIBLE IN ALL ROOMS DOT COVER PLACEMENT - GENERALLY GOOD DOT COVER CONDITION - GENERALLY FAIR
	Bath Storage	Dust	Visual & Sensory	Good	NO DUST VISIBLE NO IRRITATION
	Bath Crushing	Dust	Visual-Smoke Tube	Good	CAUSHER OPERATING - SMALL AMOUNT OF DUST VISIBLE IN BUILDING - EXHAUST HOODS OPERATING EXHAUST FAIR TO GOOD

411082 0518

SURVEYOR

CHKR

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: SEPT. 24-25, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	(9-23-71) CRUSHER OPERATING - ALL 3 BAG FILTER UNITS OPERATING - NO DUST VISIBLE COMING FROM ANY UNIT
	Ore Unloading	Dust	Visual	Good	UNLOADING IN PROGRESS - VERY SMALL AMOUNT OF DUST VISIBLE IN BUILDING
					(9-24-71)
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA AT TIMES A SMALL AMOUNT OF FUMES WAS VISIBLE NEAR THE ELECTROMOT FURNACES
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL HIGH EAR PROTECTION DEVICES WORN BY SOME OF WORKERS IN AREA
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Poor	SMALL AMOUNT OF DUST VISIBLE IN AREA - MIXER NO. 3 BEING UNLOADED - HEAVY FUMES VISIBLE IN AREA PARTICULARLY NEAR MIXER - VERY STRONG OOR OF HOT PITCH NOTICEABLE IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	CLEANING OPERATION IN PROGRESS - DUST VISIBLE ALONG ENTIRE LENGTH OF SHAKER CONVEYOR EXHAUST HOOR AT WEST END OF CONVEYOR OPERATING EXHAUST FAIR TO POOR
	Ring Furnace	Dust CO	Visual Detector Tube	Fair	FAIRLY HEAVY DUST VISIBLE ONLY IN AREAS NEAR WHERE PACKING OR UNPACKING OPERATIONS WERE IN PROGRESS - FURNACE BUILDINGS WELL VENTILATED CO 10 PPM
	Butt Unloading & Crushing	Dust	Visual	Poor	UNLOADING IN PROGRESS - NO DUST VISIBLE FROM UNLOADING PROCESS - EXHAUST IN PROGRESS - EXHAUST GOOD BUT CRUSHING IN PROGRESS - VERY HEAVY DUST VISIBLE OVER A LARGE AREA SURROUNDING CRUSHER
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE SLIGHT OOR OF HOT PITCH NOTICEABLE IN AREA

411082 0519

SURVEYOR

CHH

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: SEPT. 24, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	FAIR	NO FUMES VISIBLE EXHAUSTING FROM M-5 - EXHAUST GOOD J-4 EXHAUST SYSTEM EXHAUSTING ON OPERATING LOCALY - SOME UNBURNED OILS VISIBLE FROM EXHAUST HOOD AT WEST END OF J-4 WHICH IS STILL NOT CONNECTED TO THE EXHAUST SYSTEM
	Press Room	Fumes	Visual	Good	BOTH PRESSES OPERATING - SMALL AMOUNT OF FUMES VISIBLE EACH TIME MIX CARCAS PRESS - SLIGHT OIL ON HOT PITCH NOTICEABLE - BOTH ROOMS WELL VENTILATED
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	NO EQUIPMENT IN OPERATION NO DUST VISIBLE EXHAUST SYSTEM GOOD
	Garage - General	Fumes CO	Visual Detector Tube	Good	NO EQUIPMENT IN OPERATION - NO FUMES VISIBLE AREA WELL VENTILATED CO 0.04 PPM
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO ACID MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	SEVERAL WELDING OPERATIONS IN PROGRESS - SOME FUMES VISIBLE NEAR MIST - NO IRRITATION NOTICEABLE EXHAUST HOODS WHICH WERE IN OPERATION WERE GOOD BUILDING WELL VENTILATED
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION - NO DUST VISIBLE EXHAUST SYSTEM GOOD
	Blacksmith Shop	CO	Detector Tube	Good	NO FORGES IN OPERATION AREA WELL VENTILATED CO 0.04 PPM
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE 12 AM - READING TAKEN DIRECTLY IN FRONT OF DEGREASER WITH HOOD DOOR OPEN AND EXHAUST SYSTEM OPERATING - EXHAUST FAIR - UNIT HAD JUST BEEN SHUT DOWN WHEN TEST MADE
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN AREA - NO OILS NOTICEABLE IN SEPTIC TANK AREA - NO OILS NOTICEABLE

411082 0520

SURVEYOR

CHP

INDUSTRIAL HYGIENE SURVEY

DATE: SEPT. 23, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	Good	IN GENERAL, AREA ORDERLY - NO FIRES OR SMOKE VISIBLE - NO FUMES VISIBLE - NO ODOR NOTICEABLE
	Sewage Treatment Plant:				
	General Area		Visual	Good	IN GENERAL, AREA ORDERLY MOWING OF GRASS IN PROGRESS ALL BEDS COVERED WITH A LAYER OF PARTIALLY DRIED SLUDGE - PILE ON DRIED SLUDGE EAST OF DRIING BEDS HAS BEEN REMOVED OBSERVED AHEAD OF BAR SCREEN
	Influent to Treatment Plant		Visual	Good	INFLUENT TURBID
	Effluent of Chlorine Chamber		Visual	Good	OBSERVED AFTER BAPPLES - SOLIDS CONTENT LOW - CHLORINE 2.1 ppm
	NOTES: 1. A light plume of dust again was visible coming from the bag filter of the carbon grinding system.				
	2. A very light plume of dust again was visible coming from the duct to the precipitator stack of the carbon grinding system.				

411082 0521

CONFIDENTIAL

HOCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: AUG. 12, 1971
TOLSON - 7
file

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	FAIR	IN GENERAL, AMBIPHORE GASES - HOWEVER SOME FUMES VISIBLE IN NORTH END OF BUILDING DURING FURNACE SKIM ROOM - SLIGHT IRRITATION NOTICEABLE IN AREA NEAR SKIM ROOM
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	POOR	CO - SKIM ROOM - HCl 1 ppm - CO 10 ppm - REMARKS: TAKEN SKIM ROOM ON R-244 UNIT FOR REES 1-2 - FAIR - GENERALLY BLOWING GASES FROM BENEATH R-244 EXHAUST HOD - SLIGHT IRRITATION NOTICEABLE
	Homogenizing Furnace	CO	Detector Tube	GOOD	ONLY FEE NO. 1 IN OPERATION - SLIGHT OIL OF NATURAL GAS NOTICEABLE AROUND FURNACE CO - ON FLOOR - 0.0 ppm - OIL CATCHER 0.0 ppm
	Cutting Oil Supply Tank	Oil Vapor	Visual	GOOD	NO OIL VAPOR VISIBLE
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	GOOD	EXHAUST SYSTEM OPERATING - EXHAUST GOOD - NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE EXHAUST HOD - NO IRRITATION
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	POOR	ROTARY PANS NOT IN OPERATION - MAIN EXHAUST HODS FAIR - EXHAUST HOD IN PIT FILL - SUMMER WATER MAIN VISIBLE ON FLOOR ON PIT SKIM ON FLOOR NORTH END OF ROOM - SLIGHT IRRITATION NOTICEABLE IN ROOM - FUMES FROM SKIM VISIBLE NORTH END OF ROOM - SLIGHT IRRITATION NOTICEABLE - HCl 0.0 ppm
	Brick Cutting Area	Dust from Brick Saw	Visual	GOOD	SAW NOT IN OPERATION - NO DUST VISIBLE IN ROOM EXHAUST SYSTEM NOT OPERATING - WITH EXHAUST SYSTEM OPERATING EXHAUST FAIR - BOTH SLIDE VALVES OPEN
	Rectifier Station	Mercury Vapor	Detector Tube	FAIR	MERCURY VAPOR 0.0 mg/m ³ - NO DROPLETS OF MERCURY VISIBLE IN ROOM - EXHAUST SYSTEM NOT OPERATING - WORK IN PROGRESS IN ROOM
	Potrooms - General	Dust & Fumes	Visual	GOOD	SLIGHT HAZE OF DUST AND FUMES VISIBLE IN ALL ROOMS POT COVER PLACEMENT - GENERALLY FAIR POT COVER CLEANING - GENERALLY FAIR
	Bath Storage	Dust	Visual & Sensory	GOOD	NO DUST VISIBLE
	Bath Crushing	Dust	Visual-Smoke Tube	GOOD	NO IRRITATION
					CAUSTIC OPERATING - SMALL AMOUNT OF DUST VISIBLE IN BUILDING - EXHAUST HODS WHICH WERE OPERATING WERE GOOD

SURVEYOR CMB

411082 0522

ROCKWALL WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Aug. 18, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Rath Crushing Bag Filter	Dust	Visual	Good	CRUSHER OPERATING - TWO UNITS OPERATING NO DUST VISIBLE COMING FROM EITHER UNIT
	Ore Unloading	Dust	Visual	Poor	UNLOADING IN PROGRESS - INTERIOR OF BUILDING VERY DUSTY
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE - SLIGHT DIRT OR HOT PITCH NOTICEABLE IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	Poor	CLEANING OPERATION IN PROGRESS - FAIRLY HEAVY DUST VISIBLE ALONG ENTIRE LENGTH OF SHAKER CONVEYOR EXHAUST HOOD AT WEST END OF CONVEYOR OPERATING EXHAUST FAIR
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PACKING AND UNPACKING OPERATIONS IN PROGRESS - FURNACE BUILDINGS WELL VENTILATED - CO 5 PPM
	Dutt Unloading & Crushing	Dust	Visual	Poor	UNLOADING OPERATION NOT IN PROGRESS - UNLOADING EXHAUST HOOD OPERATING - EXHAUST GOOD AREA SURROUNDING CRUSHER VERY DUSTY - UNABLE TO TELL IF DUST COMING FROM CRUSHER OR SOME OTHER SOURCE
	Mixer Floor	Dust & Pitch Fumes	Visual	Poor	SMALL AMOUNT OF DUST VISIBLE - WHEN MIXER 10A 3 IS DUMPED HEAVY FUMES COVER FACES PARTICULARLY EAST END EXHAUST FOR THESE MIXERS APPARENTLY NOT OPERATING PROPERLY STRENGTH OF HOT PITCH NOTICEABLE IN AREA

411082 0523

SURVEYOR

CHP

INDUSTRIAL HYGIENE SURVEY

DATE: Aug. 18-19, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Poor	No Fumes Visible Escaping From M-5 - Exhaust Good Fumes Visible Escaping From J-4 Particularly At West End Of Conveyor Where The Exhaust Hoods Have Been Disconnected From The Exhaust System
	Press Room	Fumes	Visual	Good	Both Presses Operating - Small Amount Of Fumes Visible Each Time Mix Enters Press - Both Rooms Well Ventilated - Slight Odor Of Hot Pitch Noticeable
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	Saw And Shaper Operating - No Dust Visible From Either Operation - Exhaust System Operating Exhaust Good
	Garage - General	Fumes CO	Visual Detector Tube	Good	One Vehicle In Operation For Short Period Of Time No Fumes Visible - Area Well Ventilated CO 15 ppm
	Electric Shop-General	Acid Mist	Visual & Sensory	Fair	No Acid Mist Visible - However Slight Irritation Was Noticeable Between The Two Rows Of Charging Batteries
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Fair	Several Welding Operations In Progress - Fumes Visible Near Most - Slight Irritation Noticed Near Some Exhaust Hoods Which Were In Operation Were Good Building Well Ventilated
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	No Equipment In Operation - No Dust Visible Exhaust System Good
	Blacksmith Shop	CO	Detector Tube	Good	CO 3ppm - One Gas-Fired Forge Operating Area Well Ventilated
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	Trichloroethylene Oppm - Reading Taken Directly In Front Of Degreaser With Hood Door Closed And Exhaust System Operating - Exhaust Fair Unit Not In Use At Time Of Reading
	Atomizer - General	Dust	Visual	Good	Entire Atomizer Operation Shut Down Due To An Electrical Failure - No Dust Visible - No Water Visible In Septic Tank Area - No Odor Noticeable

411082 0524

SURVEYOR

CNR

INDUSTRIAL HYGIENE SURVEY

DATE: AUG. 19, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	FAIR	ALMOST ENTIRE AREA COVERED WITH FILLS OF TANK AREA IN NEED OF LEVELLING - NO FIRES OR SMOKE VISIBLE - NO FUMES VISIBLE - NO ODOR NOTICABLE
	Sewage Treatment Plant:				
	General Area		Visual	Good	IN GENERAL, AREA ORDERLY - HOWEVER GRASS IN AREA AGAIN IN NEED OF MOWING
	Sludge drying beds		Visual	FAIR	MAJORITY OF DRIED SLUDGE REMOVED FROM BEDS HOWEVER SLUDGE STILL PRESENT IN AREA - FAIRLY LARGE PILE OF DRIED SLUDGE VISIBLE IN AREA, EAST OF BEDS GRASS AND WEEDS STILL GROWING IN BEDS
	Influent to Treatment Plant		Visual	Good	OBSERVED ANGLE OF BAR SCREEN INFLUENT TURBID
	Effluent of Chlorine Chamber		Visual	Good	OBSERVED AFTER BARPLES - SOLIDS CONTENT VERY LOW - CHLORINE 3.0 + ppm
	NOTES: 1. Weather was partly cloudy with temperature ranging from 80° to 92° Wind was from the east at 5-15 mph 2. A light plume of dust again was visible coming from the bag filter of the carbon grinding system: 3. A plume of dust again was visible coming from the electrostatic precipitator stack of the carbon grinding system. The density of this plume generally was very light but at times it became very heavy.				

411082 0525

SURVEYOR CHP

INDUSTRIAL HYGIENE SURVEY

DATE: JULY 14, 1951

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
32	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	Good	IN GENERAL, AREA ORDERLY - NO FIRES OR SMOKE VISIBLE - NO FUMES VISIBLE - NO COOR NOTICEABLE
	Sewage Treatment Plant:				
33	General Area		Visual	Good	IN GENERAL, AREA ORDERLY - MOWING OF GRASS AND CLEANUP OF AREA IN PROGRESS
34	Sludge drying beds		Visual	FAIR	ALL BEDS STILL COVERED WITH DRIED SLUDGE - GRASS AND WEEDS STARTING TO GROW IN BEDS
35	Influent to Treatment Plant		Visual	Good	OBSERVED AHEAD OF BAR SCREEN INFLUENT TURBID
36	Effluent of Chlorine Chamber		Visual	Good	OBSERVED AFTER BARRIES - SOLIDS CONTENT VERY LOW - CHLORINE 2.7 ppm
	Open Blanket - Bar Screen		Visual	Good	WAS THIS P.M. VISITING
	NOTES: 1. Weather was clear with temperature ranging from 85° to 102°. Wind was from the south at 5 to 15 mph.				
	2. A light plume of dust again was visible coming from the big filter of the carbon gasoling system.				
	3. A plume of dust again was visible coming from the electrostatic precipitator stack of the carbon gasoling system. The density of this plume varied at times from very light to very heavy.				

411082 0526

SURVEYOR: C.M.R.

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JULY 14, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
12	Pulver Crushing Bag Filter	Dust	Visual	Good	CRUSHER OPERATING - TWO UNITS OPERATING NO DUST VISIBLE COMING FROM EITHER UNIT
13	Ore Unloading	Dust	Visual	Poor	UNLOADING IN PROGRESS - INTERIOR OF BUILDING VERY DUSTY
14	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
15	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL ABOVE THE DESIRED RANGE
16	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS
17	Potlining-Mixer Area	Dust & Fumes	Visual	Fair	SMALL AMOUNT OF DUST VISIBLE IN AREA FUMES VISIBLE COMING FROM MIXER NO. 1 STRONG ODOOR OF HOT PITCH NOTICEABLE IN AREA
18	Carbon Plant Electrode Cleaning	Dust	Visual	Poor	CLEANING OPERATION IN PROGRESS - FAIRLY HEAVY DUST VISIBLE ALONG ENTIRE LENGTH OF SHAKER CONVEYOR EXHAUST HOOD AT WEST END OF CONVEYOR OPERATING FAIR
19	Ring Furnace	Dust CO	Visual Detector Tube	Fair	AREAS IN WHICH PACKING AND UNPACKING OPERATIONS WERE IN PROGRESS WERE UNUSUALLY DUSTY FURNACE BUILDINGS WITH VENTILATION - CO SPAN UNLOADING OPERATION NOT IN PROGRESS - UNLOADING EXHAUST HOOD IN OPERATION - EXHAUST GOOD
20	Butt Unloading & Crushing	Dust	Visual	Poor	CRUSHER IN OPERATION - CAUSING SCRAP CARBON AREA SURROUNDING CRUSHER VERY DUSTY
21	Mixer Floor	Dust & Pitch Fumes	Visual	Poor	SMALL AMOUNT OF DUST VISIBLE - DURING THE DUMPING OF MIXER NO. 3 THE ENTIRE EAST END OF THE MIXER FLOOR WAS FILLED WITH HEAVY IRRITATING FUMES

SURVEYOR

CNR

411082 0527

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JULY 14, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
22	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	No Fumes Visible Escaping From Either J-4 OR M-5 - Both Exhaust Systems Operating Exhaust - M-5 Good J-4 Fair
23	Press Room	Fumes	Visual	Good	Both Presses Operating - Small Amount Of Fumes Visible When Mix Enters Press - Both Rooms Well Ventilated - Slight Odor Of Hot Air Not Noticeable
24	Carpenter Shop	Dust	Visual & Smoke Tube	Good	Saw And Drill Press, In Operation - No Dust Visible - Exhaust System Operating Exhaust Good
25	Garage - General	Fumes CO	Visual Detector Tube	Good	No Equipment In Operation - No Fumes Visible - Area Well Ventilated CO 0.0 ppm
26	Electric Shop-General	Acid Mist	Visual & Sensory	Fair	No Acid Mist Visible - However Slight Irritation Was Noticeable Between The Two Rows Of Connecting Batteries
27	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Fair	Several Welding Operations In Progress - Fumes Visible Near Mist - Slight Irritation Noticed Near Sides - Exhaust Hoods Which Were In Operation Near Shop - Building Well Ventilated
28	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	Drill Press In Operation - No Dust Visible Exhaust System Operating Exhaust Good
29	Blacksmith Shop	CO	Detector Tube	Good	CO 0.0 ppm - One Gas-Fired Forge Operating - Area Well Ventilated
30	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	Trichloroethylene 2 ppm - Reading Taken Directly In Front Of Degreaser With Hood On & Open And Exhaust System Operating - Exhaust Fair Unit Not In Use At Time Of Reading
31	Atomizer - General	Dust	Visual	Good	No Dust Visible In Any Area - No Water Visible In Static Tank Area - No Odor Noticeable

SURVEYOR C.H.R.

411082 0528

INDUSTRIAL HYGIENE SURVEY

705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

DATE: JULY 14, 1971

TAB. 6

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
1	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Fair	In General Atmosphere in Building Clear - However During Flowing Of FCC No. 1 Irritation Was Noticeable Near Fuses 1, 7, & 8 - Irritation Also Noticeable In Skim Room
2	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Poor	CO 10 ppm HCl 10 ppm CO 2 ppm Readings Taken Between Fuses 6 & 7 During Flowing Of FCC No. 1 - No Fumes Visible - Mercury Irritated Both Furnaces Operating - 100% Of Natural Gas Noticeable Having Both Furnaces
3	Homogenizing Furnace	CO	Detector Tube	Good	FCC No. 1 - CO - On Fire 10 ppm On Catwalk 10 ppm FCC No. 2 - CO - On Fire 2 ppm On Catwalk 2 ppm
4	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No Oil Vapor Visible
5	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	Exhaust System Operating - Exhaust Good No Fumes Or Caustic Spray Visible Outside
6	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Poor	Exhaust Hood - No Irritation In Handling Equipment Not In Operation - Main Exhaust No. 0 Good - Exhaust Hood In Pit - Water Visible On Floor Of Pit - Atmosphere In Pit Caustic HCl Concentration Of Atmosphere Was Very Irritating To Eyes And Throat
7	Brick Cutting Area	Dust from Brick Saw	Visual	Good	Saw Not In Operation - No Dust Visible In Room Exhaust System Operating - Exhaust Fair - All Slide Valves Open
8	Rectifier Station	Mercury Vapor	Detector Tube	Good	Mercury Vapor 0.0 mg/m ³ - No Droplets Of Mercury Visible In Room - Exhaust System Operating - Exhaust Fair
9	Potrooms - General	Dust & Fumes	Visual	Good	Slight Haze Visible In All Rooms Pot Cover Placement - Generally Fair Pot Cover Condition - Generally Fair
10	Bath Storage	Dust	Visual & Sensory	Good	No Dust Visible
11	Bath Crush	Dust	Visual-Smoke Tube	Good	No Irritation Crusher Operating - Small Amount Of Dust Visible In Building - Exhaust Hoods Which Were Operating Were Fair

SURVEYOR CNR

CONFIDENTIAL
ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JUNE 18, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Result	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	FAIR	IN GENERAL ATMOSPHERE IN BUILDING CLEAR - HOWEVER FUMES VISIBLE NEAR SKIM ROOM - IRRITATION ALSO NOTICEABLE NEAR SKIM ROOM
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	CO .04ppm HCl .04ppm CO .04ppm READINGS TAKEN BETWEEN FLOORS 1 & 2 DURING FLOWING AND SKIMMING OF FEE No. 1 - NO IRRITATION
	Homogenizing Furnace	CO	Detector Tube	Good	ONLY FEE No. 1 OPERATING - STRONG COOR OF NATURAL GAS NOTICEABLE AROUND FEE No. 1
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	FEE No. 1 - CO - ON FLOOR .04ppm ON CATWALKS .04ppm
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	NO OIL VAPOR VISIBLE EXHAUST SYSTEM OPERATING - EXHAUST GOOD NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Poor	EXHAUST HOOD - NO IRRITATION SKIM HANDLING EQUIPMENT NOT IN OPERATION - EXHAUST SYSTEM WORKS - HOT SKIM ON FLOOR IN NORTH END OF ROOM - FUMES VISIBLE THROUGHOUT ROOM AND SURROUNDING AREA - FUMES VERY IRRITATING - HCl .41ppm
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT IN OPERATION NO DUST VISIBLE IN ROOM
	Rectifier Station	Mercury Vapor	Detector Tube	FAIR	MERCURY VAPOR .04mg/m ³ - SOME DISPLETS OF MERCURY VISIBLE IN SINK - EXHAUST SYSTEM OPERATING - EXHAUST FAIR
	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE VISIBLE IN ALL ROOMS EXCEPT THOSE OF FLOORS 1 & 2 WHICH WERE CLEAR BUT COVER PLACEMENT - GENERALLY FAIR BUT COVER CORROSION - GENERALLY FAIR
	Bath Storage	Dust	Visual & Sensory	Good	NO DUST VISIBLE NO IRRITATION
	Bath Crushing	Dust	Visual-Smoke Tube	Good	CRUSHER NOT IN OPERATION - SMALL AMOUNT OF DUST VISIBLE IN BUILDING - EXHAUST HOODS WHICH WERE OPERATING WERE FAIR

SURVEYOR: GHR

411082 0530

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JUNE 12, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER NOT IN OPERATION - NO DUST VISIBLE COMING FROM ANY UNIT
	Ore Unloading	Dust	Visual	Poor	UNLOADING OF ORE IN PROGRESS - INTERIOR OF BUILDING VERY DUSTY
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - NO FUMES VISIBLE
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Fair	SMALL AMOUNT OF DUST VISIBLE IN AREA - FUMES VISIBLE COMING FROM MIXER NO. 1 - SLIGHT HAZE CAUSED BY FUMES VISIBLE OVER ENTIRE AREA - SLIGHT ODDOR OF HOT PITCH NOTICEABLE
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	CLEANING OPERATION NOT IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN AREA - EXHAUST HOOD AT WEST END OF SHAKER CONVEYOR OPERATING - EXHAUST FAIR
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PACKING OR UNPACKING OPERATIONS IN PROGRESS - BUILDINGS WELL VENTILATED - CO 10 PPM
	Butt Unloading & Crushing	Dust	Visual	Fair	NEITHER OPERATION IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN UNLOADING AREA - UNLOADING EXHAUST HOOD NOT IN OPERATION - FAIRLY HEAVY DUST VISIBLE IN CRUSHER AREA
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE - AREA FREE OF PITCH FUMES EVEN WHEN A MIXER IS DUMPED VERY SLIGHT ODDOR OF HOT PITCH NOTICEABLE

411082 0531

SURVEYOR

CIN

INDUSTRIAL HYGIENE SURVEY

DATE: JUNE 18, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	NEW M-S EXHAUST SYSTEM IN OPERATION - EXHAUST GOOD - NO FUMES VISIBLE ESCAPING FROM M-S - J-4 EXHAUST FAIR - SMALL AMOUNT OF FUMES VISIBLE ESCAPING FROM J-4
	Press Room	Fumes	Visual	Good	BOTH PRESSES IN OPERATION - SMALL AMOUNTS OF FUMES VISIBLE WHEN MIX ENTERS PRESSES - BOTH ROOMS WELL VENTILATED - SLIGHT ODOR OF HOT IRON NOTICABLE
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	ONLY DRILL PRESS IN OPERATION - MARINITE BEING DRILLED - NO DUST VISIBLE IN AREA
	Garage - General	Fumes CO	Visual Detector Tube	Good	EXHAUST SYSTEM OPERATING - EXHAUST GOOD NO EQUIPMENT IN OPERATION - NO FUMES VISIBLE AREA WELL VENTILATED - CO 0.0 ppm
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO ACID MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Fair	SEVERAL WELDING OPERATIONS IN PROGRESS - FUMES VISIBLE AROUND MOST OF THEM - SOME IRRITATION NOTICABLE - EXHAUST HOODS WHEN IN USE OPERATING WELL - GOOD - BUILDING WELL VENTILATED
	Marinlite Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION NO DUST VISIBLE EXHAUST SYSTEM GOOD
	Blacksmith Shop	CO	Detector Tube	Good	CO 5 ppm - ONE GAS-FIRED FORGE OPERATING - AREA WELL VENTILATED
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Fair	TRICHLOROETHYLENE - HOOD OVER DOOR OPEN 10:00 AM - HOOD DOOR CLOSED 10:00 AM - REMOVEDS TAKEN DIRECTLY IN FRONT OF DEGREASER WITH EXHAUST SYSTEM OPERATING EXHAUST FAIR - DUST NOT IN USE AT TIME OF READINGS
	Atonizer - General	Dust	Visual	Good	NO DUST VISIBLE IN ANY AREA - NO WATER VISIBLE IN SEPTIC TANK AREA - NO ODOR NOTICABLE

411082 0532

SURVEYOR

MHC

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	Good	IN GENERAL, AREA ORDERLY - NO SMOKE OR FUMES VISIBLE - NO FUMES VISIBLE - NO ODOR NOTICABLE
	Sewage Treatment Plant:				
	General Area		Visual	Good	IN GENERAL, AREA ORDERLY - AREA WILL SOON NEED MOWING
	Sludge drying beds		Visual	FAIR	ALL BEDS STILL COVERED WITH A LAYER OF DRIED SLUDGE - SLUDGE SHOULD BE REMOVED FROM AREA
	Influent to Treatment Plant		Visual	Good	OBSERVED AHEAD OF BAR SCREEN INFLUENT TURBID
	Effluent of Chlorine Chamber		Visual	Good	OBSERVED AFTER BARFLES - SOLIDS CONTENT VERY LOW - CHLORINE 2.7 ppm
	NOTES: 1. Weather was partly cloudy with temperature ranging from 85° to 95°. Wind from south at 7 to 25 mph.				
	2. A light plume of dust again was visible coming from the bag filter of the carbon grinding system.				
	3. A very light plume of dust again was visible coming from the electrostatic precipitator stack of the carbon grinding system.				

411082 0533

INDUSTRIAL HYGIENE SURVEY

DATE: MAY 5, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	In General Atmosphere in Building Clear - Some Fumes Visible Whenever A Furnace Is Fired No Irritation
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	CO 10 ppm HCl 10 ppm Readings Taken In Area Near No. 1 HDC No Fumes Visible - No Irritation
	Homogenizing Furnace	CO	Detector Tube	Good	Both Furnaces Operating - Strong Vapour of Natural Gas Noticeable On Catwalk of No. 1 Furnace Ice No. 1 - CO 10 ppm HCl 10 ppm On Catwalk 10 ppm Ice No. 2 - CO 10 ppm HCl 10 ppm On Catwalk 10 ppm
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No Oil Vapor Visible Exhaust System Operating - Exhaust Good
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	No Fumes or Caustic Spray Visible Outside Exhaust Hood - No Irritation
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Fair	DRAIN HANDLING EQUIPMENT NOT IN OPERATION - MAIN EXHAUST HOOD GOOD - EXHAUST HOOD IN AIR NOT IN OPERATION - NO SKIM ON FLOOR IN NORTH END OF ROOM No Fumes Visible - No Irritation - HCl 10 ppm
	Brick Cutting Area	Dust from Brick Saw	Visual	Fair	Saw Not in Operation - No Dust Visible in Room - New Dust Collector Installed and Operating - Exhaust Fair - However Both Exhaust Fans Open - If Only One Fan Was Used At A Time, System Might Function Better
	Rectifier Station	Mercury Vapor	Detector Tube	Good	Mercury Vapor 0.0mg/m ³ - Cleaning and Distilled and Mercury Finished - Cleanup in Progress - No Droplets of Mercury Visible in Room - Exhaust System Operating - Exhaust Fair
	Potrooms - General	Dust & Fumes	Visual	Good	Welding Haze Visible In All Rooms Except Those Of Lines 7 & 8 Which Were Clean Dust Cover Placement - Generally Good Pot Cover Condition - Generally Fair
	Bath Storage	Dust	Visual & Sensory	Good	No Dust Visible No Irritation
	Bath Crusher	Dust	Visual-Smoke Tube	Good	Crusher in Operation - Small Amount of Dust Visible in Building - All Exhaust Hoods Out One Operating - Exhaust Good

SURVEYOR

CAR

411082 0534

INDUSTRIAL HYGIENE SURVEY

DATE: MAY 5, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER IN OPERATION - TWO OR THREE BAG FILTER UNITS OPERATING - NO DUST VISIBLE COMING FROM EITHER UNIT
	Ore Unloading	Dust	Visual	Good	UNLOADING IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN BUILDING - MOST OF DUST CAUSED BY WIND BLOWING THROUGH BUILDING
	Rodding Room-General	Dust & Fumes	Visual	Fair	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE - NOISE LEVEL HIGH IN ALL PARTS OF BUILDING
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Poor	SMALL AMOUNT OF DUST VISIBLE IN AREA - HEAVY FUMES VISIBLE COMING FROM AREA No. 1 - FUMES VISIBLE OVER ENTIRE AREA - SMOKE OVER OF HOT PITCH NOTICEABLE
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	CRUSHING OPERATION NOT IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN AREA - EXHAUST FROM WEST END OF SHAKER CONVEYOR NOT OPERATING
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PACKING OR UNPACKING OPERATIONS IN PROGRESS - BUILDINGS WELL VENTILATED - CO .00PM
	Butt Unloading & Crushing	Dust	Visual	Fair	BOTH OPERATIONS IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN UNLOADING AREA - UNLOADING EXHAUST FROM CRUSHER - EXHAUST GOOD - FAIRLY HEAVY DUST VISIBLE IN CRUSHER AREA
	Mixer Floor	Dust & Pitch Fumes	Visual	Poor	SMALL AMOUNT OF DUST VISIBLE - FUMES VISIBLE IN ALL PARTS OF FLOOR - HEAVY FUMES VISIBLE AT EAST END OF FLOOR EACH TIME A MIXER IS DUMPED - STRONG ODOR OF HOT PITCH NOTICEABLE

SURVEYOR C. H. R.

INDUSTRIAL HYGIENE SURVEY

DATE: MAY 5, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	POOR	J-H Exhaust Hood Operating - Exhaust Fair - Fumes Visible Escaping From M-5 - Fumes Heaviest When A Mixer Is Dumped - Fumes From M-5 Travel To DUCT ONTO EAST END OF MIXER FLOOR
	Press Room	Fumes	Visual	Good	ONLY HPA PASSES OPERATING - SMALL AMOUNT OF FUMES VISIBLE WHEN MIX OUTSIDE PASSES - PRESS ROOM FULLY WELL VENTILATED - SLIGHT ODOUR OF HOT IRON NOTICEABLE
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	ONE SAW AND ONE SHAPER OPERATING - NO DUST VISIBLE IN BUILDING - ONE DUST COLLECTOR OPERATING EXHAUST GOOD - OTHER DUST COLLECTOR UNDERGOOD REPAIRS
	Garage - General	Fumes CO	Visual Detector Tube	Good	ONE VEHICLE IN OPERATION FOR SHORT PERIOD OF TIME CO 15 ppm - AREA WELL VENTILATED NO FUMES VISIBLE
	Electric Shop-General	Acid Mist	Visual & Sensory	Fair	NO ACID MIST VISIBLE - HOWEVER A SLIGHT IRRITATION WAS NOTICEABLE BETWEEN THE ROWS OF CHARGING BATTERIES
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Fair	SEVERAL WELDING OPERATIONS IN PROGRESS - FUMES VISIBLE AROUND MOST OF THEM - SOME IRRITATION NOTICEABLE - CORNER WELDING HOD OPERATING - EXHAUST FAIR - BUILDING WELL VENTILATED
	Marinette Finishing Room	Dust	Visual Smoke Tube	Good	DRILL PRESS IN OPERATION - NO DUST VISIBLE OUTSIDE EXHAUST HOD - EXHAUST SYSTEM OPERATING - EXHAUST GOOD
	Blacksmith Shop	CO	Detector Tube	Good	CO 15 ppm - ONE GAS-PIPED FORNE OPERATING AREA WELL VENTILATED
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE 5 ppm - READING TAKEN DIRECTLY IN FRONT OF DEGREASER WITH DUCT OPEN AND EXHAUST SYSTEM OPERATING - EXHAUST FAIR - UNIT IN USE AT TIME OF READING
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN BUILDING - NO WATER VISIBLE IN SEPTIC TANK ALGA - NO ODOUR NOTICEABLE

SURVEYOR C. H. R.

411082 0536

INDUSTRIAL HYGIENE SURVEY

DATE: MAY 5, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	Good	IN GENERAL, AREA ORDERLY - DULL DREAR IN PROCESS OF LEVELING AREA - NO SMOKE OR FUMES VISIBLE NO FUMES VISIBLE - NO ODOR NOTICEABLE
	Sewage Treatment Plant:				
	General Area		Visual	Good	IN GENERAL, AREA ORDERLY - AREA WILL SOON NEED MAINTENANCE
	Sludge drying beds		Visual	Fair	ALL BEDS STILL COVERED WITH A LAYER OF DRIED SLUDGE - NO ODOR NOTICEABLE GASSES BEGINNING TO COME IN CENTER BED
	Influent to Treatment Plant		Visual	Good	OBSERVED AHEAD OF BAR SCREEN INFLUENT TANK
	Effluent of Chlorine Chamber		Visual	Good	OBSERVED AFTER BAFFLES - SOLIDS CONTENT LOW - CHLORINE 3.0 ppm
	NOTES: 1. Weather was overcast with temperature ranging from 75° to 90°. Wind was from the south at 10-20 mph. 2. A plume of dust again was visible coming from the bag filter of the carbon grinding system. The density of this plume was generally light. 3. A plume of dust again was visible coming from the electrostatic precipitator at back of the carbon grinding system. The density of this plume was generally light. 4. A fairly heavy plume of dust again was visible escaping from the exhaust of the Darcos unit bag filter.				

411082 0537

SURVEYOR

C.R.R.

44-38861-1

ROCKDALE WORKS

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INDUSTRIAL HYGIENE SURVEY

T.B. DORNEY - 7 DATE: APRIL 11, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Fair	IN GENERAL Atmosphere In Building Clean - However IN AREA NEAR SAMPLING FUMES FROM HOT SLAG WERE VISIBLE AND A SLIGHT IRRITATION NOTICEABLE
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	Cl ₂ 0.0 ppm HCl 0.0 ppm CO 0.0 ppm Readings Taken IN AREA NEAR No. 1 HOD. No Fumes Visible - No Irritation
	Homogenizing Furnace	CO	Detector Tube	Good	BOTH FURNACES (A BURNING - BURNING DOWN OF NATURAL GAS MEASURABLE AND NO FUMES IN FURNACES No. 1 - CO 0.0 ppm No. 2 - CO 0.0 ppm ON CHIMNEY 0.0 ppm
	Cutting Oil Supply Tank	Oil Vapor	Visual	Fair	FAIRLY HEAVY VAPORS VISIBLE COMING FROM TANK - WIND BLOWING VAPORS TOWARD CENTER OF BUILDING
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	EXHAUST SYSTEM OPERATING - EXHAUST GOOD NO FUMES OR CAUSTIC SMOKE VISIBLE OUTSIDE
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Poor	SKIM HANDLING EQUIPMENT NOT IN OPERATION - LARGE AMOUNT OF HOT SLAG ON FLOOR IN AREA END OF ROOM HEAVY FUMES VISIBLE IN ROOM AND IN SWAGING AREA OPERATING - NO FUMES IN ROOM - EXHAUST SYSTEM OPERATING
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT IN OPERATION NO DUST VISIBLE IN ROOM
	Rectifier Station	Mercury Vapor	Detector Tube	Poor	MERCURY VAPOR 0.0 mg/m ³ - (CLEANING AND DISTILLING) OF MERCURY STILL IN PROCESS - CONSIDERABLE AMOUNT OF MERCURY VISIBLE IN AND AROUND STILL AND CLEANING TUBES AND IN SINK
	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT FUME VISIBLE IN ALL ROOMS EXCEPT THOSE ON LINES 1 & 2 WHICH WERE CLEAN PER COVER PLACEMENT - GENERALLY GOOD PER COVER CLEANER - GENERALLY FAIR
	Bath Storage	Dust	Visual & Sensory	Good	NO DUST VISIBLE NO IRRITATION
	Bath Crushing	Dust	Visual-Smoke Tube	Good	CAUTIONER NOT IN OPERATION - VERY LITTLE DUST VISIBLE IN BUILDING - EXHAUST SYSTEM OPERATING EXHAUST FAIR

411082 0538

SURVEYOR NHR

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: April 13, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER NOT IN OPERATION - BAG FILTER UNITS OPERATING - NO DUST VISIBLE COMING FROM ANY FILTER UNIT
	Ore Unloading	Dust	Visual	Good	UNLOADING IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN BUILDING
	Rodding Room-General	Dust & Fumes	Visual	Fair	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE - NOISE LEVEL HIGH 0 IN ALL PARTS OF BUILDING
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	ONLY SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	CRUSHER OPERATING IN PROGRESS - DUST VISIBLE AT THE LENGTH OF SHAKER CONVEYOR - EXHAUST FAN NOT OPERATING
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PACKING OR UNPACKING OPERATIONS IN PROGRESS - BUILDINGS WELL VENTILATED - CO 10 ppm
	Butt Unloading & Crushing	Dust	Visual	Good	NEITHER OPERATION IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS - UNLOADING EXHAUST HOOD NOT IN OPERATION
	Mixer Floor	Dust & Pitch Fumes	Visual	Poor	SMALL AMOUNT OF DUST VISIBLE - FUMES VISIBLE IN ALL PARTS OF FLOOR - FUMES HEAVIEST AT EAST END OF FLOOR EACH TIME A MIXER IS DUMPED - STRONG ODOR OF HOT PITCH DETECTABLE

411082 0539

SURVEYOR

CNR

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: APRIL 13, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Poor	N-N EXHAUST HOOD OPERATING - EXHAUST FAIR - FUMES VISIBLE ESCAPING FROM M-S - FUMES HEAVIEST WHEN A MIXER IS DUMPED - FUMES FROM M-S DRIFFED CHIEF EAST END OF MILLER FLOOR
	Press Room	Fumes	Visual	Good	BOTH FLOORS OPERATING - SOME FUMES VISIBLE WHEN MIXER ENTERS PRESS - BOTH AREAS WELL VENTILATED - SLIGHT O.N.A. OR HOT PITCH NOTICEABLE IN BOTH ROOMS
	Carpenter Shop	Dust	Visual & Smoke Tube		ONE SAW IN OPERATION - NO DUST VISIBLE
	Garage - General	Fumes CO	Visual Detector Tube	Good Good	EXHAUST SYSTEM OPERATING - EXHAUST GOOD CO IS GOOD - ONE VEHICLE IN OPERATION BRUPLY WHEN FAIRLY WELL VENTILATED - NO FUMES VISIBLE
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Fair	SEVERAL WELDING OPERATIONS IN PROGRESS - FUMES VISIBLE AROUND MOST OF THEM - SOME IRRITATION NOTICEABLE - COPPER WELDING HOOD OPERATING - EXHAUST GOOD - FUMES WELL VENTILATED
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION - NO DUST
	Blacksmith Shop	CO	Detector Tube	Good	VENTILATION - EXHAUST SYSTEM GOOD NO FUMES IN OPERATION - AREA WELL VENTILATED - CO 0.0 PPM
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Fair	TRICHLOROETHYLENE SOUP - PLACING TANK DIRECTLY IN FRONT OF DEGREASER WITH D.A. OPEN AND EXHAUST SYSTEM OPERATING - EXHAUST FAIR - UNIT IN USE AT TIME OF READING
	Atomizer - General	Dust	Visual	Good	No Dust Visible in Mill Area - No Water Visible in Septic Tank Area - No Other Noticeable

SURVEYOR

G.H.R.

411082 0540

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	FAIR	AREA SOMEWHAT DISORDERLY - NEEDED LEVELING NO FINES OR SMOKE VISIBLE - NO FUMES VISIBLE NO ODOR NOTICEABLE
	Sewage Treatment Plant:				
	General Area		Visual	GOOD	IN GENERAL AREA ORDERLY ALL BEDS COVERED WITH A LAYER OF WELL DRIED SLUDGE - NO ODOR NOTICEABLE OBSERVED AHEAD OF BAR SCREEN INFLUENT TUNNAGE
	Sludge drying beds		Visual	GOOD	
	Influent to Treatment Plant		Visual	GOOD	
	Effluent of Chlorine Chamber		Visual	GOOD	OBSERVED AFTER BARFLES - SOLIDS CONTENT VERY LOW - CHLORINE 2.4 ppm
NOTES: 1. Weather was clear with 75° temperature in the air. Wind was from the south at 10 mph. 2. A plume of dust again was visible coming from the bag filter of the carbon grinding system. The amount of dust emitted was less than that observed last month. 3. A plume of dust again was visible coming from the electric dust precipitator stack of the carbon grinding system. The density of the plume was generally light. 4. A fairly heavy plume of dust was visible escaping from the exhaust of the Duroco unit bag filter.					

411082 0541

SURVEYOR

CNR

INDUSTRIAL HYGIENE SURVEY

T.B. Coney, 7 DATE: MARCH 12, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Result	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Fair	IN GENERAL, AIR QUALITY IN BUILDING IS GOOD. LOCAL - MERCURY VAPOR FROM S. 1, 2, OR 3 FURNACE FURNACE VISIBLE - WIND BLOWING FUMES TO DUSTY TOWARD AND CURRENT IN NORTH END OF BUILDING - AT TIMES A SLIGHT IRRITATION WAS NOTICEABLE
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	CO - 0.0ppm HCl - 0.0ppm CO - 0.0ppm ANALOGS TAKEN IN NORTH END OF BLDG. 34 NEAR DISTILLERS OFFICE
	Homogenizing Furnace	CO	Detector Tube	Good	FROM FURNACE OPERATING - SIGHTING NO. 1 OF NATURAL GAS METERABLE ACCORDING TO NO. 1
	Cutting Oil Supply Tank	Oil Vapor	Visual	Fair	SEE NO. 2 - CO. ON FLOOR - 0.0ppm ON CARTRIDGE - 0.0ppm SOME OIL VAPOR VISIBLE - WIND BLOWING VAPOR INTO BUILDING
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	EXHAUST SYSTEM OPERATING - EXHAUST GOOD NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Fair	EXHAUST HOOD - NO IRRITATION SOME HANDLING EQUIPMENT IN OPERATION - HAND EXHAUST HOOD DUST - EXHAUST HOOD IN AIR PICK - DUST ANALOGS VISIBLE IN AIR EACH TIME A BARREL IS DUMPED - PICK IN AIR - 0.0ppm - SMOKE ANALOGS SEEN ON FLOOR IN SKIM ROOM - 0.0ppm
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT IN OPERATION NO DUST VISIBLE IN ROOM
	Rectifier Station	Mercury Vapor	Detector Tube	Fair	MERCURY VAPOR 105mg/m ³ - CLEANING AND DISTILLATION OF MERCURY IN PROGRESS - CLEANING ON MERCURY TANKS ALSO IN PROGRESS - SOME DROPLETS OF MERCURY VISIBLE IN AIR FLOWING DOWN - EXHAUST SYSTEM OPERATING - EXHAUST FAIR
	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE VISIBLE IN ALL ROOMS EXCEPT THOSE OF LINES 7 & 8 WHICH WERE CLEAR NO EXHAUST PLACEMENT - GENERALLY GOOD AT ALL PLACEMENTS - GENERALLY FAIR
	Bath Storage	Dust	Visual & Sensory	Good	NO DUST VISIBLE NO IRRITATION
	Bath Crushing	Dust	Visual-Smoke Tube	Good	EXHAUST OPERATING - VERY LITTLE DUST VISIBLE IN BUILDING - EXHAUST HOODS OPERATING EXHAUST GOOD

SURVEYOR

C.M.P.

411082 0542

INDUSTRIAL HYGIENE SURVEY

DATE: MARCH 12, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER OPERATING - BAG FILTER UNITS OPERATING NO DUST VISIBLE COMING FROM BAG FILTER UNIT
	Ore Unloading	Dust	Visual	Fair	UNLOADING IN PROGRESS - INTERIOR OF BUILDING FAIRLY DUSTY - MOST OF DUST CAUSED BY THE WIND BLOWING THROUGH THE BUILDING
	Rodding Room-General	Dust & Fumes	Visual	Fair	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE - NOISE LEVEL SEEMED HIGH IN ALL PARTS OF BUILDING
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL ABOVE THE DESIRED RANGE <i>How much?</i>
	Stub Press & Unbolting Station	Dust	Visual	Good	NEITHER OPERATION IN PROGRESS - SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Cathode Plant Electrode Cleaning	Dust	Visual	Good	CRUSHER OPERATIONS NOT IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN AREA - EXHAUST HOOD APPROXIMATELY 10' FROM CRUSHER CONVEYER FAIR
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PICKING OR UNLOADING OPERATIONS IN PROGRESS - BUILDINGS FAIRLY WELL VENTILATED - CO 10 ppm
	Butt Unloading & Crushing	Dust	Visual	Poor	BOTH OPERATIONS IN PROGRESS - EXHAUST HOOD IN UNLOADING AREA GOOD - SMALL AMOUNT OF DUST VISIBLE IN UNLOADING AREA - HEAVY DUST VISIBLE IN AREA SURROUNDING THE CRUSHER
	Mixer Floor	Dust & Pitch Fumes	Visual	Fair	SMALL AMOUNT OF DUST VISIBLE - SOME FUMES VISIBLE IN ALL PARTS OF FLOOR - FUMES HEAVIEST AT EAST END OF FLOOR WHEREVER A MIXER IS OUPPER - STEERING GAGE OF HOT PITCH NEEDED

SURVEYOR

CNR

411082 0543

INDUSTRIAL HYGIENE SURVEY

DATE: MARCH 13, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	POOR	J-4 EXHAUST HAND OPERATING - EXHAUST FAIR - SMALL AMOUNT OF FUMES VISIBLE ESCAPING AT WEST END OF J-4 - HEAVY FUMES VISIBLE ESCAPING FROM M-5 EACH TIME A MIXER IS DUMPED
	Press Room	Fumes	Visual	FAIR	BOTH PRESSES OPERATING - SMALL AMOUNTS OF FUMES VISIBLE NEAR BOTH PRESSES - BOTH ROOMS FAIRLY WELL VENTILATED - SLIGHT ODOR ON HOT PITCH NOTICEABLE IN BOTH ROOMS
	Carpenter Shop	Dust	Visual & Smoke Tube	GOOD	TWO SAWS IN OPERATION - NO DUST VISIBLE
	Garage - General	Fumes CO	Visual Detector Tube	GOOD	EXHAUST SYSTEM OPERATING - EXHAUST GOOD CO. ppm - NO EQUIPMENT IN OPERATION NO FUMES VISIBLE - AREA WELL VENTILATED
	Electric Shop-General	Acid Mist	Visual & Sensory	GOOD	NO ACID MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	GOOD	NO WELDING OPERATIONS IN PROGRESS - NO FUMES VISIBLE - NO IRRITATION - EXHAUST HAND USED FOR CARPENTRY WORKS GOOD - AREA WELL VENTILATED
	Marinite Finishing Room	Dust	Visual Smoke Tube	GOOD	NO EQUIPMENT IN OPERATION - NO DUST VISIBLE - EXHAUST SYSTEM GOOD
	Blacksmith Shop	CO	Detector Tube	GOOD	OVERCASHED FORCE IN OPERATION AREA WELL VENTILATED
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	GOOD	TRICHLOROETHYLENE - O.P.M. - READING TAKEN DIRECTLY IN FRONT OF DEGREASER WITH DOOR CLOSED AND EXHAUST SYSTEM OPERATING - EXHAUST FAIR - UNIT NOT IN USE AT TIME OF READING
	Atomizer - General	Dust	Visual	GOOD	NO DUST VISIBLE IN ANY AREA - NO WATER VISIBLE IN SEPTIC TANK AREA - NO ODOR NOTICEABLE

SURVEYOR

CHR

411082 0544

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: MARCH 12, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	Good	IN GENERAL, AREA OVERALL - NO FIRES OR SMOKE VISIBLE - NO FUMES VISIBLE - NO ODOR NOTICEABLE
	Sewage Treatment Plant:				
	General Area		Visual	Good	IN GENERAL, AREA OVERALL ALL BEANS COVERED WITH 3 TO 4 INCHES OF DRYING SLUDGE - NO ODOR NOTICEABLE
	Sludge drying beds		Visual	Good	OBSERVED AREA OF DRAIN SCREEN
	Influent to Treatment Plant		Visual	Good	INFLUENT TREATMENT
	Effluent of Chlorine Chamber		Visual	Good	OBSERVED AFTER BARRIERS - SOLIDS CONTENT LOW - CHLORINE .6 ppm
	NOTES: 1. Weather was partly cloudy to cloudy with the temperature in the mid 70's. Wind from the south at 15 mph.				
	2. A plume of dust again was visible coming from the bag filter of the carbon grinding system. The amount of dust emitted was about equal to that observed last month.				
	3. A plume of dust again was visible coming from the chlorination precipitation tank of the carbon grinding system. The density of this plume varied from light to heavy.				
	4. A light plume of dust was visible escaping from the exhaust of the process used by filter.				

SURVEYOR

C.H.R.

411082 0545

CONFIDENTIAL

ROCKDALE WORKS

100, 200, 240, 280, 320, 360, 400, 440, 480, 520, 560, 600, 640, 680, 720, 760, 800, 840, 880, 920, 960, 1000
INDUSTRIAL HYGIENE SURVEY TAB-B
DATE: Feb 12 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	Atmosphere in Building Clear - No Flaming in Process - No Irritation
	Furnace Area & Casting	CL ₂ HCl CO	Detector Tubes	Good	CL ₂ 10 ppm HCl 10 ppm CO 15 ppm Readings Taken Between Furnaces 1 & 2
	Homogenizing Furnace	Oil Vapor	Detector Tube	Good	Both Furnaces Operating - Strong Color of Natural Gas Detectable on Combustion of No. 1 Fuel Oil - CO 10 ppm CO ₂ - Fee No. 1 - Oil Fuel 15 ppm Oil Fuel 10 ppm
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No Oil Vapor Visible
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	Exhaust System Operating - Exhaust Good At Fumes or Caustic Spray Visible Outside Exhaust Hood - No Irritation
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Fair	Some Handling Equipment in Operation - No Over-Ca Fumes Visible in Room - Exhaust Hood Good - Exhaust Hood in Air Feels - No Air 10 ppm - Small Amount of Skin Oil Fuel in North End of Room
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	Saw in Operation Cutting Fire Brick Water Being Used No Dust Visible in Room
	Rectifier Station	Mercury Vapor	Detector Tube	Good	Mercury Vapor 0.0 mg/m ³ - No Droplets of Metallic Mercury Visible in Room - Exhaust System Operating - Exhaust Fair
	Potrooms - General	Dust & Fumes	Visual	Good	Slight Haze Visible in All Rooms Except Those of Lines 1 & 2 which were clear for cover placement - Generally Good Air Under Conditions - Generally Fair
	Bath Storage	Dust	Visual & Sensory	Good	No Dust Visible No Irritation
	Bath Crushing	Dust	Visual-Smoke Tube	Good	Caustic Not in Operation - No Dust Visible Exhaust Hoods Operating - Exhaust Good

SUPERVISOR

CNR

411082 0546

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: FEB. 12, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER NOT IN OPERATION - BIG FILTER UNITS OPERATING - NO DUST VISIBLE COMING FROM ANY FILTER UNIT
	Ore Unloading	Dust	Visual	Fair	UNLOADING IN PROGRESS - AREA FAIRLY DUSTY - MOST OF DUST CAUSED BY THE WIND BLOWING THROUGH THE BUILDING
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA
	Wheelabrator	Noise	Audio	Fair	NO FUMES VISIBLE NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	CRUSHER OPERATING IN PROGRESS - DUST VISIBLE ALONG ENTIRE LENGTH OF GOODMAN SHAVER CONVEYER - DUST CRUSHER AREA WEST END OF CONVEYER - EXHAUST MOTOR AT WEST END OF CONVEYER FAIR
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PACKING OK UNPACKING OPERATIONS IN PROGRESS - BUILDINGS NOT AS WELL VENTILATED AS USUAL DUE TO COOL WEATHER NO IS. AIR
	Stub Unloading & Rushing	Dust	Visual	Fair	BOTH OPERATIONS IN PROGRESS - EXHAUST MOTOR UNLOADING AREA OPERATING AND REMOVING ALMOST ALL VISIBLE DUST HOWEVER CONSIDERABLE DUST WIND VISIBLE IN AREA NEAR CRUSHER
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE - SMALL AMOUNT OF FUMES VISIBLE IN AREA WHEN A MIXER IS DAMAGED STUBS CONC. OF HOT AREA NOTICABLE

411082 0547

SURVEYOR

OHR

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Feb 12, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Fair	J-4 Exhaust Hood Operating - Exhaust Good Fumes Still Visible Escaping From Bottom Ends Of M-5 -
	Press Room	Fumes	Visual	Fair	Both Presses Operating - Small Amount Of Fumes Visible Near Both Presses - Area Fairly Ventilated Slight Odor Of Hot Pitch Noticeable
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	No Equipment In Operation - No Dust Visible - Exhaust System Operating Exhaust Good
	Garage - General	Fumes CO	Visual Detector Tube	Good	CO 10 ppm - No Equipment In Operation No Fumes Visible - Area Fairly Well Ventilated
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	Several Welding Operations In Progress - Small Amount Of Fumes Visible - No Irritation - Exhaust Hood Used For Copper Welding Good - In Area Near Where Hot Areas Were Being Welded Odor .05 ppm
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	No Equipment In Operation - No Dust Visible Exhaust System Good
	Blacksmith Shop	CO	Detector Tube	Good	No Fumes In Operation - CO 10 ppm Area Fairly Well Ventilated
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	Trichloroethylene .04 ppm - Reading Taken Directly In Front Of Degreaser With Air Closed And Exhaust System Operating - Exhaust Fair - Unit Not In Use At Time Of Reading
	Atomizer - General	Dust	Visual	Good	No Dust Visible In Any Area - No Water Visible In Septic Tank Area - No Odor Noticeable

SURVEYOR

C.R.R.

411082 0548

INDUSTRIAL HYGIENE SURVEY

DATE: Feb 11, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	GOOD	AREA, IN GENERAL, CLEANLY - NO FINES OR SMOKE VISIBLE - NO FUMES VISIBLE - NO ODOR NOTICABLE
	Sewage Treatment Plant:				
	General Area		Visual	GOOD	IN GENERAL, AREA CLEANLY
	Sludge drying beds		Visual	GOOD	SMALL AMOUNT OF DRIED SLUDGE IN SOUTH BED FROM MONTHLY SAMPLING - OTHER BEDS CLEAN
	Influent to Treatment Plant		Visual	GOOD	OBSERVED AHEAD OF BAR SCREEN
	Effluent of Chlorine Chamber		Visual	GOOD	INFLUENT TARIAR OBSERVED AFTER BAR SCREENS - SOLIDS CONTENT LOW - CHLORINE 2.1 ppm
	NOTES: 1. Weather was clear with the temperature in the 50's. Wind was from the north at 15-35 mph.				
	2. A plume of dust again was visible coming from the bag filter of the carbon gasifying system. The amount of dust emitted was much lower than that observed last month.				

SURVEYOR C.H.R.

T.O. Lohr, Jr., *Mrs. J. M. Lohr* - *Wash.*

RURAL HYGIENE SURVEY

T.B. Lohr - *7 days Jan. 12, 1908*

INDUSTRIAL HYGIENE SURVEY

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	Atmosphere in Building Generally Clear Fumes Visible & Distant Fumes in Bldg 5 - Near Fans Removed Fumes from Building - No Irritation
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	On 10 ppm HCl 10 ppm CO 10 ppm Fire 5' Fumes in Process - Fumes Visible & Rising from the Area - No Fumes Visible at Floor Level Residual Fumes in Building After Fumes 5' h
	Homogenizing Furnace	CO	Detector Tube	Good	Even Fumes in Operation - Sulfur Gas & Arsenic Fumes Not Visible Around the 1' Area at A. When Ventilation is On - CO 10 ppm HCl 10 ppm On Catalyst 5 ppm Fire 5' - No Fumes in Building - No Irritation
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No Oil Vapor Visible Exhaust System Operating - Exhaust Good No Fumes or Caustic Spray Visible Outside
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	Exhaust Main - No Irritation Sewer Handling Equipment in Operation - No Dust or Fumes Visible - Main Exhaust - Main Good - Exhaust Main in Air After Operating - Sewer Gas Fumes in Main End of Room No Irritation - No Fumes
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Fair	Sewer Gas in Day To Main Room of Machine - Little in Any Dust Visible Inside Room - However Outside the Building Machine Dust was visible & a A Large Area of Room 31
	Brick Cutting Area	Dust from Brick Saw	Visual	Poor	
	Rectifier Station	Mercury Vapor	Detector Tube	Good	Mercury Vapor 0.01 mg/m ³ - No Discrepancy of Metallic Mercury Visible in Room - Exhaust System Operating - Exhaust Fair
	Potrooms - General	Dust & Fumes	Visual	Good	Slight Haze Visible in All Rooms Except Those of Lines 1 & 2 which were clear Dust Cover Placement - Generally Good After 10' Covered - Generally Fair
	Bath Storage	Dust	Visual & Sensory	Good	No Dust Visible
	Bath Crushing	Dust	Visual-Smoke Tube	Good	No Irritation Crusher Not in Operation - No Dust Visible Exhaust Hoods Operating - Exhaust Good

SURVEY

11-25

411082 0550

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JAN. 12, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER NOT IN OPERATION - BAG FILTER UNITS OPERATING - NO DUST VISIBLE COMING FROM ANY FILTER UNIT
	Ore Unloading	Dust	Visual	Good	UNLOADING IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN AREA
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL ABOVE THE DESIRED RANGE <i>110 dB</i>
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	CLEANING OPERATION NOT IN PROGRESS SMALL AMOUNT OF DUST VISIBLE IN AREA
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PACKING OR UNPACKING OPERATIONS IN PROGRESS - FURNACE AIRWAYS WELL VENTILATED - CO 10 PPM
	Butt Unloading & Crushing	Dust	Visual	Good	NEITHER OPERATION IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN AREA - EXHAUST SYSTEM NOT IN OPERATION
	Mixer Floor	Dust & Pitch Fumes	Visual	Fair	DUST COMING FROM BALL MILL AREA VISIBLE AT WEST END OF FLOOR - AT EAST END OF FLOOR FUMES VISIBLE COMING FROM M-5 WINDROVER A METER IS DUMPED STRONG ODOOR OF HOT PITCH NOTICEABLE

SURVEYOR

AHS

411082 0551

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JAN. 12, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	POOR	EXHAUST HOOD OVER J-1 OPERATING - EXHAUST N/A - FUMES VISIBLE ESCAPING FROM J-1 - HEAVY FUMES VISIBLE ESCAPING THROUGH A HOLE IN THE TOP OF THE M-5 EXHAUST HOOD
	Press Room	Fumes	Visual	FAIR	UNABLE TO DETERMINE IF M-5 EXHAUST OPERATING BOTH PRESSSES OPERATING - SMALL AMOUNTS OF FUMES VISIBLE AROUND BOTH PRESSSES - AREA NOT AS WELL VENTILATED AS USUAL - SLIGHT OUNDRY OF HOT AREA NOTICEABLE IN BOTH ROOMS
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	NO EQUIPMENT IN OPERATION
	Garage - General	Fumes CO	Visual Detector Tube	FAIR	EXHAUST SYSTEM NOT IN OPERATION CO 30 ppm - ONE VEHICLE IN OPERATION NO FUMES VISIBLE - AREA NOT AS WELL VENTILATED AS USUAL
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO ACID MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	SEVERAL WELDING OPERATIONS IN PROGRESS - SMALL AMOUNTS OF FUMES VISIBLE - NO IRRITATION - EXHAUST HOOD WHICH WERE OPERATING WERE GOOD - AREA FAIRLY WELL VENTILATED
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	LATHE IN OPERATION - EXHAUST SYSTEM OPERATING EXHAUST GOOD - NO DUST VISIBLE IN ROOM
	Blacksmith Shop	CO	Detector Tube	FAIR	CO 25 ppm - ONE COAL-FIRED FORGE OPERATING READING TAKEN IN AREA SURROUNDING THE FORGE - FORGE EXHAUST SYSTEM FAIR - AREA FAIRLY WELL VENTILATED
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE 2 ppm - READING TAKEN DIRECTLY IN FRONT OF DEGREASER WITH D.O.R. CLOSED AND CAMPOST SYSTEM OPERATING - EXHAUST FAIR - UNIT NOT IN USE AT TIME OF READING
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN ANY AREA - NO WATER VISIBLE IN SEPTIC TANK AREA - NO OUNDRY NOTICEABLE

411082 0552

SURVEYOR

CWF

INDUSTRIAL HYGIENE SURVEY

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	Good	AREA, IN GENERAL, ORDERLY - NO FIRES OR SMOKE VISIBLE - NO FUMES VISIBLE - NO ODOR DETECTABLE
	Sevage Treatment Plant:				
	General Area		Visual	Good	IN GENERAL, AREA ORDERLY
	Sludge drying beds		Visual	Good	DRIED SLUDGE HAS BEEN REMOVED FROM DRAINING BEDS - HOWEVER DRIED SLUDGE HAS NOT BEEN REMOVED FROM AREA
	Influent to Treatment Plant		Visual	Good	OBSERVED AHEAD OF BAR SCREEN INFLUENT TURBID
	Effluent of Chlorine Chamber		Visual	Poor	OBSERVED AFTER BARFELS - SOLIDS CONTENT VERY HIGH - <u>CH. 100 ppm</u>
	NOTES: 1. Weather was partly cloudy with the temperature in the 70's in the A.M. and in the 60's in the P.M. Wind was from the south at 5 mph in the A.M. and from the north at 8 mph in the P.M. 2. A plume of dust again was visible coming from the bag filter of the carbon grinding system. The amount of dust emitted was much higher than that observed last month. 3. A plume of dust again was visible coming from the electretic precipitator stack of the carbon grinding system. The density of this plume varied from light to heavy.				

411082 0553

SURVEYOR

GHR

CONFIDENTIAL

ROCKDALE WORKS

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INDUSTRIAL HYGIENE SURVEY

DATE: DEC. 2, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE IN BUILDING GENERALLY CLEAR
	Furnace Area & Casting	HCl, HCl CO	Detector Tubes	Good	No Irritation No Fumes Visible - No Irritation No Fumes Visible - No Irritation No Fumes Visible - No Irritation
	Homogenizing Furnace	CO	Detector Tube	Good	AS NOTICABLE GROUND IN BATH FURNACE SEE NO. 1 - CO ON FLOOR - CO ON CEILING CO ON FLOOR - CO ON CEILING
	Cutting Oil Supply Tank	Oil Vapor	Visual	Fair	DIL VAPOR VISIBLE COMING FROM TANK - WIND BLOWING VAPOR TOWARD CENTER OF BLDG 34
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	EXHAUST SYSTEM OPERATING - EXHAUST GOOD - NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE EXHAUST HOLD - NO IRRITATION
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	SKIM HANDLING EQUIPMENT NOT IN OPERATION - NO DUST ON FUMES VISIBLE - HAND EXHAUST HOLD GOOD - EXHAUST HOLD IN PIT FILL - SKIM ON FLOOR IN NORTH END OF ROOM - NO IRRITATION - 11:00 A.M.
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	Saw Not in Operation No Dust Visible in Area
	Rectifier Station	Mercury Vapor	Detector Tube	Good	MERCURY VAPOR .001 MG/M ³ - NO DROPLETS OF METALLIC MERCURY VISIBLE IN ROOM - EXHAUST - SYSTEM OPERATING - EXHAUST FAIR
	Potrooms - General	Dust & Fumes	Visual	Good	SKIM HANDLING EQUIPMENT IN ALL ROOMS EXCEPT THOSE ON FLOOR 7 & 8 WHICH WERE CLEAR POT ROOMS - GENERALLY GOOD POT ROOMS - GENERALLY FAIR
	Bath Storage	Dust	Visual & Sensory	Good	No Dust Visible No Irritation
	Bath Crushing	Dust	Visual-Smoke Tube	Good	EXHAUST IN OPERATION - EXHAUST SYSTEM OPERATING EXHAUST GOOD - SMALL AMOUNT OF DUST VISIBLE IN BUILDING

SURVEYOR

CHR

411082 0554

INDUSTRIAL HYGIENE SURVEY

DATE: Dec. 2, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER OPERATING - THIS FILTERS OPERATING NO DUST VISIBLE COMING FROM ANY FILTER UNIT
	Ore Unloading	Dust	Visual	Fair	UNLOADING IN PROGRESS - FAIR AMOUNT OF DUST VISIBLE IN AREA - MOST OF DUST CAUSED BY WIND BLOWING THROUGH TRUCKS BUILDING
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA SMALL AMOUNT OF FUMES VISIBLE COMING FROM MIXER NO. 1 - SLIGHT ODOR OF HOT PITCH NOTICEABLE IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	CLEANING OPERATION NOT IN PROGRESS SMALL AMOUNT OF DUST VISIBLE IN AREA
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PACKING OR UNPACKING OPERATIONS IN PROGRESS - FURNACE BUILDINGS WELL VENTILATED - CO 10ppm
	Butt Unloading & Crushing	Dust	Visual	Good	NEITHER OPERATION IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN AREA - EXHAUST SYSTEM NOT IN OPERATION
	Mixer Floor	Dust & Pitch Fumes	Visual	Fair	SMALL AMOUNT OF DUST VISIBLE IN AREA - FUMES VISIBLE NEAR EAST END OF FLOOR WHEN A MIXER IS DUMPED STRONG ODOR OF HOT PITCH NOTICEABLE IN AREA

SURVEYOR

CJR

DATE: Dec. 2, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	POOR	HEAVY FUMES VISIBLE ESCAPING FROM M-3 AND J-4 CONVEYORS EXHAUST HOODS NOT OPERATING - FUMES VISIBLE IN LARGE AREA EAST OF MINOR FLOOR - SMOKE ON A DE HOT PITCH NOTICEABLE IN AREA
	Press Room	Fumes	Visual	FAIR	A-TH PRESSES VENTILATING - FUMES VISIBLE AROUND B-TH PRESSES - AREA NOT AS WELL VENTILATED AS USUAL STRONG OVEN OF HOT PITCH NOTICEABLE IN B-TH ROOMS
	Carpenter Shop	Dust	Visual & Smoke Tube	GOOD	ONE SAW OPERATING - AT TIMES SOUND LEVEL FAIRLY HIGH - EXHAUST SYSTEM OPERATING - EXHAUST GOOD SMALL AMOUNT OF DUST VISIBLE NEAR SAW
	Garage - General	Fumes CO	Visual Detector Tube	GOOD	NO EQUIPMENT IN OPERATION - NO FUMES VISIBLE AREA FAIRLY WELL VENTILATED CO. 0.00ppm
	Electric Shop-General	Acid Mist	Visual & Sensory	GOOD	NO ACID MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	GOOD	SEVERAL WELDING OPERATIONS IN PROGRESS - SMALL AMOUNTS OF FUMES VISIBLE - NO IRRITATION - EXHAUST HOODS WHICH WERE OPERATING WERE GOOD
	Marinite Finishing Room	Dust	Visual Smoke Tube	GOOD	LATHE IN OPERATION - EXHAUST SYSTEM OPERATING - EXHAUST GOOD - NO DUST VISIBLE IN ROOM
	Blacksmith Shop	CO	Detector Tube	FAIR	TWO GASPIPED FORGES OPERATING - NOISE LEVEL IN AREA HIGH - MIDWAY BETWEEN FORGES CO 10ppm AREA FAIRLY WELL VENTILATED
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	GOOD	TRICHLOROETHYLENE - OPMAL - READING TAKEN DIRECTLY IN FRONT OF DEGREASER WITH DOOR OPEN AND EXHAUST SYSTEM OPERATING - EXHAUST FAIR - UNIT NOT IN USE AT TIME OF READING
	Atomizer - General	Dust	Visual	GOOD	NO DUST VISIBLE IN ANY AREA - WATER VISIBLE IN SEPTIC TANK AREA - NO COOR NOTICEABLE

SURVEYOR C. H. R.

INDUSTRIAL HYGIENE SURVEY

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	Good	AREA, IN GENERAL, OROREALLY - NO FIRES OR SMOKE VISIBLE - NO FUMES VISIBLE - NO ODOR NOTICED.
	Sewage Treatment Plant:				
	General Area		Visual	Good	IN GENERAL AREA OROREALLY NORTH AND SOUTH BEDS STILL COVERED WITH DRIED SLUDGE - CENTER BED STILL CONTAINS A SMALL AMOUNT OF DRIED SLUDGE OBSERVED AHEAD OF DNR SCREEN
	Sludge drying beds		Visual	Good	INFLUENT TURBID OBSERVED AFTER BARRLES - SOLIDS CONTENT VERY LOW - CL ₂ 1.2 ppm
	Influent to Treatment Plant		Visual	Good	
	Effluent of Chlorine Chamber		Visual	Good	
	NOTES: 1. Weather was partly cloudy with temperature in the 70's. Wind was from the south at 15 mph. 2. A plume of dust again was visible coming from the bag filter of the carbon grinding system. The plume, however, was much lighter than those observed in recent months. 3. A plume of dust again was visible coming from the electrostatic precipitator stack of the carbon grinding system. The density of this plume varied from light to heavy. 4. A heavy plume of dust was visible escaping from the exhaust of the Dreeser unit bag filter.				

411082 0557

SURVEYOR CARR

CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Nov. 9, 1970

788

DATE: Nov. 9, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	Atmosphere In Building Generally Clear
	Furnace Area & Casting	Cl ₂ , HCl, CO	Detector Tubes	Good	No Irritation Cl ₂ 0 ppm HCl 0 ppm CO 5 ppm
	Homogenizing Furnace	CO	Detector Tube	Fair	No Fumes Visible - No Irritation Both Furnaces Operating - Slight Odor Of Natural Gas Noticed Around Furnace No. 1 FCC No. 1 - CO on floor 15 ppm on Catwalk 15 ppm FCC No. 2 - CO on floor 10 ppm on Catwalk 15 ppm
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No Oil Vapor Visible Exhaust System Operating - Exhaust Good - However Wind Blowing Through An Open Door Was Drawing Some Fumes And Spray Into The Surrounding Area - Near Southeast Corner Of Tank A Slight Irritation Was Noticeable
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Fair	Skim Handling Equipment In Operation - Main Exhaust Hood Good However Both Exhaust Hoods Over The Ends Of The Conveyor In Pit Were Poor Allowing Fumes To Enter Room - Slight Irritation Noticed - No Skin On Floor - HCl 1 ppm
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Poor	SAW NOT IN OPERATION
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	No Dust Visible In Area
	Rectifier Station	Mercury Vapor	Detector Tube	Fair	MERCURY VAPOR .01 mg/m ³ - Some Droplets Of Metallic Mercury Visible In Sink - Exhaust System Operating EXHAUST FAIR
	Potrooms - General	Dust & Fumes	Visual	Good	Slight Haze Visible In All Rooms Except Those Of Lines To 8 Which Were Clear Pot Cover Placement - Generally Good Pot Cover Condition - Generally Fair Small Amount Of Dust Visible Came From Courtyard Outside Storage Area
	Bath Storage	Dust	Visual & Sensory	Good	No Irritation - SEE NOTE 4 CAUSHER IN OPERATION - NEW EXHAUST SYSTEM INSTALLATION ALMOST COMPLETE - EXHAUST GOOD - SMALL AMOUNT OF DUST VISIBLE WAS COMING FROM COURTYARD OUTSIDE BUILDING SEE NOTE 4
	Bath Crushing	Dust	Visual-Smoke Tube	Good	

SURVEYOR

GAP

411082 0558

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Nov. 9, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER IN OPERATION - NO DUST VISIBLE COMING FROM ANY OF THE BAG FILTER UNITS
	Ore Unloading	Dust	Visual	Good	UNLOADING IN PROGRESS - SOME DUST VISIBLE IN AREA - DUST MAINLY CAUSED BY WIND BLOWING THROUGH BUILDING
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA
	Wheelabrator	Noise	Audio	Fair	NO FUMES VISIBLE NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	CLEANING EQUIPMENT IN OPERATION - SMALL AMOUNT OF DUST VISIBLE AROUND WHEELABRATOR - DUST VISIBLE ALONG ENTIRE LENGTH OF SNAKE CONVEYER - HEAVIEST DUST AT WEST END OF CONVEYER - EXHAUST HOOD AT END OF CONVEYOR FAIR
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PACKING OR UNPACKING OPERATIONS IN PROGRESS - FURNACE BUILDINGS WELL VENTILATED - CO 10 ppm
	Butt Unloading & Crushing	Dust	Visual	Good	NEITHER OPERATION IN PROGRESS - NO DUST VISIBLE
	Mixer Floor	Dust & Pitch Fumes	Visual	Poor	EXHAUST SYSTEM NOT IN OPERATION SMALL AMOUNT OF DUST VISIBLE IN AREA - FUMES VISIBLE IN AREA WHENEVER A MIXER IS DUMPED - AMOUNT OF FUMES RANGE FROM LIGHT TO HEAVY - BULK OF FUMES COMING FROM H-S CONVEYER - SMOKE OPER. OF HOT AIR HEATABLE IN AREA

SURVEYOR

CAR

411082 0559

INDUSTRIAL HYGIENE SURVEY

DATE: Nov. 9, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Poor	SOME WELD DUNE ON M-S EXHAUST HOOD - HOWEVER HEAVY FUMES STILL VISIBLE ESCAPING FROM HOOD PARTICULARLY WHEN A MIXER IS DUMPED - EXHAUST HOOD OVER CONVEYOR J-4 OPERATING - EXHAUST FAIR - NO FUMES VISIBLE ESCAPING FROM J-4
	Press Room	Fumes	Visual	Good	BOTH PRESSES OPERATING - SMALL AMOUNT OF FUMES VISIBLE WHEN MIX ENTERS PRESS - SLIGHT COCA OF HOT RICH NOTICEABLE IN BOTH ROOMS
	Carpenter Shop	Dust	Visual & Smoke Tube	Fair	TWO SAWS IN OPERATION CUTTING WOOD AND MARINITE EXHAUST SYSTEM OPERATING - EXHAUST GOOD - NO DUST VISIBLE INSIDE SHOP - HOWEVER OUTSIDE SHOP MARINITE DUST WAS AGAIN VISIBLE COMING FROM EXHAUST STACK OF DUST COLLECTOR
	Garage - General	Fumes CO	Visual Detector Tube	Good	NO EQUIPMENT IN OPERATION - NO FUMES VISIBLE AARSA NOT AS WELL VENTILATED AS USUAL CO 10 ppm
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	SEVERAL WELDING OPERATIONS IN PROGRESS - SMALL AMOUNT OF FUMES VISIBLE - NO IRRITATION NOTICED - EXHAUST HOODS WHICH WERE OPERATING WERE GOOD
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	LATHE IN OPERATION - NO DUST VISIBLE IN ROOM - EXHAUST SYSTEM OPERATING EXHAUST GOOD
	Blacksmith Shop	CO	Detector Tube	Fair	ONE GAS-FIRED FORGE OPERATING - IN AREA SURROUNDING FORGE CO 20 ppm - NOISE LEVEL IN AREA QUITE HIGH - AREA NOT AS WELL VENTILATED AS USUAL
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE 12 ppm - READING TAKEN DIRECTLY IN FRONT OF DEGREASER WITH EXHAUST HOOD DOOR CLOSED AND EXHAUST SYSTEM OPERATING - EXHAUST FAIR - UNIT IN USE AT TIME OF READING
	Atomizer - General	Dust	Visual	Good	No Dust Visible In Any Area - Water Visible In Septic Tank Area - No Door Noticeable

SURVEYOR

GMR

411082 0560

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Nov. 9, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	Good	IN GENERAL, AREA ORDERLY - NO SMOKE OR FUMES VISIBLE - NO FUMES VISIBLE - NO ODOR NOTICEABLE
	Sewage Treatment Plant:				
	General Area		Visual	Good	IN GENERAL, AREA ORDERLY NORTH AND SOUTH BEDS COVERED WITH DRIED SLUDGE CENTER BED CONTAINED SMALL AMOUNT OF DRIED SLUDGE FROM SAMPLING PROCEDURE
	Sludge drying beds		Visual	Good	OBSERVED AHEAD OF BAR SCREEN
	Influent to Treatment Plant		Visual	Good	INFLUENT TURBID
	Effluent of Chlorine Chamber		Visual	Fair	OBSERVED AFTER BARFLES - DUE TO MAINTENANCE WORK ON SYSTEM EFFLUENT CONTAINED A HIGHER SOLID CONTENT THAN USUAL - Cl_2 3.0 + ppm
	NOTES: 1. Weather was clear with temperature near 70°. Wind was from the south at 15 mph. 2. A plume of dust again was visible coming from the bag filter of the carbon grinding system. The amount of dust was higher than that observed last month. 3. A plume of dust again was visible coming from the electrostatic precipitator stack of the carbon grinding system. The density of this plume varied from light to heavy. 4. The courtyard between Bldg 18 and Bldg 37 was covered with a layer of finely powdered both material. The depth of this layer varied up to two inches. A strong gusty wind blowing through the courtyard stirred up a continuous cloud of this material which entered all nearby working areas.				

SURVEYOR

CHR

411082 0561

CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: OCT. 12, 1970

T.B. BOSE, JR. - 7

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE IN BUILDING GENERALLY CLEAR
	Furnace Area & Casting	HCl, HClO ₂ , SO ₂	Detector Tubes	Good	NO IRRITATION CL ₂ 0 ppm HCl 0 ppm CO 5 ppm
	Homogenizing Furnace	CO	Detector Tube	Good	NO FUMES VISIBLE - NO IRRITATION BATH FURNACES IN OPERATION FOR NO. 1 - CO ON FLOOR 5 ppm ON CATWALK 10 ppm FSE NO. 1 - CO ON FLOOR 10 ppm ON CATWALK 0 ppm
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	NO OIL VAPOR VISIBLE EXHAUST SYSTEM OPERATING - EXHAUST GOOD - NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE EXHAUST
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	GOOD - NO IRRITATION MAIN HANDLING EQUIPMENT IN OPERATION - EXHAUST SYSTEM OPERATING - EXHAUST HOOD IN AT WAS NOT IN ITS PROPER POSITION - EXHAUST GOOD - NO DUST OR FUMES VISIBLE IN ROOM - NO SPRAY ON FLOOR IN ROOM - NO IRRITATION
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	NO IRRITATION
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT IN OPERATION NO DUST VISIBLE IN AREA
	Rectifier Station	Mercury Vapor	Detector Tube	Good	MERCURY VAPOR 0.01 mg/m ³ - NO DIAPHERS OF METALLIC VISIBLE IN ROOM - EXHAUST SYSTEM OPERATING - EXHAUST FAIR
	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE VISIBLE IN ALL ROOMS EXCEPT THOSE OF LINES 7 & 8 WHICH WERE CLEAR PUT COVER PLACEMENT - GENERALLY GOOD PUT COVER PLACEMENT - GENERALLY FAIR
	Bath Storage	Dust	Visual & Sensory	Good	NO DUST VISIBLE NO IRRITATION
	Bath Crushing	Dust	Visual-Smoke Tube	Good	CRUSHER NOT IN OPERATION NO DUST VISIBLE

SURVEYOR

CAR

411082 0562

INDUSTRIAL HYGIENE SURVEY

DATE: OCT. 12, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER NOT IN OPERATION - BAG FILTERS NOT IN OPERATION - NO DUST VISIBLE
	Ore Unloading	Dust	Visual	Good	UNLOADING IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN AREA
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES VISIBLE COMING FROM TOP OF NO. 1 MIXER
	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	CRUSHING EQUIPMENT IN OPERATION - DUST VISIBLE ALONG ENTIRE LENGTH OF GREEN SAND CONVEYOR - HEAVIEST DUST VISIBLE AT WEST END OF CONVEYOR - EXHAUST FLYING AT WEST END OF CONVEYOR FAIR - SMALL AMOUNT OF DUST VISIBLE ALONG WHEELABRATOR
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE HEATING OR UNLOADING OPERATIONS IN PROGRESS - FURNACE BUILDINGS WELL VENTILATED - CO 10 PPM
	Butt Unloading & Crushing	Dust	Visual	Good	IN CRUSHER AREA - UNLOADING OPERATIONS NOW IN NEW LOCATION - EXHAUST SYSTEM OPERATING - EXHAUST GOOD DUST VISIBLE IN AREA COME FROM THE LOADING OF CRUSHER MATERIAL
	Mixer Floor	Dust & Pitch Fumes	Visual	Poor	SMALL AMOUNT OF DUST VISIBLE IN AREA - FUMES VISIBLE IN AREA WHEREVER A MIXER IS DOWNED FUMES RISING FROM M-S CONVEYOR ALSO ENTER THE AREA - STRONG COLOR OF HOT PITCH NOTICEABLE IN AREA

SURVEYOR

CAR

411082 0563

INDUSTRIAL HYGIENE SURVEY

DATE: OCT. 12, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	POOR	Fumes Visible Coming From Conveyor M-5 Whenever A Miner Is Dumped - M-5 EXHAUST HOOD STILL NOT OPERATING - EXHAUST HOOD OVER CONVEYOR J-4 OPERATING - EXHAUST FAIR - NO FUMES VISIBLE ESCAPING FROM J-4
	Press Room	Fumes	Visual	Good	At 11 AM PRESS OPERATING - SMALL AMOUNT OF FUMES VISIBLE WHENEVER MIN ENTERS A PASS - SLIGHT GLOSS OF HOT PITCH NOTICEABLE IN BOTH ROOMS
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	ONE SAW OPERATING - NO DUST VISIBLE
	Garage - General	Fumes CO	Visual Detector Tube	Good	EXHAUST SYSTEM OPERATING - EXHAUST GOOD NO EQUIPMENT IN OPERATION - NO FUMES VISIBLE AREA WELL VENTILATED - CO 0.04 ppm
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO ACID MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	SEVERAL WELDING OPERATIONS IN PROGRESS - SOME FUMES VISIBLE - NO IRRITATION - EXHAUST HOODS WHICH WERE OPERATING WERE GOOD - BUILDING WELL VENTILATED NO EQUIPMENT IN OPERATION
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	NO DUST VISIBLE EXHAUST SYSTEM GOOD
	Blacksmith Shop	CO	Detector Tube	Good	COAL-FIRED FORGE IN OPERATION - IN AREA NEAR FORGE CO 10 ppm - EXHAUST HOOD ON FORGE FAIR AREA WELL VENTILATED
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE 5 ppm - READING TAKEN DIRECTLY IN FRONT OF DEGREASER WITH EXHAUST HOOD DIRECTLY AHEAD EXHAUST SYSTEM OPERATING - EXHAUST FAIR UNIT IN USE AT TIME OF READING
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN ANY AREA - WATER VISIBLE IN SEPTIC TANK AREA - NO OTHER NOTICEABLE

SURVEYOR

GHR

411082 0564

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: OCT. 12, 1976

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	Good	IN GENERAL, AREA ORDERLY - NO SMOKE OR FIRES VISIBLE - NO FUMES VISIBLE - NO ODOR NOTICEABLE
	Sewage Treatment Plant:				
	General Area		Visual	Good	IN GENERAL, AREA ORDERLY - A STRONGER ODOR THAN USUAL WAS NOTICEABLE IN THE AREA
	Sludge drying beds		Visual	Good	SEVERAL INCHES OF DRIED SLUDGE COVERED THE NORTH BED - CENTER BED CONTAINED A SMALL AMOUNT OF DRYING SLUDGE FROM WEEKLY SAMPLING - SOUTH BED WAS CLEAN
	Influent to Treatment Plant		Visual	Good	OBSERVED AHEAD OF BAR SCREEN
	Effluent of Chlorine Chamber		Visual	Good	INFLUENT TURBID OBSERVED AFTER BAFFLES - SOLID CONTENT VERY LOW - CHLORINE RESIDUE 3.0 + ppm
	NOTES: 1. Weather was partly cloudy with the temperature in the 60's. Wind was from the south at 10-20 mph. 2. At irregular intervals dust was visible coming from the bag filter of the carbon grinding system. The amount of dust was the lowest observed in several months. 3. A plume of dust was visible coming from the electrostatic precipitator stack of the carbon grinding system. The density of this plume varied from light to heavy.				

SURVEYOR

GHR

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY ~~7-B~~ 7-B Bonney-7 DATE: Sept. 9, 1910

SURVEYOR

C-14.R.

411082 0566

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: SEPT. 7, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER OPERATING - BOTH UNITS OPERATING NO DUST VISIBLE COMING FROM EITHER UNIT
	Ore Unloading	Dust	Visual	Good	UNLOADING IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN AREA
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	CLEANING EQUIPMENT IN OPERATION - SMALL AMOUNT OF DUST VISIBLE NEAR WHEELABRATOR AND WEST END OF GROUND SINKER CONVEYER - MODERATE AMOUNT OF DUST VISIBLE ALONG ENTIRE LENGTH OF GROUND SINKER CONVEYER DUST VISIBLE ONLY IN AREAS WHERE PICKING OR UNPACKING OPERATIONS IN PROGRESS - FUMES
	Ring Furnace	Dust CO	Visual Detector Tube	Good	BUILDINGS WELL VENTILATED - CO. DRAIN NEITHER OPERATION IN PROGRESS - SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS - EXHAUST ALSO
	Butt Unloading & Crushing	Dust	Visual	Fair	STILL MISSING IN UNLOADING AREA SMALL AMOUNT OF DUST VISIBLE IN AREA - FUMES VISIBLE IN AREA WHENEVER A MIXER IS DUMPED - FUMES ENTER AREA FROM M-S CONVEYER - SINKER OR NOT PTOV-noticeable
	Mixer Floor	Dust & Pitch Fumes	Visual	Poor	

SURVEYOR

CJR

411082 0567

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: SEPT. 9, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	POOR	HEAVY FUMES VISIBLE ESCAPING FROM CONVEYOR M-S WHENEVER A MIXER IS DUMPED - M-S EXHAUST HODS STILL NOT OPERATING EXHAUST HODS OVER CONVEYOR J-4 OPERATING - EXHAUST FAIR - NO FUMES VISIBLE ESCAPING FROM J-4
	Press Room	Fumes	Visual	Good	BOTH PASSES OPERATING - SMALL AMOUNTS OF FUMES VISIBLE IN BOTH ROOMS WHEN MIX ENTERS PASSES - SMOKE DUE TO HOT IRON NOTICIBLE IN BOTH ROOMS
	Carpenter Shop	Dust	Visual & Smoke Tube	FAIR	THE SHOPS OPERATING - NO DUST VISIBLE AROUND SAW CUTTING DUE TO EXHAUST SYSTEM GOOD - NO DUST VISIBLE AROUND DRY SAW WHICH WAS CUTTING MARINITE - EXHAUST SYSTEM GOOD - HOWEVER DUE TO THE FACT MARINITE DUST WAS VISIBLE COMING FROM THE EXHAUST STACK OF THE DRY SAW DUST COLLECTOR
	Garage - General	Fumes CO	Visual Detector Tube	Good	NO FUMES VISIBLE - NO EQUIPMENT IN OPERATION ALL ACAS AND WINDOWS IN BUILDING OPEN CO 5 ppm
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO ACID MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	SEVERAL WELDING OPERATIONS IN PROGRESS - SMALL AMOUNTS OF FUMES VISIBLE - NO IRRITATION - EXHAUST HODS WHICH WERE OPERATING WERE GOOD - AREA WELL VENTILATED
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION NO DUST VISIBLE EXHAUST SYSTEM GOOD
	Blacksmith Shop	CO	Detector Tube	FAIR	ONE GAS-FAIRED FUME OPERATING - NOISE LEVEL FAIRLY HIGH - AREA FAIRLY WELL VENTILATED CO 20 ppm
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE - CHLOR - READING TAKEN DIRECTLY IN FRONT OF DEGREASER WITH EXHAUST HODS DIRT CLOSED AND EXHAUST SYSTEM OPERATING - EXHAUST FAIR DUST NOT IN USE AT TIME OF READING
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN ANY AREA - WATER VISIBLE IN SEPTIC TANK AREA - NO COCA NOTICIBLE

SURVEYOR

C.H.R.

411082 0568

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Sept. 2, 1978

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	Good	IN GENERAL, AREA CROZALY - NO SMOKE OR FUMES VISIBLE - NO FUMES VISIBLE - NO ODOR NOTICABLE
	Sewage Treatment Plant:				
	General Area		Visual	Good	IN GENERAL AREA WAS CROZALY - PILE OF DRIES SLUDGE REMOVED FROM DRYING BEDS STILL HAS NOT BEEN REMOVED - PART OF AREA MOWED - REMAINDER WILL BE MOWED NEXT WEEK
	Sludge drying beds		Visual	Fair	NO SMOKE VISIBLE IN DRYING BEDS - SMALL AMOUNT OF DRIES SLUDGE VISIBLE IN CENTER BED FROM WEEKLY SAMPLING PROCEDURES - GRASS AND WEEDS BEGINNING TO GROW IN ALL BEDS
	Influent to Treatment Plant		Visual	Good	OBSERVED AHEAD OF BAR SCREEN
	Effluent of Chlorine Chamber		Visual	Poor	EFFLUENT SLIGHTLY TURBID OBSERVED AFTER BAR SCREENS - SOLIDS CONTENT HIGHEST SINCE INSPECTION STARTED CHLORINE PRESENT - 2.2 ppm
	NOTES: 1. Weather was clear with temperature in the 90's. Wind was from the south at 10 mph. 2. A heavy plume of dust still was visible coming from the bag filter of the carbon grinding system. The plume was about equal to that observed last month. 3. A plume of dust also was visible coming from the electric dust precipitator stack of the carbon grinding system. The density of the plume was less than that of the dust precipitator stack. It was light. 4. On September 10th while running through the dust plant fairly heavy fumes were visible in the area of No. 1 and No. 2 D.C. units. The fumes were caused by action of a high magnesium content which had been added from furnace No. 1 onto the floor. This steam was hot and glowing and emitting dense white fumes. In the area where these fumes were fairly heavy concentration of the steam and dust was noticeable.				

411082 0569

SURVEYOR CARL

CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

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Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE IN BUILDING GENERALLY CLEAR - SMALL AMOUNTS OF FUMES VISIBLE DURING FURNACE FLUXING - NO IRRITATION
	Furnace Area & Casting	HCl	Detector Tubes	Good	ON 0.0PM HCl 0.0PM CO 5.0PM NO FUMES VISIBLE - NO IRRITATION
	Homogenizing Furnace	CO	Detector Tube	Good	BOTH FURNACES IN OPERATION - SLIGHT ODOR OF NATURAL GAS NOTICEABLE AROUND FEE No. 1 FEE No. 1 - CO 0.0PM ON OUTSIDE - ON OUTSIDE FEE No. 2 - CO 0.0PM ON OUTSIDE - ON OUTSIDE
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	NO OIL VAPOR VISIBLE
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	EXHAUST SYSTEM OPERATING - EXHAUST GOOD - NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE EXHAUST HOOD - NO IRRITATION
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Fair	SKIM HANDLING EQUIPMENT IN OPERATION - EXHAUST SYSTEM OPERATING - EXHAUST HOOD OVER SKIMMING EQUIPMENT GOOD - SMALL FUMES NOTICABLE ON CONVEYOR IN SKIM ROOM - SMALL AMOUNTS OF FUMES AND HCl VISIBLE IN AIR OPERATING - SMALL AMOUNTS OF FUMES AND HCl VISIBLE IN AIR
	Brick Cutting Area	Dust from Brick Saw	Visual	Poor	SAW IN OPERATION CUTTING BRICKS - LOTS OF DUST CREATED DURING THIS OPERATION WAS NOTICED BY AN EXHAUST FAN - HOWEVER THE WIND BLEW THE DUST BACK INTO THE AREA THROUGH THE CRACKS - DUST ALSO VISIBLE OUTSIDE BUILDING (SEE NOTE 4)
	Rectifier Station	Mercury Vapor	Detector Tube	Good	MERCURY VAPOR 0.0mg/m ³ - NO DROPLETS OF METALLIC MERCURY VISIBLE IN ROOM - EXHAUST SYSTEM OPERATING - EXHAUST FAIR
	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE VISIBLE IN ALL ROOMS EXCEPT THOSE ON LINES 701 WHICH WERE CLEAR
	Bath Storage	Dust	Visual & Sensory	Good	POT COVER PLACEMENT - GENERALLY GOOD BUT COVER CRACKED - GENERALLY FAIR NO DUST VISIBLE
	Bath Crushing	Dust	Visual-Smoke Tube	Fair	NO IRRITATION CRUSHER OPERATING - INTERIOR OF BUILDING FAIRLY DUSTY - EXHAUST HOODS OPERATING - EXHAUST FAIR

SURVEYOR

GNS

411082 0570

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: AUG. 11, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER OPERATING - BOTH UNITS OPERATING NO DUST VISIBLE COMING FROM EITHER UNIT
	Ore Unloading	Dust	Visual	Good	UNLOADING IN PROGRESS - ONLY A SMALL AMOUNT OF DUST VISIBLE IN AREA
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Fair	SMALL AMOUNT OF DUST VISIBLE IN AREA - MODERATE AMOUNT OF FUMES VISIBLE COMING FROM MIXER NO. 1 SLIGHT ODOR OF HOT PITCH NOTICEABLE IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	GOODMAN SMOKE CHIMNEY NOT IN OPERATION - FAIR AMOUNT OF DUST VISIBLE FROM ELECTRODES MOVING ALONG CONVEYOR M-14 TOWARD WHEELABRATOR
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE FIXING OR UNPACKING OPERATIONS IN PROGRESS - FURNACE BUILDINGS WELL VENTILATED - CO 5 ppm
	Butt Unloading & Crushing	Dust	Visual	Fair	NEITHER OPERATING IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN UNLOADING AREA - EXHAUST HOOD STILL MISSING IN UNLOADING AREA - DUST ALSO VISIBLE IN CRUSHER AREA
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - FUMES VISIBLE IN AREA WHEN MIXERS ARE DUMPED - SLIGHT ODOR OF HOT PITCH NOTICEABLE IN AREA

SURVEYOR

CAR

411082 0571

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: AUG 11, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Fair	Fumes Visible Escaping From Conveyor M-5 When A Mixer Is Dumped - M-5 Exhaust Hood Still Not Operating - Exhaust Hood Over Conveyor - 4 OPERATING EXHAUST FAIR -
	Press Room	Fumes	Visual	Good	Small Amounts Of Fumes Visible In Thin Rooms When Min Enters Press - Slight Odor Of Hot Air Not Noticeable In Both Rooms - Both Presses Operating
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	No Equipment In Operation
	Garage - General	Fumes CO	Visual Detector Tube	Good	Exhaust System Operating - Exhaust Good No Fumes Visible - No Equipment In Operation - CO 10 ppm
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	1 Welding Operations In Progress - Small Amounts Of Fumes Visible - No Irritation - Exhaust Hoods Which Were Operating Were Good - Area Well Ventilated
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	No Equipment In Operation No Dust Visible Exhaust System Good
	Blacksmith Shop	CO	Detector Tube	Good	No Forges In Operation
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	Trichloroethylene 32 ppm - Reading Taken Directly In Front Of Degreaser With Exhaust Hood Over Chen And Exhaust System Operating - Exhaust Fair Unit In Use At Time Of Reading
	Atomizer - General	Dust	Visual	Good	No Dust Visible In Any Area - Water Visible In Septic Tank Area - No Odor

SURVEYOR

NHR

411082 0572

INDUSTRIAL HYGIENE SURVEY

DATE: 11/11/70

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	Good	Area, in general orderly - No smoke or fires visible - No fumes visible - No odor
	Sewage Treatment Plant:				
	General Area		Visual	Good	IN GENERAL, AREA WAS ORDERLY AREA WILL SOON NEED TO BE MAINTAINED DRUG SLUDGE REMOVED FROM ALL AREAS HOWEVER THE DRUG SLUDGE HAS NOT BEEN REMOVED FROM THE AREA - CENTER ISN CONTAINS A SMALL AMOUNT OF DRUG SLUDGE DUE TO RECENT SAMPLING OPERATIONS OBSERVED AHEAD OF BNA SCREEN
	Sludge drying beds		Visual	Good	
	Influent to Treatment Plant		Visual	Good	INFLUENT SLIGHTLY TURBID
	Effluent of Chlorine Chamber		Visual	Good	OBSERVED AFTER Baffles - VERY SMALL AMOUNT OF SOLIDS VISIBLE CHLORINE PRESENT - 2.0 PPM
	NOTES: 1. Weather was partly cloudy with the temperature in the 90's and a breeze from the north at 10 mph. 2. A heavy plume of dust still was visible coming from the bag filter of the carbon grinding system. 3. A plume of dust also was visible coming from the static electric precipitator stack of the carbon grinding system. The density of this plume was less than at the time of this observation it was light. 4. An RFA to purchase and install a dust collection system for this dust has been submitted to Pittsburgh. 5. A flame arrester still has not been installed on the digester gas vent at Alley 70.				

411082 0573

SURVEYOR CHB

CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

788-100, 1218, ~~Rockdale Works~~
 TB Bang - 7 f DATE: JULY 9, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	Atmosphere in Building Generally Clear - Small Amounts of Fumes Visible During Furnace Flaring - No Irritation
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	On 10 ppm HCl 10 ppm CO 10 ppm
	Homogenizing Furnace	CO	Detector Tube	Good	No Fumes Visible - No Irritation No. 2 Fire Air in Operation - Strong Ozone or Natural Gas Noticeable Around Fire No. 1
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	Fire No. 1 - CO OFFICE 10 ppm ON CATWALKS
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	No Oil Vapor Visible Exhaust System Operating - Exhaust Good - No Fumes or Caustic Spray Visible Outside
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Poor	Exhaust Hood - No Irritation Skim Handling Equipment in Operation - Exhaust System Operating - Exhaust Hood Over Grates - Handling Equipment - Small Exhaust Hood At End of Grates in Air Not Drawing White Fumes Visible in Room - Sweet Irritated - HCl - 10 ppm
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	Saw Not in Operation No Dust Visible in Room
	Rectifier Station	Mercury Vapor	Detector Tube	Good	Mercury Vapor 0.01 mg/m ³ - No Droplets of Metallic Mercury Visible in Room - Exhaust System Operating - Exhaust Fair
	Potrooms - General	Dust & Fumes	Visual	Good	Slight Haze Visible in All Rooms Except Those of Lines 1 & 2 which were clear At Cover Placement - Generally Good But Cover Placement - Generally Fair
	Bath Storage	Dust	Visual & Sensory	Good	No Dust Visible
	Bath Crushing	Dust	Visual-Smoke Tube	Fair	No Irritation Crusher Operating - Interior of Building Fair Dusty - Both Exhaust Units Operating Exhaust Fair

SURVEYOR

CMR

411082 0574

INDUSTRIAL HYGIENE SURVEY

DATE: JULY 9, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	Good	AREA, IN GENERAL, ORDEALY - NO SMOKE OR FIRES VISIBLE - NO FUMES VISIBLE - NO ODOR NOTICEABLE
	Sewage Treatment Plant:				
	General Area		Visual	Good	IN GENERAL, AREA WAS ORDEALY ALL BEDS STILL COVERED WITH A LAYER OF DRIED SLUDGE - NO ODOR NOTICEABLE OBSERVED AHEAD OF BAR SCREEN
	Sludge drying beds		Visual	Good	INFLUENT SLIGHTLY TURBID OBSERVED AFTER BAFFLES - VERY SMALL AMOUNT OF SOLIDS VISIBLE CALCULINE PRESENT - CLx 1.8 ppm
	Influent to Treatment Plant		Visual	Good	
	Effluent of Chlorine Chamber		Visual	Good	
	NOTES: 1. Weather was partly cloudy with the temperature in the 90's. Wind was from the southwest at 5-10 mph. a plume of dust was still visible coming from the Dresser unit by filter. The plume 2. was heavier than that observed last month. a heavy plume of dust still was visible coming from the bag filter of the carbon grinding system. 3. This plume was heavier than that observed last month. of the carbon grinding system. a plume of dust also was visible coming from electrostatic precipitator stack. It varied from light to very heavy.				

411082 0575

SURVEYOR

CJR

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JULY 9, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	POOR	CRUSHER OPERATING - BATH UNITS OPERATING EAST UNIT - NO DUST VISIBLE COMING FROM EXHAUST WEST UNIT - FAIRLY HEAVY PLUME OF DUST VISIBLE COMING FROM EXHAUST
	Ore Unloading	Dust	Visual	Good	UNLOADING IN PROGRESS ONLY A SMALL AMOUNT OF DUST VISIBLE
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Wheelabrator	Noise	Audio	FAIR	NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - NO FUMES VISIBLE COMING FROM THE MIXERS - ONLY A SLIGHT DREG OF HOT PITCH NOTICEABLE IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	CLEANING EQUIPMENT NOT IN OPERATION SMALL AMOUNT OF DUST VISIBLE IN AREA
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PACKING OR UNPACKING OPERATIONS IN PROGRESS - FURNACE BURNERS WELL VENTILATED - CO 5 ppm
	Butt Unloading & Crushing	Dust	Visual	POOR	NEITHER OPERATION IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN UNLOADING AREA - EXHAUST HOOD STILL MISSING IN UNLOADING AREA - EXTREMELY HEAVY DUST CONCENTRATED VISIBLE IN CRUSHER AREA DUE TO OVERFLOWING CRUSHER
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - NO FUMES VISIBLE - NO MIXERS BEING DUMPED - NO MIX ON M-5 CONVEYER - UNABLE TO OBTAIN READING IN M-5 EXHAUST HOOD OPERATING - SMOKE ONLY FROM DUMPING MIXERS IN AREA

411082 0576

SURVEYOR

C.H.R.

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JULY 9, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	No Fumes Visible - No Mix On Conveyors M-5 OR J-4 - Exhaust Hood Over J-4 Operating Exhaust Fair
	Press Room	Fumes	Visual	Good	Neither Press In Operation - No Fumes Visible Slight Odor Of Hot Pitch Noticeable In Area
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	Two Saws Operating - No Dust Visible Exhaust System Operating - Exhaust Good
	Garage - General	Fumes CO	Visual Detector Tube	Fair	No Fumes Visible - CO 25 ppm - Reading Taken Near Four Truck Which Has Its Engine Idling - This Was The Only Equipment Operating - Area Well Ventilated
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	Several Welding Operations In Progress - Small Amounts Of Fumes Visible - No Irritation - Exhaust Hoods Which Were Operating Were Good - Area Well Ventilated
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	Lathe Operating - Exhaust System Operating Exhaust Good - No Dust Visible Outside Of Exhaust Hood
	Blacksmith Shop	CO	Detector Tube	Good	No Forges Operating - CO 10 ppm Area Well Ventilated
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	Trichloroethylene 8 ppm - Reading Taken Directly In Front Of Degreaser With Exhaust Hood On And Exhaust System Operating - Exhaust Fair Unit In Use At Time Of Reading
	Atomizer - General	Dust	Visual	Good	No Dust Visible In Any Area - No Water Visible In Septic Tank Area - No Odor Noticeable

SURVEYOR CH/R

411082 0577

CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

TBA, ~~not~~, MOC, R. ~~not~~ - 2
Atkins - 7 TB Dwyer - 7 DATE: JUNE 10, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	Atmosphere In Building Generally Clear - Small Amounts Of Fumes Visible During Furnace Flaring - No Irritation
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	Cl ₂ 0.0 ppm HCl 0.0 ppm CO 0.0 ppm No Fumes Visible - No Irritation
	Homogenizing Furnace	CO	Detector Tube	Good	Bottom Furnaces Operating - Strong Odor Of Natural Gas Noticeable Around Furnace No. 1. For No. 1 - CO on floor 0.0 ppm on Catwalk 0.0 ppm For No. 2 - CO on floor 0.0 ppm on Catwalk 0.0 ppm
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No Oil Vapor Visible
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	Exhaust System Operating - Exhaust System Good No Fumes Or Caustic Spray Visible Outside Exhaust Hood - No Irritation
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	Saw Handling Equipment Not In Operation - Exhaust System Operating - Exhaust Good Except For The Hood In Pit Where Was No. 1 - Small Amount Of Skin On Floor In North End Of Room - No Irritation - No CO seen
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	Saw Not In Operation No Dust Visible In Room
	Rectifier Station	Mercury Vapor	Detector Tube	Fair	Mercury Vapor 0.0 mg/m ³ - Droplets Of Metallic Mercury Visible On Table In Room - Exhaust System Operating - Exhaust System Fair
	Potrooms - General	Dust & Fumes	Visual	Good	Slight Haze Visible In All Rooms Except Those On Line 703 Which Were Clear Pot Cover Placement - Generally Good Pot Cover Condition - Generally Fair
	Bath Storage	Dust	Visual & Sensory	Good	No Dust Visible No Irritation
	Bath Crushing	Dust	Visual-Smoke Tube	Good	Crusher Not In Operation - No Dust Visible Exhaust System Fair

SURVEYOR

CAB

411082 0578

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JUNE 10, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	CRAUSHER NOT IN OPERATION - BOTH UNITS OPERATING
	Ore Unloading	Dust	Visual	Good	NO DUST VISIBLE COMING FROM EITHER UNIT SMALL AMOUNT OF DUST VISIBLE - DUST MAINLY CAUSED BY WIND BLOWING THROUGH THE BUILDING
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Wheelabrator	Noise	Audio	FAIR	NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	NEITHER OPERATION IN PROGRESS
					SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Poor	SMALL AMOUNT OF DUST VISIBLE IN AREA - HEAVY AMOUNTS OF FUMES VISIBLE COMING FROM MIXERS No. 1 & 2 - SMOKE ODOR OF HOT PITCH NOTICEABLE IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	CLEANING EQUIPMENT NOT IN OPERATION
	Ring Furnace	Dust CO	Visual Detector Tube	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA DUST VISIBLE ONLY IN AREAS WHERE PACKING OR UNPACKING OPERATIONS IN PROGRESS - FURNACE BUILDINGS WELL VENTILATED - CO LOW
	Butt Unloading & Crushing	Dust	Visual	Good	NEITHER OPERATION IN PROGRESS - SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS - EXHAUST HOOD STILL MISSING IN UNLOADING AREA
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - NO FUMES VISIBLE - NO MIXERS BEING DUMPED - NO MIX OF CONVEYOR M-5 - SLIGHT ODOR OF HOT PITCH NOTICEABLE IN AREA

411082 0579

SURVEYOR

CAR

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JUNE 10, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	No Fumes Visible - No Mix On Conveyors M-5 OR J-1 - Unable To Determine If M-5 Exhaust Hood Operating - J-1 Exhaust Hood Operating - Exhaust Fair
	Press Room	Fumes	Visual	Good	NEITHER PRESS IN OPERATION - NO FUMES VISIBLE SLIGHT ODOR OF HOT AIRC. NOTICEABLE IN AREA
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	ONE SAW OPERATING - NO DUST VISIBLE
	Garage - General	Fumes CO	Visual Detector Tube	Good	EXHAUST SYSTEM OPERATING - EXHAUST GOOD NO EQUIPMENT IN OPERATION - NO FUMES VISIBLE AREA WELL VENTILATED - CO 0.04PM
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	No Welding Operations In Progress - No Fumes Visible No Irritation - Exhaust Hoods Which Were Operating Were Good - Area Well Ventilated
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	No Equipment In Operation - No Dust Visible EXHAUST SYSTEM GOOD
	Blacksmith Shop	CO	Detector Tube	Good	ONE GAS-PIPED FORGE OPERATING - CO 10.0PM AREA WELL VENTILATED
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE 10.0PM - READING TAKEN DIRECTLY IN FRONT OF DEGREASER WITH EXHAUST HOOD DOOR OPEN AND EXHAUST SYSTEM OPERATING - EXHAUST FAIR UNIT NOT IN USE AT TIME OF READING
	Atomizer - General	Dust	Visual	Good	No Dust Visible In Any Area - Water Visible In Septic Tank Area - No Odor Noticeable

SURVEYOR CMB

411082 0580

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	Good	AREA, IN GENERAL, DREARY - NO FIRES BURNING NO SMOKE VISIBLE - NO FUMES VISIBLE - NO ODOR NOTICEABLE
	Sewage Treatment Plant:				
	General Area		Visual	Good	IN GENERAL, AREA WAS DREARY ALL BEDS CONTAINED APPROXIMATELY 4 INCHES OF DRYED SLUDGE - NO ODOR NOTICEABLE
	Sludge drying beds		Visual	Good	OBSERVED AREA OF BAR SCREEN
	Influent to Treatment Plant		Visual	Good	INFLUENT SLIGHTLY TURBID
	Effluent of Chlorine Chamber		Visual	Poor	OBSERVED AFTER BAPPLES - CONTAINED A HIGH CONCENTRATION OF SOLIDS - CHLORINE PRESENT Ch 1.1 ppm
	NOTES: 1. Weather was cloudy to partly cloudy with the temperature in the 80's. Wind was from the south at 10-20 mph.				
	2. A small amount of dust was visible escaping from the Process unit by filter.				
	3. A fairly heavy plume of dust was visible coming from bag filter of the carbon grinding system.				
	A small plume of dust also was visible coming from the electrostatic precipitator stack of the carbon grinding system.				

411082 0581

CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE IN BUILDING GENERALLY CLEAR - SMALL AMOUNTS OF FUMES VISIBLE DURING RANAGE FLUXING - NO IRRITATION
	Furnace Area & Casting	CO, HCl, SO ₂	Detector Tubes	Good	CO 0.0ppm HCl 0.0ppm CO 5ppm
	Homogenizing Furnace	CO	Detector Tube	Good	NO FUMES VISIBLE - NO IRRITATION HLM FURNACE OPERATING - STANDING OVER NATURAL GAS NOTICABLE FLAMING FURNACE NO. 1 AL 1 FCS - CO IN FURNACE 0.0ppm CO IN CHIMNEY 0.0ppm NO 1 FCS - CO IN FURNACE 0.0ppm CO IN CHIMNEY 0.0ppm
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	NO OIL VAPOR VISIBLE EXHAUST SYSTEM OPERATING - EXHAUST SYSTEM GOOD
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE EXHAUST HCL - NO IRRITATION
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	SKIM HANDLING EQUIPMENT IN OPERATION - NO DUST OR FUMES VISIBLE OUTSIDE EXHAUST HCL - EXHAUST SYSTEM GOOD EXCEPT THAT ON HCL IN PIT WHICH WAS AIR - DUST OR FUMES VISIBLE COMING FROM EXHAUST SYSTEM STACK - NO IRRITATION - HCL 0.0ppm SAW NOT IN OPERATION
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	NO OTHER DUST VISIBLE IN ROOM
	Rectifier Station	Mercury Vapor	Detector Tube	Good	MERCURY VAPOR 0.0mg/m ³ - NO DROPLETS OF METALLIC MERCURY VISIBLE IN ROOM - EXHAUST SYSTEM OPERATING - EXHAUST FAIR
	Potrooms - General	Dust & Fumes	Visual	Fair	SLIGHT HAZE VISIBLE IN ALL ROOMS EXCEPT THOSE ON LINES 10-11 WHICH WERE CLEAR AND THESE ON LINES 5 WHICH WERE VERY SMOKY BUT COVER PLACEMENT - GENERALLY GOOD AT COVER PLACEMENT - GENERALLY FAIR
	Bath Storage	Dust	Visual & Sensory	Good	NO DUST VISIBLE NO IRRITATION
	Bath Crushing	Dust	Visual-Smoke Tube	Fair	CRUSHER OPERATING - INTERIOR OF BUILDING FAIRLY DUSTY - MOST OF DUST CAUSED BY A STRONG WIND BLOWING THROUGH THE BUILDING - EXHAUST SYSTEM OPERATING - EXHAUST FAIR

SURVEYOR

CAR

411082 0582

INDUSTRIAL HYGIENE SURVEY

DATE: MAY 8 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER OPERATING - BOTH UNITS OPERATING NO DUST VISIBLE COMING FROM EITHER UNIT
	Ore Unloading	Dust	Visual	Good	SMALL AMOUNT OF DUST VISIBLE - DUST MAINLY CAUSED BY A STRONG WIND BLOWING THROUGH THE BUILDING
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Fair	SMALL AMOUNT OF DUST VISIBLE IN AREA - MODERATE AMOUNTS OF FUMES VISIBLE COMING FROM MIXERS No. 1 & No. 2 - FAIRLY STRONG OXIDE OF NITRUS NOTICEABLE IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	CLEANING EQUIPMENT NOT IN OPERATION SMALL AMOUNT OF DUST VISIBLE IN AREA
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PACKING OR UNPACKING OPERATIONS IN PROGRESS - FURNACE BUILDINGS WELL VENTILATED - CO. OXIDE
	Butt Unloading & Crushing	Dust	Visual	Good	NEITHER OPERATING IN PROGRESS - SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS - EXHAUST HOOD STILL MISSING IN UNLOADING AREA
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - FUMES VISIBLE IN AREA WHEN A MIXER IS UNLOADED - HEAVIEST CONCENTRATION OF FUMES IS AT EAST END OF FLOOR NEAR M-5 CONVEYER - FAIRLY STRONG ONE OF HOT PITCH NOTICEABLE

SURVEYOR

CAR

INDUSTRIAL HYGIENE SURVEY

DATE: May 8, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Poor	M-5 EXHAUST HOOD STILL NOT OPERATING - FUMES VISIBLE RISING FROM M-5 EACH TIME A MINERAL DUMPED - NO FUMES VISIBLE ESCAPING FROM J-4 EXHAUST HOOD - EXHAUST FAIR
	Press Room	Fumes	Visual	Good	ONLY HPM PRESS OPERATING - SMALL AMOUNT OF FUMES VISIBLE WHEN MIX ENTERS PRESS - SLIGHT ODOOR OF HOT PITCH NOTICEABLE IN AREA
	Carpenter Shop	Dust	Visual & Smoke Tube	Fair	HAND SAW OPERATING - CUTTING BLOCKS OF ASBESTOS INSULATION - DUST CREATED DURING SAWING REMOVED BY EXHAUST SYSTEM - EXHAUST GOOD - SMALL AMOUNT OF DUST VISIBLE IN AREA CREATED DURING HANDING OF ASBESTOS
	Garage - General	Fumes CO	Visual Detector Tube	Good	NO EQUIPMENT OPERATING - NO FUMES VISIBLE - AREA WELL VENTILATED - CO 0 ppm
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No ACID MIST VISIBLE No IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	ONLY ONE WELDING OPERATED IN PROGRESS - SMALL AMOUNT OF FUMES VISIBLE - NO IRRITATION EXHAUST HOODS WHICH WERE OPERATING WERE GOOD DUST WELL VENTILATED NO EQUIPMENT IN OPERATION - NO DUST
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	VISIBLE - EXHAUST SYSTEM GOOD ONE GAS-APRED FUME AND ONE COAL FUME OPERATING EXHAUST SYSTEM OF COAL FUME FAIR - CO AROUND COAL FUME 15 ppm - AREA WELL VENTILATED
	Blacksmith Shop	CO	Detector Tube	Good	TRICHLOROETHYLENE 10 ppm - READING TAKEN DIRECTLY IN FRONT OF DEGREASER WITH EXHAUST HOOD DIA OPEN AND EXHAUST SYSTEM OPERATING - EXHAUST FAIR UNIT IN USE AT TIME OF READING
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	
	Atomizer - General	Dust	Visual	Good	No DUST VISIBLE IN ANY AREA - NO WATER VISIBLE IN SEPTIC TANK AREA - NO ODOOR NOTICEABLE

SURVEYOR

C.H.R.

411082 0584

INDUSTRIAL HYGIENE SURVEY

DATE: MAY 2, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	Good	Area, in General, orderly - No Fires Burning No Smoke Visible - No Fumes Visible - No Bad Smell - No Ignition
	Sewage Treatment Plant:				
	General Area		Visual	Good	All Dead or Dying Shrubs Removed - Other Shrubs Trimmed - Grass in Area Mowed
	Sludge drying beds		Visual	Good	No Sludge
	Influent to Treatment Plant		Visual	Good	All Weeds Removed From Beds Observed Ahead of Bar Screen
	Effluent of Chlorine Chamber		Visual	Good	Influent Slightly Turbid Observed After Barriers - Effluent Clear O ₂ Present - Approximately 1 ppm
	NOTES: 1. Weather was cloudy to partly cloudy with the temperature in the 70's. Wind was from the south at 25-30 mph.				
	2. A moderate amount of dust was visible seeping from the Pressure unit bag filter				
	3. An almost continuous plume of dust was coming from the electrostatic precipitator stack of the carbon grinding system.				

411082 0585

SURVEYOR

C.H.R.

CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: APRIL 14, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	Atmosphere in Building Generally Clear - Small Amounts of Fumes Visible During Furnace Firing
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	Cl ₂ .0 ppm HCl .0 ppm CO 10 ppm
	Homogenizing Furnace	CO	Detector Tube	Good	No Fumes Visible - No Irritation Both Furnaces Operating - Strong Odor of Natural Gas Detectable on Catwalk of Furnace No. 1 on Catwalk .0 ppm No. 1 FEE - CO on floor 5 ppm No. 2 FEE - CO on floor 5 ppm on Catwalk .0 ppm
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No Oil Vapor Visible
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	Exhaust System Operating - Exhaust System Good No Fumes or Caustic Spray Visible Outside Exhaust No. 1 - No Irritation - Large Area of Floor in Near Tank Vent - Unaware of Tellie (Bottle of Just Water)
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	Skim Handling Equipment in Operation - Exhaust System Operating - Exhaust Good Except That of No. 1 in Skim Room Was P.A. - No Irritation - No Dust or Fumes Visible
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	Exhaust on Saw Operating - No Other Dust Visible in Room - 2 Workmen in Area Throwing Trash Sweled Chlorine - Cl ₂ .0 ppm
	Rectifier Station	Mercury Vapor	Detector Tube	Fair	Mercury Vapor .0 mg/m ³ - Detectable of Metallic Mercury Visible in Sink and on a Work Table - Exhaust System Operating - Exhaust Fair
	Potrooms - General	Dust & Fumes	Visual	Good	Exhaust Haze Visible in All Rooms Except Those on Lines 7 & 8 which were clear At Given Placement - Generally Good At Given Location - Generally Fair
	Bath Storage	Dust	Visual & Sensory	Good	No Dust Visible
	Bath Crushing	Dust	Visual-Smoke Tube	Good	No Irritation Exhaust Not Operating - Small Amount of Dust in Air Caused by Wind Blowing from Building - Exhaust System Not Operating

411082 0586

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: April 14, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER NOT OPERATING - DUST COLLECTOR NOT OPERATING - NO DUST VISIBLE
	Ore Unloading	Dust	Visual	Good	ONLY A SMALL AMOUNT OF DUST VISIBLE IN AREA - THIS DUST MAINLY CAUSED BY WIND BLOWING TOWARD THE BUILDING
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA
	Wheelabrator	Noise	Audio	Fair	NO FUMES VISIBLE NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - NO FUMES VISIBLE - ONLY A SLIGHT ODDOR OF HOT PITCH NOTICEABLE IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	Poor	CLEANING EQUIPMENT OPERATING - VERY LITTLE DUST VISIBLE NEAR WHEREABOUTS - MOST OF DUST IN AREA COMING FROM GROUNDWATER SINKER - EXHAUST FLOW AT WEST END OF GROUNDWATER SINKER LOCATED NEARLY OPPOSITE
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PACKING OR UNPACKING OPERATIONS IN PROGRESS - FURNACE BURNING WELL VENTILATED - CO 5 ppm
	Butt Unloading & Crushing	Dust	Visual	Fair	UNLOADING NOT IN PROGRESS - EXHAUST FLOW STILL MISSING - VERY LITTLE DUST VISIBLE IN UNLOADING AREA - HOWEVER CRUSHING AREA QUITE DUSTY
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES VISIBLE WHEN A MIXER IS DUMPED - FUMES TEND TO KEEP FUMES FROM M-S CONVEYER FROM ENTERING MIXER AREA - FAIRLY STRONG ODDOR OF HOT PITCH NOTICEABLE

SURVEYOR

NLR

411082 0587

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: April 14, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Poor	M-S EXHAUST HOOD STILL NOT OPERATING - FUMES VISIBLE RISING FROM M-S CONVEYOR BELT. TIME A MINOR IS LAPPED - NO FUMES VISIBLE ESCAPING FROM J-4 - EXHAUST HOOD OVER J-4 OPERATING - EXHAUST FAIR
	Press Room	Fumes	Visual	Good	BOTH PRESSES OPERATING - SMALL AMOUNT OF FUMES VISIBLE IN BOTTOM ROOMS - ONE OF NOT FITTEN NOTICEABLE IN BUTH ROOMS
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	A SAW AND DRILL PRESS IN OPERATION - NO DUST VISIBLE AROUND EITHER OPERATED - EXHAUST SYSTEM OPERATING - EXHAUST FAIR
	Garage - General	Fumes CO	Visual Detector Tube	Poor	CO SODIUM (MISC) - VEHICLE OPERATING JUST BEFORE READING TAKEN - NO FUMES VISIBLE - AUTOMOBILE DEAD AND WINDOWS WERE OPEN, FUMES AIR IN THE GARAGE WAS NOT SEEM TO BE MOVING
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No ACID MIST VISIBLE No IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	SEVERAL WELDING OPERATIONS IN PROGRESS - SMALL AMOUNTS OF FUMES VISIBLE - NO IRRITATION EXHAUST HOODS WHICH WERE OPERATING WERE GUID AROUNDING WELL VENTILATED No EQUIPMENT IN OPERATION - No DUST
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	VISIBLE - EXHAUST SYSTEM GOOD
	Blacksmith Shop	CO	Detector Tube	Fair	ONE GAS-FIRED FORGE OPERATING - IN AREA AROUND FORGE CO 20 PPM - AREA FAIRLY WELL VENTILATED
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE 10 PPM - READING TAKEN DIRECTLY IN FRONT OF DEGREASER WITH EXHAUST HOOD DIRECTLY AND EXHAUST SYSTEM OPERATING - EXHAUST FAIR UNIT NOT IN USE AT TIME OF READING
	Atomizer - General	Dust	Visual	Good	No DUST VISIBLE IN ANY AREA - NO WATER VISIBLE IN SEPTIC TANK AREA - NO DUST NOTICEABLE

411082 0588

SURVEYOR

CJR

INDUSTRIAL HYGIENE SURVEY

DATE: April 14, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	Good	Small Amount Of Smoke Visible From One Small Fire - No Fumes Visible - No Odor Noticeable No Irritation - In General Area Was Barely
	Sewage Treatment Plant:				
	General Area		Visual	Fair	Several Shavings In Area Either Dead Or Dying - Area In Need Of Mowing
	Sludge drying beds		Visual	Fair	No Sludge Beds Full Of Weeds
	Influent to Treatment Plant		Visual	Good	Observed Ahead Of Bar Screen Influent Slightly Turbid
	Effluent of Chlorine Chamber		Visual	Good	Observed After Baffles Effluent Clear - Cl_2 Present - $< 1 ppm$
	NOTES: 1. Weather was partly cloudy with the temperature in the low 70's. Wind was generally from the east at 10-15 mph.				
	2. A small plume of dust was visible escaping from the Dresser unit bag filter.				

411082 0589

SURVEYOR

CHR

CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: March 10, 1971

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	Atmosphere in Building Generally Clear No Dust or Fumes Visible
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	On 1 March 1971 at 11:00 AM CO 10 ppm These Readings Taken On Sum Sol on R 349 Unit for Furnaces No. 1 & No. 2 - North and South Sides of R 349 Exhausts located in Basement - Slight Irritation - Fumes Fair
	Homogenizing Furnace	CO	Detector Tube	Good	Both Furnaces Operating - Strong odor of Natural Gas Noticeable Around Furnace No. 1 On Caisson - On No. 1. Fee - CO Outflow - 10 ppm On Caisson - On No. 2 Fee - CO Outflow - 10 ppm On Caisson - On
	Cutting Oil Supply Tank	Oil Vapor	Visual	Fair	Small Amount of Oil Vapor Visible Coming From Tank - Wind Blowing Oil Vapor Toward Center of Bldg 34
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	Exhaust System Operating - Exhaust System Good No Fumes or Caustic Spray Visible Outside of Exhaust Hood - No Irritation
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	Skim Handling Equipment Not in Operation - No Dust or Fumes Visible - Exhaust System Operating - Exhaust System Good - No Skin Off Flow in North End of Room No Irritation - HCl OK
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	Saw Not in Operation - No Other Dust Visible in Room
	Rectifier Station	Mercury Vapor	Detector Tube	Fair	Mercury Vapor .00 mg/m ³ - Droplets of Metallic Mercury Visible in Sink and on a Work Table - Exhaust System Operating - Exhaust Fair
	Potrooms - General	Dust & Fumes	Visual	Good	Slight Haze Visible in All Rooms Except Those on Lines 7 & 8 Which Were Clear Pot Cover Placement - Generally Good Net Over Condition - Generally Fair
	Bath Storage	Dust	Visual & Sensory	Good	No Dust Visible
	Bath Crushing	Dust	Visual-Snack Tube	Fair	No Irritation Causing Operating - Interior of Building Fairly Dusty Most of Dust Caused by the Wind Blowing Through The Building - Exhaust System Operating - Exhaust System Fair

SURVEYOR

1110

411082 0590

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: MARCH 10, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER OPERATING - NO DUST VISIBLE
	Ore Unloading	Dust	Visual	Good	COMING FROM EITHER UNIT ONLY A SMALL AMOUNT OF DUST VISIBLE
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Fair	SMALL AMOUNT OF DUST VISIBLE IN AREA - MEDIATE AMOUNT OF FUMES VISIBLE RISING FROM MIXER NO. 2 STRONG ODOR OF HOT PITCH NOTICEABLE IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	CLEANING EQUIPMENT NOT IN OPERATION SMALL AMOUNT OF DUST VISIBLE IN AREA
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE TACKLING OR UNPACKING OPERATIONS IN PROGRESS - FURNACE BUILDINGS WELL VENTILATED - CO 5 ppm
	Butt Unloading & Crushing	Dust	Visual	Good	UNLOADING AND CRUSHING OPERATIONS NOT IN PROGRESS DUE TO EQUIPMENT BREAKDOWN
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS SMALL AMOUNT OF DUST VISIBLE IN AREA - NO FUMES VISIBLE - SLIGHT ODOR OF HOT PITCH NOTICEABLE IN AREA

SURVEYOR

CNR

411082 0591

INDUSTRIAL HYGIENE SURVEY

DATE: MARCH 10, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Poor	M-5 EXHAUST HOOD STILL NOT OPERATING - FUMES VISIBLE RISING FROM M-5 CONVEYOR - NO FUMES VISIBLE ESCAPING FROM J-4 - EXHAUST HOOD OVER J-4 OPERATING - EXHAUST GOOD
	Press Room	Fumes	Visual	Good	BOTH PRESSES OPERATING - SMALL AMOUNTS OF FUMES VISIBLE EACH TIME HOT MIX ENTERS THE PRESSES SLIGHT OILS OF HOT PITCH NOTICEABLE IN BOTH ROOMS
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	NO EQUIPMENT IN OPERATION
	Garage - General	Fumes CO	Visual Detector Tube	Fair	EXHAUST SYSTEM NOT IN OPERATION NO EQUIPMENT IN OPERATION - NO FUMES VISIBLE ONLY VENTILATION WAS LARGE DUCT IN SOUTH END OF BUILDING - CO 20 PPM
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO ACID MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	SEVERAL WELDING OPERATIONS IN PROGRESS - SMALL AMOUNTS OF FUMES VISIBLE - NO IRRITATION AREA WELL VENTILATED - EXHAUST HOODS WHEN WERE OPERATING WERE GOOD
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION - NO DUST VISIBLE - EXHAUST SYSTEM GOOD
	Blacksmith Shop	CO	Detector Tube	Fair	ONE GAS-FIRED FORGE OPERATING - AREA NOT AS WELL VENTILATED AS USUAL - IN AREA NEAR FORGE CO 15 PPM
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE 2 AMM - BENDING TAKEN DIRECTLY IN FRONT OF DEGREASER WITH EXHAUST HOOD OVER CLOSED AND EXHAUST SYSTEM OPERATING - UNIT NOT IN USE AT TIME OF READING - EXHAUST SYSTEM FAIR
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN ANY AREA - WATER VISIBLE ON GROUND IN SEPTIC TANK AREA - NO ODOOR NOTICEABLE

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SURVEYOR

C. H. R.

DATE: APR 10 1976

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CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

765, 17 f

145 live men
 Rail and maintenance
 Feb. 7, 1976

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE IN BUILDING GENERALLY CLEAR NO DUST OR FUMES VISIBLE
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	NO IRRITATION Cl ₂ 0.04ppm HCl 0.04ppm CO 0.04ppm
	Homogenizing Furnace	CO	Detector Tube	Good	NO FUMES VISIBLE - NO IRRITATION WITH FURNACE OPERATING - SLIGHT ODOR OF NATURAL GAS NOTICEABLE (NATURAL GAS FURNACE NO. 1) HCL FIVE - CO WITH FURNACE OPERATING IN CAPTIVE AREA HCL FIVE - CO WITH FURNACE OPERATING IN CAPTIVE AREA
	Cutting Oil Supply Tank	Oil Vapor	Visual	Fair	MODERATE AMOUNT OF OIL VAPOR VISIBLE COMING FROM TANK - WIND BLOWING OIL VAPOR TOWARD CENTER OF BLDG. 34
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	EXHAUST SYSTEM OPERATING - EXHAUST SYSTEM GOOD NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE OF TANK
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	FURNACE HCL - NO IRRITATION FUMES VISIBLE - EXHAUST SYSTEM OPERATING - EXHAUST SYSTEM GOOD - SMALL AMOUNT OF CAUSTIC SPRAY IN MIDDLE OF ROOM - NO DUST OR FUMES VISIBLE - NO IRRITATION - HCL
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT IN OPERATION - NO OTHER DUST VISIBLE IN ROOM
	Rectifier Station	Mercury Vapor	Detector Tube	Good	MERCURY VAPOR 0.04mg/M ³ - NO DROPLETS OF METALLIC MERCURY VISIBLE IN ROOM - EXHAUST SYSTEM OPERATING - EXHAUST SYSTEM FAIR
	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE VISIBLE IN ALL ROOMS EXCEPT TROUSER WARE 7 & 2 WHICH WERE CLEAR AIR COVER PLACEMENT - GENERALLY GOOD AIR COVER CONDITION - GENERALLY FAIR
	Bath Storage	Dust	Visual & Sensory	Good	NO DUST VISIBLE
	Bath Crushing	Dust	Visual-Smoke Tube	Fair	NO IRRITATION CAUSTIC OPERATING - INTERIOR OF BUILDING FAIRLY DUSTY - MOST OF DUST CAUSED BY A STRONG WIND BLOWING THROUGH THE BUILDING - EXHAUST SYSTEM OPERATING - EXHAUST SYSTEM FAIR

SURVEYOR

N.H.

411082 0594

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: FEB. 9, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	CRUSHER OPERATING - NO DUST VISIBLE COMING FROM EITHER UNIT
	Ore Unloading	Dust	Visual	Fair	INTERIOR OF BUILDING FAIRLY DUSTY - MOST OF DUST CAUSED BY STRONG WIND BLOWING THROUGH BUILDING
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA
	Wheelabrator	Noise	Audio	Fair	NO FUMES VISIBLE NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Poor	SMALL AMOUNT OF DUST VISIBLE IN AREA - SOME FUMES VISIBLE COMING FROM AREA NO. 1 & 2 - HEAVY FUMES VISIBLE COMING FROM AREA NO. 3 WHICH WAS BEING UNLOADED - STRONG ODS OF HOT PITCH NEUTRALIZED IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	CLEANING EQUIPMENT NOT IN OPERATION - MAINTENANCE WORK IN PROGRESS
	Ring Furnace	Dust CO	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA DUST VISIBLE ONLY IN AREAS WHERE FURNACE UNLOADING OPERATIONS IN PROGRESS - FURNACE BUILDING WALL VENTILATED - CO 5 ppm
	Butt Unloading & Crushing	Dust	Visual	Poor	BOTH OPERATIONS IN PROGRESS - HEAVY DUST VISIBLE IN BOTH AREAS - EXHAUST HEED IN UNLOADING AREA STILL MISSING
	Mixer Floor	Dust & Pitch Fumes	Visual	Fair	SOME DUST VISIBLE IN AREA - FUMES VISIBLE IN AREA PARTICULARLY WHEN A MIXER IS DUMPED - FUMES, ALSO ENTERING AREA FROM M-5 (CONNECTED AT EAST CORNER FROM

411082 0595

SURVEYOR

CNR

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: FEB 9 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	M-5 EXHAUST HOODS OPERATING - HEAVY FUMES VISIBLE RISING FROM M-5. EARLY TIME A MINOR LEAKAGE - NO FUMES VISIBLE RISING FROM CONVEYOR CARRYING MIN FROM M-5 TO PRESS - CONVEYOR HOODS OPERATING.
	Press Room	Fumes	Visual	Good	BURN PHOSSES OPERATING - SMALL AMOUNT OF FUMES VISIBLE IN BURN ROOMS - SILENT DUCT ON HOT PITCH NOTICABLE IN BURN ROOMS
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	ONE SAW CUTTING MARINITE IN OPERATION - NO DUST VISIBLE - EXHAUST SYSTEM OPERATING - EXHAUST SYSTEM GOOD
	Garage - General	Fumes CO	Visual Detector Tube	Good	SEVERAL VEHICLES OPERATING INTERMITTENTLY - NO FUMES VISIBLE - AREA FAIRLY WELL VENTILATED CO 13 ppm
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	SEVERAL WELDING OPERATIONS IN PROGRESS - SMALL AMOUNTS OF FUMES VISIBLE - NO IRRITATION - AREA WELL VENTILATED - EXHAUST HOODS WHICH WERE OPERATING WERE FULL
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	No Equipment in Operation - No Dust Visible - Exhaust System Good
	Blacksmith Shop	CO	Detector Tube	Good	TWO GAS-FIRED FORGES OPERATING - AREA WELL VENTILATED - CO IN AREA BETWEEN THE FORGES - CO ppm
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE - OPEN - RENDING TANK DRAINING IN FRONT OF DEGREASER WITH EXHAUST HOODS ON - EXHAUST SYSTEM OPERATING - DUST NOT IN USE AT TIME OF READING - EXHAUST SYSTEM FULL
	Atomizer - General	Dust	Visual	Good	No Dust Visible in Any Area - Water Visible in Septic Tank Area - No CO in Area

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INDUSTRIAL HYGIENE SURVEY

DATE: FEB 11 1970

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SURVEYOR *CHP*

CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JAN. 9, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	Armstrong in building Generally Clear - No Dust or Fumes Visible -
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	No Irritation Cl ₂ .0ppm HCl .0ppm CO .0ppm
	Homogenizing Furnace	CO	Detector Tube	Good	No Fumes Visible - No Irritation Both Furnaces Operating - Switch Over On Natural Gas Merisala Around Furnace No. 1 Not Fire - CO on Floor .0ppm On Circulator .0ppm No. 2 Fire - CO on Floor .0ppm On Circulator .0ppm
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No Oil Vapor Visible Exhaust System Operating - Exhaust System Good No Fumes or Caustic Spray Visible Outside Of
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	Exhaust Hood - No Irritation Swim Handling Equipment Not In Operation - Exhaust System Operating - Exhaust System Good - Small Amount Of Spray On Floor In North End Of Room - No Dust or Fumes Visible - No Irritation - HCl .0ppm
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	Saw Not In Operation - No Other Dust
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	Visible In Room
	Rectifier Station	Mercury Vapor	Detector Tube	Good	Mercury Vapor .0mg/m ³ - No Droplets Of Metallic Mercury Visible In Room - Exhaust System Operating - Exhaust System Fair
	Potrooms - General	Dust & Fumes	Visual	Good	More Dust And Fumes Than Usual Visible In All Rooms No Lines 1 Through 6 - Rooms Of Lines 1 And 2 Clear But Cover Placement - Generally Good But Cover Condition - Generally Fair
	Bath Storage	Dust	Visual & Sensory	Good	No Dust Visible No Irritation
	Bath Crushing	Dust	Visual-Smoke Tube	Fair	Crusher Operating - Interior Of Building Fairly Dirty - Must Be Out Caused By Collecting Joints Not Being Under The Exhaust Hood - Exhaust System Generally Fair Directly

SURVEYOR

HHC

411082 0598

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Jan 9, 1970

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	LAUNCHER OPERATING - NO DUST VISIBLE
	Ore Unloading	Dust	Visual	Good	COMING FROM EITHER UNIT NO UNLOADING IN PROGRESS NO DUST VISIBLE
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA
	Wheelabrator	Noise	Audio	Fair	NO FUMES VISIBLE NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Poor	SMALL AMOUNT OF DUST VISIBLE IN AREA - HEAVY FUMES VISIBLE COMING FROM MIXER HOP - WHICH WAS BEING UNLOADED SMALL AMOUNT OF FUMES ALSO VISIBLE COMING FROM MIXER HOP FUMES VISIBLE OVER ENTIRE MIXER AREA FROM FLOOR TO ROOF
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	CLEANING EQUIPMENT NOT IN OPERATION - NO DUST VISIBLE -
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREA WHERE TAPPING IN UNLOADING OPERATIONS IN PROGRESS - DUE TO COOL WEATHER FUMES ARE NOT AS WELL VENTILATED AS IN WARMER WEATHER
	Butt Unloading & Crushing	Dust	Visual	Poor	UNLOADING OPERATIONS NOT IN PROGRESS - SOME DUST VISIBLE IN AREA - EXHAUST HEARD IN UNLOADING AREA STILL MISSED - HEAVY DUST VISIBLE IN CRUSHING AREA
	Mixer Floor	Dust & Pitch Fumes	Visual	Fair	SOME DUST VISIBLE IN AREA - FUMES VISIBLE IN AREA PARTICULARLY WHEN A MIXER IS DUMPED - FUMES ALSO ENTER THE AREA FROM THE M.S. CONVEYER AT THE EAST END OF THE MIXER FLOOR

SURVEYOR

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411082 0599

DATE: Jan. 9, 1970

INDUSTRIAL HYGIENE SURVEY

ROCKDALE WORKS

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Poor	WHENEVER A MIXER IS STARTED HEAVY FUMES VISIBLY RISE FROM M-5 CHASSIS - THIS EXHAUST HOOD DOES NOT OPERATE - EXHAUST HOOD OVER CONVEYOR LEADING TO PRESS OPERATING - THIS EXHAUST HOOD IS FAIR
	Press Room	Fumes	Visual	Good	ACTN PRESS OPERATING - DUE TO COLD WEATHER FUMES NOT AS WELL VENTILATED AS USUAL - THEREFORE MIXTURES VISIBLE IN BOTH ROOMS - COLOR OF HOT FIRM NOTICABLE IN BOTH ROOMS
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	ONE SAW IN OPERATION - SMALL AMOUNT OF DUST VISIBLE - EXHAUST SYSTEM NOT IN OPERATION
	Garage - General	Fumes CO	Visual Detector Tube	Good	NO EQUIPMENT IN OPERATION - NO FUMES VISIBLE DUE TO COLD WEATHER AREA PROBABLY VENTILATED CO 10 ppm
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO ACID MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	ONLY ONE WELDING OPERATION IN PROGRESS - SMALL AMOUNT OF FUMES VISIBLE - NO IRRITATION - DUE TO COLD WEATHER BUILDING NOT AS WELL VENTILATED AS USUAL - EXHAUST HOOD WHICH WERE OPERATING WERE GOOD
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION - NO DUST VISIBLE - EXHAUST SYSTEM GOOD
	Blacksmith Shop	CO	Detector Tube	Fair	ONE GAS FIRM FUME OPERATING ALTHOUGH NOT IN USE - CO IN AREA SURROUNDING FUME 15 ppm - DUE TO COLD WEATHER AREA NOT AS WELL VENTILATED AS USUAL
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE 10 ppm - READING TAKEN DIRECTLY IN FRONT OF DEGREASER WITH EXHAUST HOOD ON, FUMES AND EXHAUST SYSTEM OPERATING - DUE TO COLD WEATHER OF READING - EXHAUST SYSTEM FAIR
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN ANY AREA - WATER VISIBLE IN SEPTIC TANK AREA - NO ODOR NOTICABLE

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INDUSTRIAL HYGIENE SURVEY

DATE: JUL 7 1970

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CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: DEC 9 1969

Location	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Visual & Sensory	Good	Atmosphere in building is clean
Furnace Area & Casting	Oil Vapor	Detector Tubes	Detector Tubes	Good	No irritation CO 10 ppm HCL 1 ppm CO 10 ppm
Homogenizing Furnace	Dust & Fumes	Detector Tube	Detector Tube	Good	No fumes visible - No irritation From furnace operation - Dust of material gas mercuric arc and furnace No 1 No 1 fume - CO 10 ppm HCL 1 ppm CO 10 ppm No 2 fume - CO 10 ppm HCL 1 ppm CO 10 ppm
Cutting Oil Supply Tank	Oil Vapor	Visual	Visual	Good	No oil vapor visible
Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Visual & Sensory Smoke Tube	Good	Exhaust system operating - Exhaust system good No fumes or caustic spray visible outside of furnace hood - No irritation
Skim Room	Dust & Fumes HCL	Visual & Sensory Detector Tube	Visual & Sensory Detector Tube	Good	Skim handling equipment not in operation - Exhaust system operating - Exhaust system good - No dust or fumes visible - No irritation in room - Exhaust system good - No irritation
Brick Cutting Area	Dust from Brick Saw	Visual	Visual	Good	Saw not in operation - No other dust visible in room
Rectifier Station	Mercury Vapor	Detector Tube	Detector Tube	Good	Mercury vapor 0.05 mg/m ³ - No troublets of metallic mercury visible in room - Exhaust system operating - Exhaust system fair
Potrooms - General	Dust & Fumes	Visual	Visual	Good	Slight haze visible in all rooms except the rooms on line 7 which were clear Air cover placement - Generally good At dust level - Generally fair
Bath Storage	Dust	Visual & Sensory	Visual & Sensory	Good	No dust visible
Bath Crushing	Dust	Visual-Smoke Tube	Visual-Smoke Tube	Fair	No irritation Crusher operating - Interior of building fairly dirty - Some dust caused by wind blowing through the building - Exhaust system operating - Exhaust system fair

SURVEYOR

WHR

411082 0602

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Dec 9, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	Good (operation) - No Dust Visible
	Coke Unloading	Dust	Visual	Good	Good (operation) - No Dust Visible
	Redding Room-General	Dust & Fumes	Visual	Good	Small Amount of Dust Visible in Area Small Amount of Fumes Visible in Area Near Unloading Furnace
	Wheelabrator	Noise	Audio	Fair	Noise Level Still Above This Desired Range
	Stub Press & Unbolting Station	Dust	Visual	Good	Small Amount of Dust Visible in Area - Area Also Has Some Fumes - Very High Noise Level Most of Noise From Wheelabrator & Unloading Furnace
	Potlining-Mixer Area	Dust & Fumes	Visual	Fair	Fairly Large Amount of Fumes Visible Coming From Top of Mixer No. 2 - Fumes of Hot Air Some Noise in Area - Small Amount of Dust Visible in Area
	Carbon Plant Electrode Cleaning	Dust	Visual	Poor	Heavy Dust Visible Coming From Location of Particularly at the West End of the Conveyor - Small Amount of Dust Visible Near Wheelabrator
	Ring Furnace	Dust CO	Visual Detector Tube	Good	Dust Visible Only in Areas Where Packing is Unpacking Operations in Progress - Furnace Burning Well Ventilated - CO Spikes
	Butt Unloading & Crushing	Dust	Visual	Poor	Butt Operations in Progress - Moderate Amount of Dust Visible in Unloading Area - Exhaust Hood in Unloading Area Still Missing - Heavy Dust Visible in Unloading Area
	Mixer Floor	Dust & Pitch Fumes	Visual	Fair	Construction Still in Progress - Moderate Amount of Fumes Visible in Area - Strong Odor of Hot Air Noticeable in Area - Heavy Fumes Visible at Eastern End of Mixer Area - Heavy Dust

SURVEYOR

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INDUSTRIAL HYGIENE SURVEY

DATE: Dec 9, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	Exhaust hood over conveyor which is parallel to belt. Food mixer fumes still not noticeable. Heavy fumes visible near press. Belt after press is covered. Exhaust hood over belt carrying mix. To press. Operating - this exhaust hood is fair.
	Press Room	Fumes	Visual	Good	Only one press operating - no fumes visible. Slight odor of H.T. fumes noticeable.
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	Two saws operating - one cutting wood machine cutting machine - no dust visible - exhaust system operating - exhaust system good.
	Garage - General	Fumes CO	Visual Detector Tube	Good	No equipment in operation - no fumes visible. Area fairly well ventilated. CO 0 ppm.
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No acid mist visible. No irritation.
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	Only a few welding operations in progress - small amount of fumes visible. No irritation - building fairly well ventilated. Exhaust hood which were operating were good.
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	No equipment in operation - no dust visible - exhaust system good.
	Blacksmith Shop	CO	Detector Tube	Good	One gas fired forge operating - CO in area surrounding forge 10 ppm - area not as well ventilated as usual.
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	Trichloroethylene open - reading taken directly in front of the degreaser with exhaust hood over open and exhaust system operating - unit in use at time of reading - exhaust system fair.
	Atomizer - General	Dust	Visual	Good	No dust visible in any area - water visible in septic tank area - no odor noticeable.

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411082 0604

CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Nov 10, 1969

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Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE IN BUILDING GENERALLY CLEAR
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	NO IRRITATION CL ₂ 0 ppm HCl 0 ppm CO 5 ppm
	Homogenizing Furnace	CO	Detector Tube	Good	NO FUMES VISIBLE - NO IRRITATION NO. 1 FIBER NET OPERATING D.E. TO MAINTENANCE WORK NO. 2 FIBER CO IN CHARGE 0 ppm
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	NO CL ₂ VAPOR VISIBLE
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	EXHAUST SYSTEM GOOD - NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE EXHAUST HOOD
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	NO IRRITATION SKIM HANDLING EQUIPMENT NOT OPERATING D.E. T. MAINTENANCE WORK - NO DUST OR FUMES VISIBLE HCl 0 ppm - EXHAUST SYSTEM - GOOD - NO SUM CH FIBER IN NEXT END OF ROOM
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NET IN OPERATION - NO OTHER DUST VISIBLE IN ROOM
	Rectifier Station	Mercury Vapor	Detector Tube	Good	MERCURY VAPOR - 0 ppm - NO DROPLETS OF METALLIC MERCURY VISIBLE - EXHAUST SYSTEM OPERATING - EXHAUST SYSTEM FAIR
	Potrooms - General	Dust & Fumes	Visual	Good	SMALL FIBER VISIBLE IN AIR - EXHAUST SYSTEM FAIR FIBER WHICH WERE CLEAR NET COVER PLACEMENT - GENERALLY GOOD NET COVER CONDITION - GENERALLY FAIR
	Bath Storage	Dust	Visual & Sensory	Good	NO DUST VISIBLE
	Bath Crushing	Dust	Visual-Smoke Tube	Good	NO IRRITATION CRUSHER NET IN OPERATION - SMALL AMOUNT OF DUST VISIBLE IN BUILDING CAUSED BY MAINTENANCE WORK - EXHAUST SYSTEM OPERATING - EXHAUST SYSTEM FAIR

SURVEYOR

168

411082 0606

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Nov. 10, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	BOTH UNITS OPERATING - NO DUST VISIBLE COMING FROM EITHER UNIT - CRUSHER NOT IN OPERATION
	Ore Unloading	Dust	Visual	Good	ONLY A SMALL AMOUNT OF DUST VISIBLE
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA
	Wheelabrator	Noise	Audio	Fair	NO FUMES VISIBLE NOISE LEVEL STILL ABOVE THE DESIRABLE RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES VISIBLE RISING FROM THIS FE MINERS NO. 1 & 2 - SILENT CIRCUIT NOT FROM NOTICABLE IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	CLEANING EQUIPMENT NOT OPERATING SMALL AMOUNT OF DUST VISIBLE IN AREA
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS AROUND PARKING OR UNPACKING OPERATIONS IN FURNACE FURNACE
	Butt Unloading & Crushing	Dust	Visual	Fair	QUICKLY WELL VENTILATED - CO 5 ppm BOTH OPERATIONS IN PROGRESS - MODERATE AMOUNT OF DUST VISIBLE IN UNLOADING AREA - HEAVY DUST VISIBLE IN CRUSHING AREA - FURNACE WIND IN UNLOADING AREA STILL MISSING
	Mixer Floor	Dust & Pitch Fumes	Visual	Fair	HEAVY FUMES VISIBLE FROM ENTER MIXER FLOOR - MOST OF FUMES SEEMED TO BE COMING FROM A NEW MIXER ON WHICH TESTS WERE BEING RUN - HEAVY FUMES ALSO VISIBLE AT EAST END OF MIXER FLOOR - NEW MIXER IS DUMPED

SURVEYOR

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411082 0608

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Nov. 10, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Fair	HEAVY FUMES VISIBLE NEARBY FROM CONVEYOR WHICH IS PARALLEL TO EAST END OF MILLER FLOOR - EXHAUST HOOD APPARENTLY NOT OPERATING - EXHAUST HOOD OVER CONVEYOR RUNNING FROM MILLER FLOOR TO PRESSES OPERATING - NO FUMES VISIBLE HERE
	Press Room	Fumes	Visual	Good	BOTH PRESSES OPERATING - NO FUMES VISIBLE SLIGHT OZE OF HOT PITCH NOTICEABLE
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	NO EQUIPMENT IN OPERATION - NO DUST VISIBLE EXHAUST SYSTEM NOT IN OPERATION BUILDING WELL VENTILATED
	Garage - General	Fumes CO	Visual Detector Tube	Good	NO EQUIPMENT IN OPERATION - NO FUMES VISIBLE AREA WELL VENTILATED - CO 0.04 ppm
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO ACID MIST VISIBLE NO IRRITATED
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	TWO WELDING OPERATIONS IN PROGRESS - SMALL AMOUNT OF FUMES VISIBLE - NO IRRITATION - AREA WELL VENTILATED - EXHAUST HOOD WHICH WERE IN OPERATIONAL WEAR GOOD NO EQUIPMENT IN OPERATION - NO DUST VISIBLE
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	EXHAUST SYSTEM GOOD ONE GAS FIRED FORGE OPERATING - HARD (1 EA) FORGE PIR - CO AROUND FORGE 10 ppm
	Blacksmith Shop	CO	Detector Tube	Good	AREA WELL VENTILATED TRICHLOROETHYLENE - 20 ppm - READING TAKEN DIRECTLY IN FRONT OF THE DEGREASER WITH EXHAUST HOOD OPERATING AND EXHAUST SYSTEM OPERATING - UNIT IN USE AT TIME OF READING - EXHAUST SYSTEM FINE
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN ANY AREA - NO WATER VISIBLE IN SEPTIC TANK AREA - NO OZE NOTICEABLE

SURVEYOR CHR

411082 0609

CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

73, 154E, 173
DATE: OCT. 9, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE IN BUILDING GENERALLY CLEAR
	Furnace Area & Casting	Cl ₂ , HCl, CO	Detector Tubes	Good	No IRRITATION Cl ₂ .0 ppm HCl .0 ppm CO .0 ppm
	Homogenizing Furnace	CO	Detector Tube	Good	No Fumes Visible - No IRRITATION No. 2 Fee Not Operating Due To Maintenance Work No. 1 Fee - CO ON CATWALK .0 ppm
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No OIL VAPOR VISIBLE EXHAUST SYSTEM GOOD - NO FUMES OR CAUSTIC SPRAY VISIBLE OUTSIDE EXHAUST HOOD
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	No IRRITATION NEW SKIM HANDLING EQUIPMENT IN OPERATION - NO DUST OR FUMES VISIBLE - NO IRRITATION - HCl .0 ppm
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	EXHAUST SYSTEM GOOD - NO SKIM ON FLOOR IN WATER EXHAUST ROOM - SEE NOTE 2
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	Saw Not In Operation - NO OTHER DUST VISIBLE IN ROOM
	Rectifier Station	Mercury Vapor	Detector Tube	Good	MERCURY VAPOR .0 mg/m ³ - NO DISPLETS OF METALLIC MERCURY VISIBLE IN ROOM - EXHAUST SYSTEM OPERATING - EXHAUST SYSTEM FAIR
	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE VISIBLE IN ALL ROOMS EXCEPT THE ROOM ON FLOOR 2 WHICH WERE CLEAR FET COVER PLACEMENT - GENERALLY GOOD
	Bath Storage	Dust	Visual & Sensory	Good	AT COVER CONDITION - GENERALLY FAIR SMALL AMOUNT OF DUST VISIBLE
	Bath Crushing	Dust	Visual-Smoke Tube	Fair	No IRRITATION CRUSHER OPERATING - INTERIOR OF BUILDING FAIRLY DUSTY - SOME OF DUST CAUSED BY WIND BLOWING THROUGH THE BUILDING - EXHAUST SYSTEM OPERATING EXHAUST SYSTEM FAIR

411082 0810

SURVEYOR

CAR

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Oct. 9, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	BOTH UNITS OPERATING - NO DUST VISIBLE COMING FROM EITHER UNIT
	Ore Unloading	Dust	Visual	Good	SMALL AMOUNT OF DUST VISIBLE - MOST OF DUST CAUSED BY WIND BLOWING THROUGH THE BUILDING
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA
	Wheelabrator	Noise	Audio	Fair	NO FUMES VISIBLE NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Fair	FAIR AMOUNT OF FUMES VISIBLE COMING FROM TOP OF MIXER No. 1 - SMALL AMOUNT OF DUST ALSO VISIBLE IN AREA - OCCR OF HOT AREN NOTICEABLE IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	CLEANING EQUIPMENT NOT OPERATING
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PACKING OR UNPACKING OPERATIONS IN PROGRESS - FURNACES WELL VENTILATED - CO .00 PPM
	Butt Unloading & Crushing	Dust	Visual	Good	NEITHER OPERATION IN PROGRESS - SMALL AMOUNT OF DUST VISIBLE IN AREA - EXHAUST HOOD IN UNLOADING AREA STILL MISSING
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	NO MIXERS OPERATING - SOME DUST VISIBLE IN AREA - NO FUMES VISIBLE - SLIGHT OCCR OF HOT PITCH NOTICEABLE IN AREA

SURVEYOR

C.M.R.

411082 0611

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Oct. 9, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	No MIA ON BELT - NO FUMES VISIBLE - EXHAUST HOOD OVER BELT OPERATING - EXHAUST FAIR
	Press Room	Fumes	Visual	Good	NEITHER PRESS OPERATING
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	ONE SAW IN OPERATION - NO DUST VISIBLE EXHAUST SYSTEM GOOD - AREA WELL VENTILATED
	Garage - General	Fumes CO	Visual Detector Tube	Good	NO EQUIPMENT IN OPERATION - NO FUMES VISIBLE AREA WELL VENTILATED - CO 0 ppm
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	NO WELDING OPERATIONS IN PROGRESS - NO SMOKE OR FUMES VISIBLE - NO IRRITATION - AREA WELL VENTILATED - EXHAUST HOODS WHICH WERE IN OPERATION WERE GOOD
	Marinette Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION - NO EXHAUST HOODS INSTALLED ON DRILL PRESS AND LATHE - EXHAUST SYSTEM GOOD
	Blacksmith Shop	CO	Detector Tube	Good	DUE GAS FIRED FORGE OPERATING CO AROUND FORGE - 5 ppm AREA WELL VENTILATED
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE 0.04 ppm - READING TAKEN DIRECTLY IN FRONT OF THE DEGREASER - UNIT NOT BEING USED AT TIME - EXHAUST HOOD DEER CLOSED AND EXHAUST SYSTEM OPERATING - EXHAUST SYSTEM FAIR
	Atomizer - General	Dust	Visual	Good	No Dust Visible in Any Area - No Water Visible in Septic Tank Area - Slight Odor Noticeable in Septic Tank Area

SURVEYOR

CML

411082 0612

INDUSTRIAL HYGIENE SURVEY

DATE: OCT. 9, 1969

[illegible]

411082 0613

SURVEYOR *CAR*

Les

looks like Rockwell
is starting to get
the idea.

However, like everyone
else, their remedial
action is rather
slow

Tom

411082 0614

CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Sept 8, 1969

J.B. TUBB

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	Atmosphere in Building Generally Clear
	Furnace Area & Casting	Cl ₂ , HCl, CO	Detector Tubes	Good	No Irritation CO 0.04 ppm HCl 0.04 ppm Cl ₂ 0.04 ppm
	Homogenizing Furnace	CO	Detector Tube	Good	No Fumes Visible - No Irritation Both Furnaces Operating No. 1 Fan - CO on Cartwalk 0.04 ppm on floor 0.04 ppm No. 2 Fan - CO on Cartwalk 0.04 ppm on floor 0.04 ppm
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No Oil Vapor Visible Exhaust System Good - No Fumes or Spray Visible Outside Exhaust Hood
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	No Irritation New Skim Handling Equipment Not in Operation - Small Amount of Spray on Floor in North End of Room - No Dust CA Fumes Visible - No Irritation HCl 0.04 ppm
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	Saw Not in Operation - No Other Dust Visible in Room
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	
	Rectifier Station	Mercury Vapor	Detector Tube	Good	MERCURY VAPOR 0.04 mg/HI - No Discrepancy of METALLIC MERCURY VISIBLE IN ROOM - EXHAUST SYSTEM OPERATING - EXHAUST SYSTEM FAIR
	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE VISIBLE IN ALL ROOMS EXCEPT THE HAZARDOUS LINE 1 WHICH WERE CLEAR PER COVER PLACEMENT - GENERALLY GOOD AT COVER POSITION - GENERALLY FAIR No Dust Visible
	Bath Storage	Dust	Visual & Sensory	Good	No Irritation
	Bath Crushing	Dust	Visual-Smoke Tube	Fair	CRUSHER OPERATING - INTERIOR OF BUILDING FAIRLY DUSTY - EXHAUST SYSTEM FAIR

SURVEYOR

J.B.T.

411082 0615

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: SEPT. 2, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	BOTH UNITS OPERATING - NO DUST VISIBLE COMING FROM EITHER UNIT
	Ore Unloading	Dust	Visual	Good	ONLY A SMALL AMOUNT OF DUST VISIBLE IN AREA
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA
	Wheelabrator	Noise	Audio	Fair	NO FUMES VISIBLE NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF FUMES VISIBLE COMING FROM MIXER NO. 1 - SMALL AMOUNT OF DUST VISIBLE IN AREA - OAR OF HOT PITCH NOTICEABLE IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	Poor	LARGE AMOUNT OF DUST VISIBLE AT WEST END OF GUOMANI SHARER CLEANER - EXHAUST HOOD AT END OF CONVEYER PLEA - WIND CAUSED DUST TO MOVE SLOWLY TOWARD PITTING MIXERS AND WEST END OF REMOVED DUST VISIBLE ONLY IN AREAS WHERE PARKING OR UNPACKING OPERATIONS IN PROGRESS - AREAS WELL VENTILATED - CC 10 ppm
	Ring Furnace	Dust CO	Visual Detector Tube	Good	EXHAUST HOOD IN UNLOADING AREA REMOVED - DUST CREATED WHEN BUTTS UNLOADED IS BLOWN BY A FAN INTO THE WEST END OF THE UNLOADING - CRUISER AREA VERY DUSTY
	Butt Unloading & Crushing	Dust	Visual	Poor	SOME DUST VISIBLE IN AREA - FUMES VISIBLE PARTICULARLY WHEN A MIXER IS KNEED - FUMES ALSO VISIBLE COMING FROM CONVEYORS AT END OF MIXER FLOOR - STANDING OAR OF HOT PITCH NOTICEABLE IN AREA
	Mixer Floor	Dust & Pitch Fumes	Visual	Fair	

SURVEYOR

CHIR

411082 0616

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: SEPT. 2, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	FAIR	EXHAUST HOOD OVER BELT APPARENTLY OPERATING - NO FUMES VISIBLE - UNABLE TO CHECK HOOD DUE TO CONSTRUCTION ACTIVITY - FUMES STILL VISIBLE ESCAPING FROM CONVEYOR BELT EAST OF MILLER FURNACE
	Press Room	Fumes	Visual	GOOD	DETH FUMES OPERATING - A SLIGHT AMOUNT OF FUMES IS VISIBLE WHEN AIR ENTRIES THE PRESS - DUE TO HOT PLUM NOTICABLE IN BOTH ROOMS - AREA WELL VENTILATED
	Carpenter Shop	Dust	Visual & Smoke Tube	GOOD	NO EQUIPMENT IN OPERATION NO DUST VISIBLE - AREA WELL VENTILATED EXHAUST SYSTEM NOT IN OPERATION
	Garage - General	Fumes CO	Visual Detector Tube	GOOD	NO EQUIPMENT IN OPERATION - NO FUMES VISIBLE AREA WELL VENTILATED - CC. 10 AM
	Electric Shop-General	Acid Mist	Visual & Sensory	GOOD	NO ACID MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	GOOD	THREE WELDING OPERATIONS IN PROGRESS - SMALL AMOUNT OF FUMES VISIBLE - NO IRRITATION - AREA WELL VENTILATED - EXHAUST HOODS WHICH WERE IN OPERATION WERE USED
	Marinite Finishing Room	Dust	Visual Smoke Tube	GOOD	NO EQUIPMENT IN OPERATION NO DUST VISIBLE EXHAUST SYSTEM GOOD
	Blacksmith Shop	CO	Detector Tube	GOOD	NO FUMES IN OPERATION AREA WELL VENTILATED
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	GOOD	TRICHLOROETHYLENE - C. 10 AM - READING TAKEN DIRECTLY IN FRONT OF THE DEGREASER - UNIT NOT IN USE AT TIME - EXHAUST HOOD OVER WAS CLOSED AND EXHAUST SYSTEM OPERATING - EXHAUST SYSTEM FAIR
	Atomizer - General	Dust	Visual	GOOD	NO DUST VISIBLE IN ANY AREA - WATER VISIBLE IN SEPTIC TANK AREA - SLIGHT OILY NOTICEABLE IN SEPTIC TANK AREA

411082 0617

SURVEYOR

CNR

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: AUG. 2, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	BOTH UNITS OPERATING - NO DUST VISIBLE COMING FROM EITHER UNIT
	Ore Unloading	Dust	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - MOST OF DUST CAUSED BY WIND
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA
	Wheelabrator	Noise	Audio	Fair	NO FUMES VISIBLE NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - SMALL AMOUNT OF FUMES VISIBLE COMING FROM MIXER NO. 1 GOOD OR NOT PITCH NOTICEABLE IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	CLEANING EQUIPMENT NOT IN OPERATION SMALL AMOUNT OF DUST VISIBLE IN AREA
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PACKING OR UNPACKING OPERATIONS IN PROGRESS CO .00 ppm
	Butt Unloading & Crushing	Dust	Visual	Good	UNLOADING NOT IN PROGRESS - SOME DUST VISIBLE IN CRUSHER AREA - EXHAUST HOOD IN UNLOADING AREA NOT IN OPERATION
	Mixer Floor	Dust & Pitch Fumes	Visual	Fair	SOME DUST VISIBLE IN AREA - FUMES QUITE HEAVY WHEN A MEAL IS DUMPED - FUMES ALSO VISIBLE COMING FROM CONVEYORS AT EAST END OF MIXER FLOOR STRENGTH OF PITCH NOTICEABLE IN AREA

SURVEYOR

GHR

411082 0619

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Aug. 2, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	FAIR	Exhaust Hood Now Installed Over Belt - However Either The Exhaust System Is Not Operating Or Its Capacity Is Very Low Because Fumes Are Still Escaping Into The Surrounding Area
	Press Room	Fumes	Visual	Good	Both Presses Operating - Occasionally A Small Amount Of Fumes Is Visible When Mix Enters The Press Door Of Hot Pitch Noticeable In Both Rooms - Area Well Ventilated
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	ONE SAW OPERATING - NO DUST VISIBLE
	Garage - General	Fumes CO	Visual Detector Tube	Good	Exhaust System Good - Area Well Ventilated No Equipment In Operation - No Fumes Visible Area Well Ventilated - CO .0%
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	ONLY ONE WELDING OPERATION IN PROGRESS - SMALL AMOUNT OF FUMES VISIBLE - NO IRRITATION - AREA WELL VENTILATED - EXHAUST HOODS WHICH WERE IN OPERATION WERE GOOD
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	LATHE OPERATING - NO DUST VISIBLE - ALL DUST CREATED DURING OPERATION OF LATHE REMOVED BY EXHAUST SYSTEM - EXHAUST SYSTEM ON LATHE GOOD, ON DRILL PRESS IT IS ONLY FAIR
	Blacksmith Shop	CO	Detector Tube	Good	ONE FORGE OPERATING - CO .0% AREA WELL VENTILATED
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE 29 ppm - READING TAKEN DIRECTLY IN FRONT OF DEGREASING TANK WHICH WAS NOT BEING USED AT THE TIME - THE MOLD DEGRASER WAS CLOSED AND THE EXHAUST HOOD OPERATING - EXHAUST SYSTEM FAIR
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN ANY AREA - NO WATER VISIBLE AND NO ODOOR NOTICEABLE IN SEPTIC TANK AREA

411082 0620

SURVEYOR CHAS.

INDUSTRIAL HYGIENE SURVEY

DATE: Aug. 8, 1966

[illegible]

411082 0621

CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

FB, etc 1706
 FB - Air Cond R-78
 DATE: Aug. 8, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE IN BUILDING CLEAN
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	No IRRITATION Cl ₂ .00ppm HCl 1ppm CO .00ppm No Fumes Visible - No IRRITATION
	Homogenizing Furnace	CO	Detector Tube	Good	BOTH FURNACES OPERATING No. 1 FCC - CO ON CATWALK .0% ON FLOOR .0% No. 2 FCC - CO ON CATWALK .0% ON FLOOR .0%
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No OIL VAPOR VISIBLE
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	EXHAUST SYSTEM GOOD - NO FUMES OR SPRAY VISIBLE OUTSIDE EXHAUST HOOD - NO IRRITATION
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	NEW SKIM HANDLING EQUIPMENT BEING TESTED - NOT IN FULL USE YET - MODERATE AMOUNT OF SKIM OIL FUME IN DECK END OF ROOM - SOME DUST VISIBLE - NO FUMES VISIBLE NO IRRITATION - HCl .00ppm Saw Not in Operation - No Other Dust Visible in Room
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SEE NOTE 2
	Rectifier Station	Mercury Vapor	Detector Tube	FAIR	MERCURY VAPOR .0mg/M ³ - DROPLETS OF METALLIC MERCURY VISIBLE IN AND AROUND SINK - EXHAUST HOOD OPERATING - EXHAUST HOOD FAIR
	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT MIST VISIBLE IN ALL ROOMS EXCEPT LINE 7 WHICH WAS CLEAR NOT COVER PLACEMENT - GENERALLY GOOD NOT COVER CONDITION - GENERALLY FAIR
	Bath Storage	Dust	Visual & Sensory	Good	No DUST VISIBLE
	Bath Crushing	Dust	Visual-Smoke Tube	FAIR	No IRRITATION CRUSHER OPERATING - INTERIOR OF BUILDING FAIRLY DUSTY - SOME OF DUST CAUSED BY WIND BLOWING THROUGH BUILDING - EXHAUST SYSTEM FAIR

STANDARD

411082 0622

Cult. 1001141

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

700 RAC, TB BL
DATE: JULY 8, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE GENERALLY CLEAR - SMALL AMOUNT OF FUMES VISIBLE WHILE DURING OF FURNACE NO. 1 WAS OPEN
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	NO IRRITATION CO .0ppm HCl .0ppm CO .0%
	Homogenizing Furnace	CO	Detector Tube	Good	NO. 1 FUE - CO ON CATHODE .0% ON FLOOR .0% NO. 2 FUE - CO ON CATHODE .0% ON FLOOR .0%
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	NO OIL VAPOR VISIBLE
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	EXHAUST SYSTEM GOOD - NO FUMES OR SPRAY VISIBLE OUTSIDE EXHAUST HOLD - NO IRRITATION - SPRAY ON NORTH SIDE OF TANK PREVENTS WIND FROM BLOWING FUMES AND SPRAY INTO SURROUNDING AREA
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	INSTALLATION OF NEW SKIM HANDLING EQUIPMENT STILL IN PROGRESS - MODERATE AMOUNT OF SKIM OIL FUMES VISIBLE NORTH END OF ROOM - NO FUMES VISIBLE - NO IRRITATION NO. 1 FUE - SOME DUST VISIBLE WHEN SKIM SUSPENDED IN BEAM
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW OPERATING, BUT USING WATER - NO DUST VISIBLE FROM SAW OR OTHER OPERATIONS IN AREA
	Rectifier Station	Mercury Vapor	Detector Tube	Good	MERCURY VAPOR .0 mg/M ³ - NO SPILLED MERCURY VISIBLE IN ROOM - EXHAUST SYSTEM OPERATING - EXHAUST SYSTEM FAIR
	Potrooms - General	Dust & Fumes	Visual	Good	SIGHT HAZE VISIBLE IN ALL ROOMS EXCEPT LINES WHENEVER CLEAR
	Bath Storage	Dust	Visual & Sensory	Good	AT COVER PLACEMENT - GENERALLY GOOD AT COVER CONDITION - GENERALLY FAIR
	Bath Crushing	Dust	Visual-Smoke Tube	Fair	NO DUST VISIBLE NO IRRITATION CRUSHING OPERATING - INTERIOR OF BUILDING FAIRLY DUSTY - SOME OF DUST CAUSED BY WIND - EXHAUST SYSTEM FAIR

SURVEYOR

CAR

411082 0623

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JULY 8, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	BOTH UNITS OPERATING - NO DUST VISIBLE COMING FROM EITHER UNIT
	Ore Unloading	Dust	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA. MOST OF DUST CAUSED BY WIND BLOWING THROUGH THE BUILDING
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE IN MIXER AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	CLEANING EQUIPMENT NOT IN OPERATION SMALL AMOUNT OF DUST VISIBLE IN AREA
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PACKING OR UNPACKING OPERATIONS IN PROGRESS CO. 0.0%
	Butt Unloading & Crushing	Dust	Visual	Good	NEITHER OPERATION IN PROGRESS - SOME DUST VISIBLE IN AREA - EXHAUST HOOD IN UNLOADING AREA GOOD
	Mixer Floor	Dust & Pitch Fumes	Visual	Fair	SOME DUST VISIBLE IN AREA - FUMES VISIBLE PARTICULARLY WHEN A MIXER IS EMPTIED - STRONG ODOOR OF HOT PITCH NOTICEABLE IN AREA

SURVEYOR

CAR

411082 0624

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JULY 8, 1969

Ide	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Poor	HOOD OVER BELT STILL OPEN - FUMES VISIBLY RISING FROM MET MIX IN BELT - FUMES GENERALLY DRAFTING TOWARD MIXER FAN - STAGING DOOR OF MET AREA NOT OPEN
	Press Room	Fumes	Visual	Good	BOTH PASSES OPERATING - SOME FUMES VISIBLE WHEN MIX ENTERS THE PRESS - SWEET DOOR OF MET AREA NOTICEABLE IN BOTH ROOMS - AREA WELL VENTILATED
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	ONLY A PLANNER WAS OPERATING NO DUST VISIBLE
	Garage - General	Fumes CO	Visual Detector Tube	Good	EXHAUST SYSTEM (TAN) NO EQUIPMENT IN OPERATION - NO FUMES VISIBLE AREA WELL VENTILATED - CO 0.01%
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO ACID MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	NO WELDING OPERATIONS IN PROGRESS - NO FUMES VISIBLE - NO IRRITATION - EXHAUST HOODS WHICH WERE IN OPERATION WERE GOOD - AREA WELL VENTILATED
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION - NO DUST VISIBLE EXHAUST SYSTEM GOOD
	Blacksmith Shop	CO	Detector Tube	Good	COAL-FIRED FORGE OPERATING - A COOLING FAN AIMED DIRECTLY AT THE FORGE WAS CAUSING SMOKE FROM THE FORGE TO BE BLOWN INTO SURROUNDING AREA - EXHAUST FAN OPERATING FAIR - CO 0.01%
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE - 0.01% - READING TAKEN DIRECTLY IN FRONT OF DEGREASING UNIT WHICH WAS NOT IN OPERATION, BUT EXHAUST HOOD WAS OPERATING WITH NO DUST GOOD - EXHAUST SYSTEM FAIR
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN ANY AREA - NO WATER VISIBLE IN SEPTIC TANK AREA - HOWEVER A SLIGHT ODOR WAS NOTICEABLE IN THE SEPTIC TANK AREA

SURVEYOR

CAR

411082 0625

CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JUNE 7, 1969

R.D. LVC

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	Atmosphere Generally Clean - Small Amount of Fumes Visible During Pouring - No Sulfur Fumes
	Furnace Area & Casting	CL ₂ , HCl, CO	Detector Tubes	Good	Exhausted by New Fan - No Indication of Fumes Visible During Pouring of Furnace
	Homogenizing Furnace	CO	Detector Tube	Good	1.5 - No Indication Not Filled - CO in Furnace - On Fan 1.5 ppm 1/2 Feb - CO in Furnace - On Fan 1.5 ppm Fumes (CO) of N ₂ and H ₂ in Furnace - 1/2 Feb
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No Oil Vapor Visible Tank in New Location - Exhaust System in Use - Wind Blowing Through Open Door Near Tank Caused Fumes and Some Spray to Enter Area - No Sulfur Fumes
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Poor	Substance (Caustic) Noticed In Progress - Only Small Amount of Spray in Room - No Dust or Fumes Visible - No Indication of Caustic
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	NO CAUSTIC Saw Not in Operation
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	No Other Dust Visible
	Rectifier Station	Mercury Vapor	Detector Tube	Good	Mercury Vapor .005 mg/m ³ - No Spilled Mercury Visible in Room - Exhaust System Operating - Exhaust System Fair
	Potrooms - General	Dust & Fumes	Visual	Good	Slight Haze Visible in All Rooms - Exhaust System 1 At Cover Placement - Fair to Good At Cover Condition - Fair to P.A. (General) No Dust Visible
	Bath Storage	Dust	Visual & Sensory	Good	No Indication Canner Operating - In Area of Bathing - Fairly Dusty - Some of Dust Caused by Wind Blowing Through Building - Exhaust System Fair
	Bath Crushing	Dust	Visual-Smoke Tube	Fair	

SURVEYOR

R.D. LVC

411082 0627

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JUNE 9, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	POOR	NO DUST VISIBLE COMING FROM EAST UNIT LARGE AMOUNT OF DUST VISIBLE COMING FROM WEST UNIT
	Ore Unloading	Dust	Visual	GOOD	NO DUST VISIBLE IN AREA
	Rodding Room-General	Dust & Fumes	Visual	GOOD	SMALL AMOUNT OF DUST VISIBLE IN AREA
	Wheelabrator	Noise	Audio	FAIR	NO FUMES VISIBLE NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	GOOD	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	FAIR	HEAVY FUMES VISIBLE RISING FROM NO. 2 MIXER SOME DUST ALSO VISIBLE IN AREA - SWANT COAL DIE NOT AT ALL NOTICEABLE IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	GOOD	WHEELABRATOR NOT OPERATING - A SMALL AMOUNT OF DUST WAS VISIBLE COMING FROM GOODMAN SHAKER CONVEYER
	Ring Furnace	Dust CO	Visual Detector Tube	GOOD	DUST VISIBLE ONLY IN AREAS WHERE PACKING OR UNPACKING OPERATIONS IN PROGRESS CO 0%
	Butt Unloading & Crushing	Dust	Visual	GOOD	UNLOADING NOT IN PROGRESS - EXHAUST SYSTEM GOOD - SMALL AMOUNT OF DUST VISIBLE IN CRUSHER AREA
	Mixer Floor	Dust & Pitch Fumes	Visual	FAIR	SMALL AMOUNT OF DUST VISIBLE - FUMES VISIBLE WHEN A MIXER IS EMPTIED - STRONG COAL DIE NOT PITCH NOTICEABLE IN AREA

411082 0628

SURVEYOR

CNR

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: June 9, 1967

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Poor	How Area Belt Still Open - Fumes Visible Coming From Hot Mix On Belt Toward Upper Part of Building
	Press Room		Visual	Good	STANGE CONCENTRATION OF FUMES IN AREA - BUT FUMES CLEARING - SMALL AMOUNTS OF FUMES VISIBLE AS HOT MIX ENTERS PRESS - SIGNIFICANT OF HOT MIX ACTIVELY IN BOTH ROOMS - AREA WELL VENTILATED
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	TWO PIECES OF EQUIPMENT OPERATING - NO DUST VISIBLE - EXHAUST SYSTEM FAIR
	Garage - General	Fumes CO	Visual Detector Tube	Good	NO EQUIPMENT IN OPERATION - NO FUMES VISIBLE - AREA WELL VENTILATED - CO 5 ppm
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Acid Mist Visible No Irritation
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	SEVERAL WELDING OPERATIONS IN PROGRESS - SMALL AMOUNTS OF FUMES VISIBLE - EXHAUST HOOS WHICH WERE IN OPERATION WERE GOOD - AREA WELL VENTILATED - NO IRRITATION
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION - NO DUST VISIBLE
	Blacksmith Shop	CO	Detector Tube	Good	EXHAUST SYSTEM (GOLD) NO FUMES IN OPERATION
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Poor	TRICHLOROETHYLENE 100% (V/V) (MHC) - READING TAKEN DIRECTLY IN FRONT OF DEGREASING UNIT WITH UNIT IN OPERATION, EXHAUST HOOS OPERATING AND WITH UNIT MOVED A FEET - EXHAUST SYSTEM FAIR
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN ANY AREA - SMALL AMOUNT OF WATER VISIBLE IN SEPTIC TANK AREA - SIGNIFICANT ALSO NOTICEABLE IN AREA

411082 0629

SURVEYOR

C.M.R.

INDUSTRIAL HYGIENE SURVEY

DATE: JUNE 9 1969

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411082 0630

CONCLUSIONS

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: MAY 7, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	BOTH UNITS OPERATING - NO DUST VISIBLE FROM EITHER UNIT - CRUSHER NOT OPERATING
	Ore Unloading	Dust	Visual	Good	No DUST VISIBLE IN AREA
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Poor	HEAVY SMOKE ALSO FUMES VISIBLE IN AREA - FUMES VISIBLE COMING FROM NO. 1 MIXER - SMOKE AND FUMES ARE CAUSED BY THE CRUSHER CO UNIT TAKING EXCESSIVE IN EXCESSIVE DUSTS - SOME DUST ALSO VISIBLE IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	EQUIPMENT NOT OPERATING NO DUST VISIBLE
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PAVING IS BEING OPERATING IN PROGRESS CO. C/C
	Butt Unloading & Crushing	Dust	Visual	Good	UNLOADING NOT IN PROGRESS - EXHAUST FANS IN UNLOADING AREA GOOD - SOME DUST VISIBLE IN CRUSHER AREA
	Mixer Floor	Dust & Pitch Fumes	Visual	Fair	STRONG LAY OF HOT PITCH NOTICEABLE - SMALL AMOUNT OF CO FUMES VISIBLE - FUMES SEEMED TO BE COMING FROM CRUSHER WHICH CRUSHER MIX TO THE PASSES - SMALL AMOUNT OF DUST ALSO VISIBLE

SURVEYOR

CNR

411082 0631

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: MAY 7, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Poor	HOOD OVER BELT STILL OPEN - FUMES VISIBLE RISING FROM HOT MILD ON BELT AND DRIFTING TOWARD LOWER FLOOR - STRONG COLORED OF NOT MUCH NOTICEABLE IN AREA
	Press Room	Fumes	Visual	Good	BOTH PRESSES OPERATING - SMALL AMOUNTS OF FUMES OCCASIONALLY VISIBLE AS HOT MILD ENTERS PRESS - SWAMP COLORED OF NOT MUCH NOTICEABLE IN BOTH ROOMS - AREA WELL VENTILATED
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	ONLY ONE SAW OPERATING - NO DUST VISIBLE EXHAUST SYSTEM (GOOD)
	Garage - General	Fumes CO	Visual Detector Tube	Good	NO FUMES VISIBLE - NO EQUIPMENT IN OPERATION AREA WELL VENTILATED - CO 0.0%
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO ACID MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	SEVERAL WELDING OPERATIONS IN PROGRESS - SMALL AMOUNTS OF FUMES VISIBLE AT TIMES - NO IRRITATION - AREA WELL VENTILATED - EXHAUST HOODS WHEN WERE IN OPERATION WERE GOOD
	Marinette Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION - NO DUST VISIBLE EXHAUST SYSTEM GOOD
	Blacksmith Shop	CO	Detector Tube	Good	ONE GAS-PRESS FORGE OPERATING - EXHAUST HOOD OVER FORGE FAIR CO 0.0%
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE 30 AM - READING TAKEN DIRECTLY IN FRONT OF DEGREASING UNIT - UNIT IN USE AND WITH NEWLY INSTALLED OVER COUPLING TIGHTENED FRONT OF THE EXHAUST HOOD COVERED - EXHAUST OPERATING - EXHAUST GOOD
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN ANY AREA - FAIRLY LARGE AMOUNT OF WATER VISIBLE ON GROUND IN SEPTIC TANK AREA - FAIRLY STRONG OVER AREA NOTICEABLE IN AREA

SURVEYOR

CMR

411082 0632

INDUSTRIAL HYGIENE SURVEY

DATE: MAY 7, 1969

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411082 0633

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CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

FAC

DATE: MAY 7, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	Atmosphere Generally Clear - A Slight Haze Was Visible During The Firing Of Furnaces
	Furnace Area & Casting	HCl	Detector Tubes	Good	4-7 - No Irritation CO - 0.0 ppm HCl - 0.0 ppm CO - 0%
	Homogenizing Furnace	CO	Detector Tube	Good	4-7 - No Irritation CO - 0.0 ppm ON Floor 0.0% ON Ceilings 0.0% A Slight Odor Of Natural Gas Noticeable Around Both Furnaces
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No Oil Vapor Visible
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	Location Of Tank Moved - Tank Will Not Be Used Until Exhaust Hood Is Installed
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	Room Being Enlarged And A Rotary Barrel Unit Installed - Due To This Construction Room Is Only Intermittently Used For Handling Scrap
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	Saw Not In Operation No Other Dust Visible
	Rectifier Station	Mercury Vapor	Detector Tube	Good	Mercury Vapor 0.0 mg/m ³ - No Metallic Mercury Visible Anywhere In Room - Exhaust System Operating - Exhaust System Good
	Potrooms - General	Dust & Fumes	Visual	Good	Slight Haze Visible In All Rooms Pot Cover Placement - Generally Good Pot Cover Condition - Fair
	Bath Storage	Dust	Visual & Sensory	Good	No Dust Visible
	Bath Crushing	Dust	Visual-Smoke Tube	Good	No Irritation Crusher Not Operating - No Dust Visible Exhaust System Operating - Exhaust System Fair

SURVEYOR

GMR

411082 0634

FROM H. A. SEMKEN

ROCKDALE WORKS

April 24, 1969

CONFIDENTIAL

TO MR. T. B. BONNEY
MEDICAL DEPARTMENT
PITTSBURGH OFFICE

Copy to: ~~Dr. M. O. Colwell - Pittsburgh~~
~~Dr. L. V. Crafley - Pittsburgh~~

RE: INDUSTRIAL HYGIENE SURVEY

We are listing below comments on the items referred to in your letter of March 21, as receiving less-than-favorable evaluations in our industrial hygiene survey reports. As you will note, corrective measures are either contemplated or have been taken to improve conditions in all of these areas and steady, deliberate progress is being made in carrying out these plans.

Bath Crushing: Design of revisions of this equipment is about complete and this project is almost to the RFA stage. It includes a revised dump station, conveyors to mill, transfer points, and more hooding on the belts and transfer points. An evaluation will be made of the entire dust-collecting system and additional capacity installed, if required.

Bath Crushing - Bag Filters: The frequent poor rating of this item is due to this being a continuing maintenance and operating problem. Generally, work orders have been requested to correct the situation at the time of the survey. On one occasion we were out of bags for several weeks and on another occasion the fan got out of balance and the new runner was shipped to the wrong address by the vendor, which delayed the repair about two weeks. In most cases, repairs have been made in just a few days.

Conveyor Belt from Mixers: An Engineering Work Order to install a satisfactory hood over the open section of the belt conveyor has been issued. This is presently in the design stage.

Blacksmith Shop: A forced draft fan has been installed in the exhaust stack of the hood over the forge.

We are also listing below comments on areas, not mentioned in your letter, which frequently receive only a fair or poor rating.

Fume from Alcuplate Washer Dipping: We are investigating the use of a thermostatically controlled pot to prevent overheating of the joint compound and to cut down on the emission of objectionable fume.

Potroom Atmosphere: Our worst problem is in Lines 5 and 6 where we do not have adequate draft to tolerate bad covers or fan downtime. This problem should be corrected when the R-398 unit is complete on Line 5.

Mold Repair Room Degreaser: Doors are being fabricated to close off most of the opening while the equipment is in use. This should help prevent the escape of fumes into the building. Also, additional heaters have been ordered so that the solvent can be heated with a lower temperature on the heating elements and prevent local overheating.

411082 0635



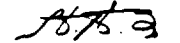
Mr. T. B. Bonney

Page 2

April 24, 1969

Wheelabrator: Although we are looking into methods of further decreasing the noise level of this unit, nothing material has been done. This unit is, however, only a part of a general noise level problem in the entire rodding operating area.

If you have any comments or questions, please let us know.


H. A. SEMKEN

HAS:S

411082 0636

Tom:

We will shortly
have an answer to
the comments made
in your letter of
March 31

H.A.S.

411082 0637

CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: APRIL 10, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	Atmosphere Clear
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	Cl ₂ 0.0 ppm HCl 0.0 ppm No Fumes Visible - No Irritation
	Homogenizing Furnace	CO	Detector Tube	Good	CO - ON FLAME 0% ON CARBIDE 0% SLIGHT COLOR OF NATURAL GAS - NOT APPARENT AROUND FEE No. 1
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No Oil Vapor Visible
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	EXHAUST SYSTEM GOOD - ALL VISIBLE FUMES AND SPRAY BEING REMOVED BY EXHAUST SYSTEM - NO IRRITATION
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	ONLY A SMALL AMOUNT OF SMOKE IN ROOM - NO DUST OR FUMES VISIBLE - NO IRRITATION - HCl 0.0 ppm EXHAUST SYSTEM POOR SAW NOT IN OPERATION
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	No Other Dust Visible
	Rectifier Station	Mercury Vapor	Detector Tube	Good	MERCURY VAPOR 0.000/M ³ - METALLIC MERCURY VISIBLE IN SINK - EXHAUST SYSTEM OPERATING EXHAUST SYSTEM GOOD
	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE VISIBLE IN ALL ROOMS AT COVER PLACEMENT - GENERALLY GOOD POT COVER CONDITION - FAIR NO DUST VISIBLE
	Bath Storage	Dust	Visual & Sensory	Good	No Irritation
	Bath Crushing	Dust	Visual-Snake Tube	Fair	INTERIOR OF BUILDING FAIRLY DUSTY - MOST OF DUST CAUSED BY WIND BLOWING CAUSING DUST FROM BENEATH THE EXHAUST HOODS - NEARLY ALL RUBBER FLAPS MISSING FROM EXHAUST HOODS

411082 0638

SURVEYOR

GMR

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: APRIL 16, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	FAIR ?	BOTH DUST COLLECTORS OPERATING - NO DUST VISIBLE (COMING FROM EAST UNIT - DUST, SOME TIMES HEAVY, VISIBLE COMING FROM WEST UNIT)
	Ore Unloading	Dust	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA - MOST OF DUST CAUSED BY WIND BLOWING THROUGH THE UNLOADING
					PPH
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Wheelabrator	Noise	Audio	FAIR ?	NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	Good	SMALL AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	POOR	HEAVY FUMES VISIBLE COMING FROM MIXER NO. 1 - WEST END OF BAYS 5, FULL OF HEAVY FUMES - VERY STRONG ODOR OF HOT PITCH NOTICEABLE IN AREA - SOME DUST ALSO IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	FAIR	AREA FAIRLY DUSTY - VERY LITTLE DUST VISIBLE NEAR WHEELABRATOR - MOST OF THE DUST SEEMED TO BE CAUSED BY THE GROUNDING SHAKER CONVEYOR
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY IN AREAS WHERE PACKING OR UNPACKING OPERATIONS IN PROGRESS CO .0.1%
	Butt Unloading & Crushing	Dust	Visual	Good	ONLY A SMALL AMOUNT OF DUST VISIBLE IN AREA - NEITHER OPERATION IN PROGRESS - EXHAUST HOUS IN UNLOADING AREA FAIR
	Mixer Floor	Dust & Pitch Fumes	Visual	FAIR	SMALL AMOUNT OF DUST VISIBLE - FUMES HEAVIER THAN USUAL - FUMES SEEMED TO BE COMING FROM THE CONVEYOR WHICH CARRIES MIX TO THE PASSES

SURVEYOR

CNR

411082 0639

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: April 10, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Poor	Hood Over Belt Still Open - Fumes Visible Rising From Hot Mix On Belt Toward Upper Part Of Building And Also Toward Mixer Floor - Sucking Duct On Mt. Atomizer In Area
	Press Room	Fumes	Visual	Good	ONLY HPM PRESS OPERATING - NO FUMES OR DUST VISIBLE - SIGHT DUCT OF HOT ATOMIZER NOTICEABLE IN AREA AREA WELL VENTILATED
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	NO DUST VISIBLE - NO EQUIPMENT IN OPERATION EXHAUST SYSTEM GOOD
	Garage - General	Fumes CO	Visual Detector Tube	Good	NO FUMES VISIBLE - NO EQUIPMENT IN OPERATION AREA WELL VENTILATED
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO ACID MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	ONLY A FEW WELDING OPERATIONS IN PROGRESS - SMALL AMOUNTS OF FUMES VISIBLE AT TIMES - NO IRRITATION EXHAUST HOODS WHICH WERE IN OPERATION WERE GOOD AREA WELL VENTILATED
	Marinette Finishing Room	Dust	Visual Smoke Tube	Good	NO DUST VISIBLE - NO EQUIPMENT IN OPERATION - EXHAUST SYSTEM GOOD
	Blacksmith Shop	CO	Detector Tube	Good	ONE GAS-FIRED FORGE OPERATING HOOD OVER FORGE FAIR CO 0.0%
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Poor	TRICHLOROETHYLENE 100PPM (100% MAC) - THIS READING TAKEN AT HIGH LEVEL DIRECTLY IN FRONT OF DEGREASING UNIT - UNIT IN USE - REMOVAL OF SOME METAL PARTS FROM UNIT PROBABLY THE CAUSE OF HIGH READING - EXHAUST GOOD
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN ANY AREA - WATER VISIBLE ON GROUND IN SEPTIC TANK AREA BEHIND BLDG 405 - SLIGHT ONCE NOTICEABLE IN AREA

SURVEYOR

GMR

411082 0640

INDUSTRIAL HYGIENE SURVEY

INDUSTRIAL HYGIENE SURVEY

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CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: FEB. 7, 1969

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Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE CLEAR
	Furnace Area & Casting	HCL	Detector Tubes	Good	No IRRITATION No Fumes Visible - No IRRITATION
	Homogenizing Furnace	CO	Detector Tube	Good	CO - 0.000 HCL 0.000 CO 0.000 SLIGHT ODOR OF NATURAL GAS NOTICABLE NEAR FCE No. 1 CO - 0.0 FLOOR 0.000 ON CATWALK 0.000
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No. OIL VAPOR VISIBLE EXHAUST SYSTEM GOOD - ALL VISIBLE FUMES AND SPRAY BEING REMOVED BY EXHAUST SYSTEM
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	No IRRITATION VERY LITTLE SAUN IN ROOM - NO DUST OR FUMES VISIBLE
	Soda Room	Dust & Fumes HCL	Visual & Sensory Detector Tube	Good	No IRRITATION - EXHAUST SYSTEM POOR HCL 0.000 SAW NOT IN OPERATION
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	No OTHER DUST VISIBLE IN AREA
	Rectifier Station	Mercury Vapor	Detector Tube	Good	MERCURY VAPOR 0.000/M ³ - SMALL AMOUNT OF METALLIC MERCURY VISIBLE IN SINK - NEW EXHAUST SYSTEM GOOD
	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE VISIBLE IN ALL ROOMS NOT COVER PLACEMENT - GENERALLY GOOD PER COVER CONDITION - FAIR No DUST VISIBLE
	Bath Storage	Dust	Visual & Sensory	Good	No IRRITATION INTERIOR OF BUILDING FAIRLY DUSTY - MOST OF DUST CAUSED BY STRONG WIND GUSTS BLOWING THROUGH BUILDING - THE WIND ALSO CAUSED THE EXHAUST HOODS TO PERFORM POORLY
	Bath Crushing	Dust	Visual-Smoke Tube	FAIR	

SURVEYOR

C.H.C.

411082 0643

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Feb. 7 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Fair	Dust Visible Coming From West Dust No Dust Visible Coming From East Dust
	Ore Unloading	Dust	Visual	Good	Small Amount of Dust Visible in Area T.P. 11
	Rodding Room-General	Dust & Fumes	Visual	Good	Small Amount of Dust Visible in Area
	Wheelabrator	Noise	Audio	Fair	No Fumes Visible Noise Level Still Above 100
	Stub Press & Unbolting Station	Dust	Visual	Good	Deformed Rods Small Amount of Dust Visible in Area Area
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	Small Amount of Dust Visible in Area - Small Amount of Fumes Visible Coming from One Machine - Only A Very Slight Amount of Dust Visible in Area
	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	Small Amount of Dust Visible in Area - Small Amount of Fumes Visible Coming from One Machine - Only A Very Slight Amount of Dust Visible in Area
	Ring Furnace	Dust CO	Visual Detector Tube	Good	Dust Visible Only in Area Where Furnace is Operating - Operations in Progress
	Butt Unloading & Crushing	Dust	Visual	Good	Neither Operations in Progress
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	Exhaust System in Unloading Area Area Small Amount of Dust Visible - Fumes Visible Only When A Mixer is Dumped - Only a Very Slight Amount of Dust Visible in Area

SURVEYOR

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INDUSTRIAL HYGIENE SURVEY

DATE: FEB 7 1969

SURVIVOR

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CONFIDENTIAL

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Jan. 9, 1969

for 7-13
for the purpose of a general survey
of the Rockdale Works
by the following person
R. J. M. J. M. J. M.

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	Atmosphere Generally Clear - Some Fumes Visible When A Skin Flux Used In Furnace
	Furnace Area & Casting	Cl ₂ , HCl, CO	Detector Tubes	Good	No Irritation No Fumes Visible - Occasional Gists Of White Steam Amounts Of Cl ₂ Outside The Exhaust Hoods On The Roof Units - No Irritation On 12:25pm HCl 0.00pm 0.00pm
	Homogenizing Furnace	CO	Detector Tube	Good	Slight Door Of Natural Gas Not Operative Near Burner Furnaces CO - On Floor 0.00pm On Catwalk 0.00pm
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No Oil Vapor Visible
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	Exhaust System Good - All Visible Fumes And Spray Being Removed By Exhaust System No Irritation
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	No Skim In Room - No Dust Or Fumes Visible - No Irritation - HCl 0.00pm - Exhaust System Either Not Operating Or Its Performance Very Poor
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	Saw Not In Operation No Other Dust Visible In Area
	Rectifier Station	Mercury Vapor	Detector Tube	Good	Mercury Vapor 0.00mg/m ³ - Small Amount Of Metallic Mercury Visible In And Around Sink New Exhaust System Installed Since Last Survey
	Potrooms - General	Dust & Fumes	Visual	Good	Slight Haze Visible In All Rooms At Cover Placement - Generally Good Pet Cover Cracked - Fair
	Bath Storage	Dust	Visual & Sensory	Good	No Dust Visible No Irritation
	Bath Crushing	Dust	Visual-Smoke Tube	Fair	Building Fairly Dusty - Most Of Dust Caused By Wind Blowing Than Building - Exhaust Hoods Shipped From Wind-Fair - Exhaust Hoods Exposed To Wind-Rod

SURVEYOR

C. M. R.

411082 0646

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JAN. 9, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	FAIR	A SMALL AMOUNT OF DUST VISIBLE COMING FROM BOTH UNITS
	Ore Unloading	Dust	Visual	GOOD	ONLY A SMALL AMOUNT OF DUST VISIBLE IN AREA
	Rodding Room-General	Dust & Fumes	Visual	GOOD	SMALL AMOUNT OF DUST VISIBLE IN AREA
	Wheelabrator	Noise	Audio	FAIR	NO FUMES VISIBLE NOISE LEVEL STILL ABOVE THE DESIRED RANGE
	Stub Press & Unbolting Station	Dust	Visual	GOOD	SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	FAIR	SMALL AMOUNT OF DUST VISIBLE IN AREA FUMES VISIBLE RISING FROM ONE MIXER - FAIRLY STRONG ODEUR OF HOT PITCH NOTICEABLE IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	GOOD	CLEANING OPERATION NOT IN PROGRESS
	Ring Furnace	Dust CO	Visual Detector Tube	GOOD	SMALL AMOUNT OF DUST VISIBLE IN AREA DUST VISIBLE ONLY IN AREAS WHERE PACKING OR UNPACKING OPERATIONS IN PROGRESS CO 10 ppm
	Butt Unloading & Crushing	Dust	Visual	GOOD	NEITHER OPERATION IN PROGRESS
	Mixer Floor	Dust & Pitch Fumes	Visual	GOOD	EXHAUST SYSTEM IN UNLOADING AREA GOOD SMALL AMOUNT OF DUST VISIBLE - FUMES VISIBLE ONLY WHEN A MIXER IS DUMPED - ODEUR OF HOT PITCH NOTICEABLE IN AREA

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SURVEYOR

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Jan 9, 1969

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Poor	HOOD OVER BELT STILL OPEN - HEAVY FUMES VISIBLE RISING FROM HOT MIX ON BELT - FUMES GENERALLY RISING TOWARD UPPER PART OF BUILDING - STRONG ODOR OF HOT BITUMEN ACTIVE IN AREA
	Press Room	Fumes	Visual	Good	SMALL AMOUNT OF FUMES VISIBLE ALONG EACH PRESS WHEN THE HOT MIX ENTERS THE PRESS - STRONG ODOR OF HOT BITUMEN NOTICEABLE IN BOTH ROOMS
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	TWO SAWS IN OPERATION - EXHAUST SYSTEM GOOD AT BOTH LOCATIONS - NO DUST VISIBLE
	Garage - General	Fumes CO	Visual Detector Tube	Good	NO EQUIPMENT IN OPERATION NO FUMES VISIBLE
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO ACID MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	FUMES VISIBLE FROM SEVERAL WELDING OPERATIONS - FUMES RISING RAPIDLY - EXHAUST HOODS ABOVE SEVERAL OF THE OPERATIONS GOOD - NO IRRITATION - BUILDING GENERALLY WELL VENTILATED
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	IN THE IN OPERATION - NO DUST VISIBLE EXHAUST SYSTEM GOOD
	Blacksmith Shop	CO	Detector Tube	Fair	LOCAL FIRED FORGE OPERATING - EXHAUST HOOD FAIR - OCCASIONAL GUSTS OF AIR BLOW PRODUCTS OF COMBUSTION INTO SURROUNDING AREA - CO 25 ppm - READING TAKEN AT HOSE LEVEL DIRECTLY IN FRONT OF FORGE
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE 30 ppm - THIS READING TAKEN AT HOSE LEVEL DIRECTLY IN FRONT OF DEGREASING UNIT - UNIT NOT IN USE - EXHAUST SYSTEM GOOD
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN ANY AREA - WATER VISIBLE ON GROUND IN SEPTIC TANK AREA BEHIND BLDG NOS FAIRLY STRONG ODOR IN AREA

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INDUSTRIAL HYGIENE SURVEY

DATE: JAN. 9, 1962

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: DEC. 10, 1968

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Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE CLEAN
	Furnace Area & Casting	HCl CO	Detector Tubes	Good	NO IRRITATION NO FUMES VISIBLE - NO IRRITATION - NO CATCHING WAS DONE AT TIME OF SURVEY
	Homogenizing Furnace	H ₂ CO	Detector Tube	Good	SMALL DUCK OF NATURAL GAS NOTICEABLE NEAR FURNACE
	Cutting Oil Supply Tank	Oil Vapor	Visual	Poor	Oil - ON FLOOR - DRAIN ON FLOOR - VAPOR VISIBLE COMING FROM TANK - WIND BLOWING VAPOR INTO CENTRAL PART OF BLDG. 34 - NO OIL VISIBLE OVER A LARGE PART OF NORTH END BLDG.
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	NO IRRITATION - EXHAUST SYSTEM GOES ALL VISIBLE FUMES AND SPRAY BEING REMOVED BY EXHAUST SYSTEM
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	VERY LITTLE SMOKY IN ROOM - NO DUST OR FUMES VISIBLE NO IRRITATION - HQ 10 AM - EXHAUST SYSTEM PLEASANTLY UNDER A NEW SMOKE HANDLING PLANT - ONLY SMALL AMOUNTS OF SMOKE SEEN - BELIEVED AT ANY TIME
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT IN OPERATION NO OTHER DUST VISIBLE IN AREA
	Rectifier Station	Mercury Vapor	Detector Tube	Good	MERCURY VAPOR .001 mg/m ³ - ONLY A SMALL AMOUNT OF METALLIC MERCURY VISIBLE AROUND SPILL ROOM WELL VENTILATED
	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE VISIBLE IN ALL ROOMS AT COVER PLACEMENT - GENERALLY GOOD
	Bath Storage	Dust	Visual & Sensory	Good	AT COVER PLACEMENT - FAIR NO DUST VISIBLE
	Bath Crushing	Dust	Visual-Smoke Tube	Fair?	NO IRRITATION BUILDING FAIRLY DUSTY - SOME OF DUST CAUSED BY WIND BLOWING THROUGH BUILDING - EXHAUST SYSTEM FAIR - NEW COVERING IN OPERATION - PILES OF DUST UP TO ONE INCH BEING THROWN UP BY CRUSHER INTO BUILDING

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: DEC 10 1961

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	No Dust Visible Coming From Either Unit
	Ore Unloading	Dust	Visual	Good	Very Little Dust Visible In Area
	Rodding Room-General	Dust & Fumes	Visual	Good	Small Amount Of Dust Visible In Area No Fumes Visible
	Wheelabrator	Noise	Audio	Fair	Addition Of Rubber Lined Boxes Around Wheels Lowered The Noise Level - Further Improvement Needed To Reach A Desirable Range
	Stub Press & Unbolting Station	Dust	Visual	Good	Small Amount Of Dust Visible In Both Areas
	Potlining-Mixer Area	Dust & Fumes	Visual	Fair	Small Amount Of Dust Visible In Area A Moderate Amount Of Fumes Visible Around Furnace One Mixer - Slight Odor Of Hot Pitch Noticeable In Area
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	Cleaning Operation Not In Progress Small Amount Of Dust Visible In Area
	Ring Furnace	Dust CO	Visual Detector Tube	Good	Dust Visible Only In Areas Where Packing Or Unpacking Operations In Progress CO 0.0 ppm
	Butt Unloading & Crushing	Dust	Visual	Good	Neither Operation In Progress Exhaust System In Unloading Area Good
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	Small Amount Of Dust Visible - Fumes Visible Only When A Mixer Is Dumped - Slight Odor Of Hot Pitch Noticeable In Area

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Dec 10 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	POOR ✓	HOOD OVER BELT STILL OPEN - HEAVY FUMES VISIBLE RISING FROM HOT MIX ON BELT - WIND WAS BLOWING FUMES TOWARD FURN AND THE STORAGE LANES OVER OF HOT PITTING DISTURBANCE IN AREA
	Press Room		Visual	GOOD	BOTH PRESSURE OPERATING - NO FUMES VISIBLE IN EITHER ROOM - SLIGHT ODOR OF HOT PITTING NOTICEABLE IN BOTH ROOMS
	Carpenter Shop	Dust	Visual & Smoke Tube	GOOD	ONE SAW OPERATING - SMALL AMOUNT OF DUST VISIBLE IN AREA OF SAW - EXHAUST SYSTEM AND AREA WELL VENTILATED
	Garage - General	Fumes CO	Visual Detector Tube	GOOD	NO EQUIPMENT IN OPERATION - NO FUMES VISIBLE AREA WELL VENTILATED
	Electric Shop-General	Acid Mist	Visual & Sensory	GOOD	NO ACID MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	GOOD	FUMES VISIBLE FROM SEVERAL WELDING OPERATIONS - FUMES RISING RAPIDLY - NO IRRITATION - BURNING WELL VENTILATED - EXHAUST HOODS NOT IN OPERATION NO WELDING IN PROGRESS NEAR HOODS
	Marinette Finishing Room	Dust	Visual Smoke Tube	GOOD	NO EQUIPMENT OPERATING - NO DUST VISIBLE EXHAUST SYSTEM GOOD
	Blacksmith Shop	CO	Detector Tube	POOR ✓	COAL FIRED FUDGE OPERATING - FIRE NOT DIRECTLY UNDER EXHAUST HOOD - EXHAUST HOOD FAIR - SMOKE VISIBLE ENTERING ATMOSPHERE AROUND FUDGE - CO 50 PPM READING TAKEN AT LEVEL DIRECTLY IN FRONT OF FUDGE
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	GOOD	TRICHLOROETHYLENE 8 PPM - THIS READING TAKEN AT HOSE LEVEL DIRECTLY IN FRONT OF DEGREASING UNIT - UNIT NOT IN USE - EXHAUST SYSTEM GOOD
	Atomizer - General	Dust	Visual	GOOD	NO DUST VISIBLE IN ANY AREA - SEPTIC TANK AREA BEHIND BLDG NOT DRY - NO ODOR

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Nov. 7, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Poor	Hood Over Belt Still Open - Heavy Fumes Visible Rising From Mix Ch. Belt - Fumes Tended To Rise Rapidly - Particulate Fumes Observed Toward Mixed Floor
	Press Room		Visual	Good	Over Of Hot Presses Noticeable In Area Visible In Both Presses Operating - No Fumes Visible In Either Room - Slight Cloud Of Hot Air From Noticeable In Both Rooms
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	No Dust Visible
	Garage - General	Fumes CO	Visual Detector Tube	Good	Exhaust System (Good) No Equipment In Operation - No Fumes Visible Area Well Ventilated
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Mist Visible No Irritation
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	All Visible Fumes Around Welding Operations Either Aside Rapidly Or Being Removed To Exhaust Hoods - Exhaust Hoods Good - No Irritation - Grinding Wheel Ventilated
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	No Equipment Operating - No Dust Visible Exhaust System Good
	Blacksmith Shop	CO	Detector Tube	Fair	One Gas Fume From Finishing - CO 10 ppm
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	Exhaust Hood Over Finishing - See Note 2 Trichloroethylene 17 ppm - This Reading Taken 4 hr After Leaving Degreaser In Favor Of Degreasing Unit Not In Use - Exhaust System Good
	Atomizer - General	Dust	Visual	Good	No Dust Visible In Hot Area - Some Water Visible On Ground In Septic Tank Area Behind Building - No Dust

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Nov 7, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE CLEAR
	Furnace Area & Casting	HCl CO	Detector Tubes	Good	No Irritation No Fumes Visible - No Irritation Dust - Green HCl - Green CO - Green
	Homogenizing Furnace	CO	Detector Tube	Good	No Fumes Visible - No Irritation CO - Green
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No Oil Vapor Visible No Irritation - No Fumes Visible - No Irritation
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	Being Removed by Exhaust System Exhaust System - Green
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	Very Little Skim - No Dust - Fumes Visible No Irritation - HCl - Green - Fumes Visible Exhaust System - Green - Fumes Visible Dust - Green - Fumes Visible Skim Not in Operation
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	No Dust Visible in Area
	Rectifier Station	Mercury Vapor	Detector Tube	Fair	Some Irritation Visible in Area Fume Side Concentration - Fair Exhaust System - Green
	Potrooms - General	Dust & Fumes	Visual	Good	Some Irritation Visible in Area Exhaust System - Green - Fumes Visible Dust - Green - Fumes Visible
	Bath Storage	Dust	Visual & Sensory	Good	No Irritation
	Bath Crushing	Dust	Visual-Smoke Tube	Fair	Exhaust System - Green - Fumes Visible Dust - Green - Fumes Visible Exhaust System - Green - Fumes Visible

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Nov. 7, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Fair	A Moderate Amount of Dust Visible Coming from the Bags Near M. Dust Visible Coming from Bag Filter
	Ore Unloading	Dust	Visual	Good	Very Little Dust Visible in Area
	Rodding Room-General	Dust & Fumes	Visual	Good	Small Amount of Dust Visible in Area No Fumes Visible
	Wheelabrator	Noise	Audio	Fair	Noise Level Early High
	Stub Press & Unbolting Station	Dust	Visual	Good	Small Amount of Dust Visible in Both Areas
	Potlining-Mixer Area	Dust & Fumes	Visual	Fair	Small Amount of Dust Visible in Area - Heavy Fumes Visible Coming from the Mixer. Fumes Coming from the Potlining Area in Area
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	Cleaning Operation Not in Progress
	Ring Furnace	Dust CO	Visual	Good	Small Amount of Dust Visible in Area Dust Visible Only in Areas Where Fumes are Unloading Operation is in Progress
	Butt Unloading & Crushing	Dust	Visual	Fair	Unloading Operation Not in Progress Dust in Unloading Area - Quite Heavy in Crushing Area
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	Small Amount of Dust Visible - Fumes Visible Only When A Mixer is Dumped - Light Good at the Pitch Noticeable in Area

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INDUSTRIAL HYGIENE SURVEY

INDUSTRIAL HYGIENE SURVEY

STUDY 1

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: OCT. 2, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	No Dust Visible (Comm. Fines)
	Ore Unloading	Dust	Visual	Good	No Dust Visible in Area
	Rodding Room-General	Dust & Fumes	Visual	Good	Small Amount of Dust Visible in Area - No Fumes Visible
	Wheelabrator	Noise	Audio	Fair	Noise Level Fairly High ?
	Stub Press & Unbolting Station	Dust	Visual	Good	A Small Amount of Dust Visible in Area
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	Small Amount of Dust Visible in Area - No Fumes Visible (Comm. Fines)
	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	When Cleaning Operation is in Progress, Area is Very Dirty - Wind Tends to Blow Dust into Respiratory Area
	Ring Furnace	Dust CO	Visual Detector Tube	Good	Dust Visible in Area - No Fumes Visible - No CO
	Butt Unloading & Crushing	Dust	Visual	Good	Very Little Dust Visible in Area - Unloading and Crushing Operations Not in Progress
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	Small Amount of Dust Visible - No Fumes Visible - Small Amount of Hot Pitch Noticeable in Area

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Oct. 2, 1972

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	FAIR	Hood Over Belt Still Open - Fumes Visible Rising From Hot Mix On The Belt - Case Of
	Press Room	Fumes	Visual	Good	Hot Press Noticeable In Area Both Presses Operating - No Fumes Visible In Either Room; Slight Odor On Presses Noticeable In Both Rooms
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	No Dust Visible - No Equipment In Operation
	Garage - General	Fumes CO	Visual Detector Tube	Good	Exhaust System Good - Area Well Ventilated No Equipment In Operation Area Well Ventilated
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Mist Visible No Irritation
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	All Visible Fumes Around Welding Operations Either Rising Rapidly Or Being Removed By Exhaust Systems No Irritation - Building Well Ventilated No Equipment Operating - No Dust Visible
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	Exhaust System Good
	Blacksmith Shop	CO	Detector Tube	FAIR	One Small Coal Fired Forge Operating - Exhaust System Did Not Seem To Be Functioning Properly CO 10 ppm
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	FAIR	Trichloroethylene 50 ppm - This Reading Taken At High Level Directly In Front Of Degreasing Unit - Unit Not In Use - Exhaust System Operating - Comments: Detectors Taken At High Level
	Atomizer - General	Dust	Visual	Good	No Dust Visible In Any Area - Seeping Tank Area Behind Basin For Day - No Odor

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INDUSTRIAL HYGIENE SURVEY

DATE: OCT. 8, 1968

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CONCLUSION

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ROCKDALE WORKS

Don't 'fair' mean bad?
Probably means anything other than good
INDUSTRIAL HYGIENE SURVEY
CHL required to North Star to be painted out to him.

DATE: SEPT. 4, 1968

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INDUSTRIAL HYGIENE SURVEY

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE CLEAN
	Furnace Area & Casting	CL ₂ HCL CO	Detector Tubes	Good	NO IRRITATION NO FUMES VISIBLE - NO IRRITATION NO CHLORINE WAS BEING USED CO. VAPOR
	Homogenizing Furnace	CO	Detector Tube	Good	SLIGHT ODOOR OF NATURAL GAS BURN FURNACES CO - ON FLOOR - OILY ON CATWALK
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	NO VAPOR VISIBLE
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	EXHAUST SYSTEM GOOD - ALL VISIBLE FUMES AND SPRAY BEING REMOVED BY EXHAUST SYSTEM NO IRRITATION
	Skim Room	Dust & Fumes HCL	Visual & Sensory Detector Tube	FAIR	ONE HALF OF ROOM FULL OF BURNING SKIM - ONE HALF OF ROOM UNDER REPAIR - SOME FUMES VISIBLE ESP. INTO MAIN BUILDING - INABLE TO ENTER ROOM TO CHECK EXHAUST SYSTEM OR HCL SAW NOT IN OPERATION
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	NO DUST VISIBLE IN AREA
	Rectifier Station	Mercury Vapor	Detector Tube	Poor	DISTILLATION OF MERCURY IN PROGRESS - QUOTE - A LARGE AMOUNT OF MERCURY VISIBLE IN SINK AND ON FLOOR AROUND AND UNDER TUBES MERCURY UNDER 1/2 IN. / M
	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE VISIBLE IN ALL ROOMS NOT COVER PLACEMENT - GENERALLY GOOD PUT COVER CONTAINER - FAIR +
	Bath Storage	Dust	Visual & Sensory	Good	NO DUST VISIBLE
	Bath Crushing	Dust	Visual-Smoke Tube	FAIR	NO IRRITATION INTERIOR OF BUILDING QUITE DUSTY AT TIMES - MOST OF THE RUBBER FLAM MISSING FROM EXHAUST HOODS EFFICIENCY OF EXHAUST SYSTEM ON FAIR - SEE NOTE

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: SEPT. 4, 1962

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	FAIR	A SMALL AMOUNT OF DUST VISIBLE COMING FROM EAST UNIT - MODERATE AMOUNT OF DUST VISIBLE COMING FROM WEST UNIT
	Ore Unloading	Dust	Visual	Good	VERY LITTLE DUST VISIBLE IN AREA - DUST MAINLY CAUSED BY WIND BLOWING THROUGH BUILDING
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Wheelabrator	Noise	Audio	FAIR	NOISE LEVEL FAIRLY HIGH ✓
	Stub Press & Unbolting Station	Dust	Visual	Good	ONLY A SMALL AMOUNT OF DUST VISIBLE IN EITHER AREA
	Potlining-Mixer Area	Dust & Fumes	Visual	FAIR	SMALL AMOUNT OF DUST VISIBLE IN AREA MODERATE AMOUNT OF FUMES VISIBLE RISING FROM TWO MIXERS - STRENGTH OF FUMES NOT ASSESSABLE IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	FAIR	AREA QUITE DUSTY WHEN CARBON OPERATING IN PACKAGING - WIND TENDS TO BLow DUST INTO SURROUNDING AREA
	Ring Furnace	Dust CO	Visual Detector Tube	(Good)	DUST VISIBLE ONLY IN AREA WHERE FUMES OR UNPACKING OPERATIONS ARE IN PROGRESS
	Butt Unloading & Crushing	Dust	Visual	Good	VERY LITTLE DUST VISIBLE IN AREA - UNPACKING AND CRUSHING OPERATIONS NOT IN PROGRESS EXHAUST SYSTEM GOOD
	Mixer Floor	Dust & Pitch Fumes	Visual	FAIR	SMALL AMOUNT OF DUST AND FUMES VISIBLE IN AREA - OCCASIONALLY FROM GATE STRENGTH

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: SEPT. 4, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	FAIR	HEAD OVER BEST STILL COOL - Fumes Visible Near End FROM HOT MIX ON THE BELT - Fumes Dispersing Toward Mixer Floor - NO. 2 OF HOT MIX - Fumes Striking In Area
	Press Room	Fumes	Visual	Good	Both Presses Operating - Small Amounts of Fumes Visible Around Each Press - Slight Odor of Pitch Noticeable In Both Rooms
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	No Dust Visible - Exhaust System Good Area Well Ventilated
	Garage - General	Fumes CO	Visual Detector Tube	Good	No Equipment In Garage Area Well Ventilated
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Mist Visible No Irritation
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	Only The Welding Operation No. 14 Running Exhaust Hood Removed From Welding Position Well Ventilated
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	No Equipment Operating - No Dust Visible Exhaust System Good
	Blacksmith Shop	CO	Detector Tube	FAIR	CO 10 ppm One Forge Operating
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	FAIR	Trichloroethylene Solvent - This Solvent Taken At Nose Level Directly In Front Of Degreasing Unit - But No Odor - In Solvent Section - FAIR
	Atomizer - General	Dust	Visual	Good	No Dust Visible In Any Area - Slight Taint Area Behind Bench For Dry - No CO. 2

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INDUSTRIAL HYGIENE SURVEY

DATE: SEPT 1 1968

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SUMMARY

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RECORDS W-203

INDUSTRIAL HYGIENE CULVEY

DATE: AUG. 9, 1968

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Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE CLEAR
	Furnace Area & Casting	OL ₂ HCl CO	Detector Tubes	Good	NO IRRITATION NO FUMES VISIBLE - NO IRRITATION CO 0% HCl 0% ONLY ONE FURNACE OPERATING
	Homogenizing Furnace	CO	Detector Tube	Good	CO - OFF FLOOR 1% ON CORNERS 0.1%
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	NO VAPOR VISIBLE
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	EXHAUST SYSTEM GOOD - ALL VISIBLE FUMES AND SPRAY BEING REMOVED BY EXHAUST SYSTEM
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	NO IRRITATION VERY LITTLE SKIM IN ROOM - NO DUST OR FUMES VISIBLE NO IRRITATION - EXHAUST SYSTEM VERY P.R. HCl 0.05% SAW NOT OPERATING
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	NO DUST VISIBLE IN AREA
	Rectifier Station	Mercury Vapor	Detector Tube	Good	SMALL AMOUNT OF MERCURY VISIBLE ALONG STILL - ROOM WELL VENTILATED MERCURY VISIBLE
	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE VISIBLE IN ALL ROOMS AFTER COVER PLACEMENT GENERALLY NO BUT COVER REMOVED - FAIR + NO DUST VISIBLE
	Bath Storage	Dust	Visual & Sensory	Good	NO IRRITATION NO DUST VISIBLE
	Bath Crushing	Dust	Visual-Smoke Tube	Good	CAUSTIC NOT OPERATING

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ROCKDALE WOLLS

INDUSTRIAL HYGIENE SURVEY

DATE: Aug. 9, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	No Dust Visible - Just Collectors Not Operating Because Crusher Not In Operation
	Ore Unloading	Dust	Visual	Good	Small Amount Of Dust Visible In Area - Dust Mainly Caused By A Fairly Strong Wind Blowing Through The Bunkers
	Rodding Room-General	Dust & Fumes	Visual	Good	Small Amount Of Dust Visible In Area No Fumes Visible
	Wheelabrator	Noise	Audio	Fair	Noise Level Fairly High
	Stub Press & Unbolting Station	Dust	Visual	Good	Only A Small Amount Of Dust Visible In Either Area
	Potlining-Mixer Area	Dust & Fumes	Visual	Fair	Mixer Being Unloaded - Large Amount Of Fumes Visible Around Filler Not Near End Of Mixer Potliners Quite Clean In Area In Which Visible In Area
	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	Area Quite Clean - Some Cleaning Operations In Progress - Wind From Potliners Dust In Area Bunkers Room Clean
	Ring Furnace	Dust CO	Visual Detector Tube	Good	Dust Visible Only In Areas Where In Area OR Unloading Station In Area In Which CO High
	Butt Unloading & Crushing	Dust	Visual	Good	Very Little Dust Visible In Area - Unloading And Crushing Operations Not In Progress Exhaust System Good
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	Small Amount Of Dust Visible - No Fumes Visible - Slight COCA Of Hot Pitch Noticeable In Area

SURVEYOR

C.H.S.

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FOGIES

INDUSTRIAL HYGIENE SURVEY

DATE: AUG. 9 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	FAIR	HOOD OVER BELT SUCKING UPEN - FUMES VISIBLE RISING FROM MIXER BELT - DOOR OF HULL
	Press Room	Fumes	Visual	Good	PISTON PUMP SUCKING UPEN AREA ONLY NEW PRESS OPERATING - SMALL AMOUNT OF FUMES VISIBLE - SUCKING DOOR OF MOTOR PUMP NOTICEABLE - FUMES WELL VENTILATED
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	NO DUST VISIBLE - EXHAUST SYSTEM GOOD AREA WELL VENTILATED
	Garage - General	Fumes CO	Visual Detector Tube	Good	NO EQUIPMENT IN OPERATION AREA WELL VENTILATED
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	ONLY TWO WELDING OPERATIONS OBSERVED - EXHAUST HOOD REMOVED FUMES IN ONE AREA - ONLY A SMALL AMOUNT OF FUMES VISIBLE - AREA WELL VENTILATED - FUMES WELL VENTILATED
	Marinette Finishing Room	Dust	Visual Smoke Tube	Good	NO DUST VISIBLE EXHAUST SYSTEM GOOD
	Blacksmith Shop	CO	Detector Tube	Good	TWO FORGES OPERATING - AREA WELL VENTILATED - CO 10%
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE 40PPM - THIS REMOVED AT LOW LEVEL DURING FINISHING DEGREE OF DEGREASER WITH UNIT OPERATING - EXHAUST SYSTEM GOOD
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN ANY AREA - SEPTIC TANK AREA BEHIND BLOS NOS DAY - NO DOOR

SURVEYOR

CHH

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INDUSTRIAL ENGINE SUKVELY

DATE: Dec 9 1968

[illegible]

SUMMARY

211

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

MCC-1A-1UC

DATE: JUNE 10 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE CLEAR EXCEPT FOR A SPOT PERIOD DURING THE FLOWING OF FURNACE No. 6
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	NO IRRITATION FUMES VISIBLE ONLY WHILE FURNACE No. 6 WAS BEING FLOWED - NO IRRITATION NO. 1 FURNACE HCl 0.000% CO 0.0%
	Homogenizing Furnace	CO	Detector Tube	Good	NO. 1 FURNACE NOT OPERATING - NO MAINTENANCE WORK - SIGHT OBS. OF NATURAL FUMES NOT NOTICEABLE AROUND FURNACE No. 2 - CO 0.0%
	Cutting Oil Supply Tank	Oil Vapor	Visual	Fair	FUMES VISIBLE AROUND TANK - WIND WAS BLOWING FUMES TOWARD CENTER OF BUILDING
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	EXHAUST SYSTEM GOOD - NO FUMES OR SPRAY VISIBLE - NO IRRITATION
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	MODERATE AMOUNT OF SMOKY IN ROOM - NO DUST OR FUMES VISIBLE - NO IRRITATION - EXHAUST SYSTEM VERY POOR - HCl 0.000% NO WORK IN PROGRESS
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	NO DUST VISIBLE
	Rectifier Station	Mercury Vapor	Detector Tube	Good	SOME MERCURY VISIBLE IN SINK AND AROUND STILL - ROOM WELL VENTILATED MERCURY VAPOR 0.000/m ³
	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE VISIBLE IN ALL ROOMS POT COVER PLACEMENT - GENERALLY GOOD POT COVER CONTAINED - FAIR +
	Bath Storage	Dust	Visual & Sensory	Good	NO DUST VISIBLE
	Bath Crushing	Dust	Visual-Smoke Tube	Good	NO IRRITATION NOT IN OPERATION - NO DUST VISIBLE EXHAUST SYSTEM NOT OPERATING

SURVEYOR

C.H.R.

411082 0670

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JUNE 10, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	BATH CRUSHER NOT OPERATING DUST COLLECTORS NOT OPERATING
	Ore Unloading	Dust	Visual	Good	VERY LITTLE DUST VISIBLE IN AREA
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE NO FUMES VISIBLE
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL FAIRLY HIGH
	Stub Press & Unbolting Station	Dust	Visual	Good	ONLY A SMALL AMOUNT OF DUST VISIBLE IN EITHER AREA
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SOME DUST VISIBLE IN AREA - A SMALL AMOUNT OF FUMES VISIBLE RISING FROM THE TOP OF ONE MIXER
	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	A MODERATE AMOUNT OF DUST STILL ESCAPING FROM CLEANING OPERATION - DUST BEING BLOWN BY WIND TOWARD RODDING ROOM AREA
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY NEAR PACKING AND UNPACKING OPERATIONS CO. 0.0%
	Butt Unloading & Crushing	Dust	Visual	Fair	UNLOADING AREA RELATIVELY FREE OF DUST EXHAUST HOOD GOOD - AREA SURROUNDING THE CRUSHING OPERATION VERY DUSTY
					SOME DUST VISIBLE - NO FUMES VISIBLE
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	SLIGHT ODDOR OF PITCH FUMES NOTICEABLE

SURVEYOR

GHR

411082 0671

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JUNE 10, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Good	HOOD OVER BELT STILL OPEN - NO FUMES VISIBLE BECAUSE THERE WAS NO MIST ON THE BELT
	Press Room	Fumes	Visual	Good	PRESSES NOT OPERATING - NO FUMES OR DUST VISIBLE
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	EXHAUST SYSTEM GOOD
	Garage - General	Fumes CO	Visual Detector Tube	Good	NO EQUIPMENT IN OPERATION
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO MIST VISIBLE
					NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	NO WELDING OPERATIONS IN PROGRESS - NO FUMES VISIBLE - NO IRRITATION - AREA WELL VENTILATED
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION
	Blacksmith Shop	CO	Detector Tube	Good	1 FORGE OPERATING - AREA WELL VENTILATED CO 10%
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE SOLVENT - THIS READING TAKEN AT KNEE LEVEL DIRECTLY IN FRONT OF DEGREASING UNIT WITH UNIT OPERATING - EXHAUST SYSTEM FAIR
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN ANY AREA - WATER VISIBLE ON SURFACE OF GROUND IN SPRING TANK AREA BEHIND AND SWARTZKOPF NOTICEABLE AND NUMEROUS FLIES VISIBLE IN AREA

SURVEYOR

C.H.R.

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411082 0672

DATE: JUNE 10 1968

INDUSTRIAL HYGIENE SURVEY

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DATE: JULY 2, 1968

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE CLEAR NO IRRITATION
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	NO FUMES VISIBLE - NO IRRITATION 0.5 ppm HCl 0.5 ppm CO 0.0%
	Homogenizing Furnace	CO	Detector Tube	Good	SLIGHT COOR OF NATURAL GAS NOTICEABLE AROUND BOTH FURNACES CO - ON FLOOR 0.0% OIL CATWALK 0.0%
	Cutting Oil Supply Tank	Oil Vapor	Visual	FAIR	FUMES VISIBLE AROUND TANK - WIND BLOWING FUMES TOWARD CENTER OF BUILDING
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	EXHAUST SYSTEM GOOD - NO FUMES OR SPRAY VISIBLE - NO IRRITATION
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	VERY LITTLE SKIM IN ROOM - NO DUST OR FUME VISIBLE - NO IRRITATION - EXHAUST SYSTEM VERY POOR HCl 0.5 ppm
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT OPERATING NO DUST VISIBLE IN AREA
	Rectifier Station	Mercury Vapor	Detector Tube	Good	SOME MERCURY VISIBLE IN SINK AND AROUND STILL - ROOM WELL VENTILATED MERCURY VAPOR 0.0 mg/m ³
	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE VISIBLE IN ALL ROOMS POT COVER PLACEMENT - GENERALLY OK POT COVER CONDENSATE - FAIR
	Bath Storage	Dust	Visual & Sensory	FAIR	INTERIOR OF STORAGE BUILDING QUITE DUSTY - CRUSHED BATH BEING DUMPED IN ONE OF THE STORAGE AREAS
	Bath Crushing	Dust	Visual-Smoke Tube	Poor	INTERIOR OF BUILDING VERY DUSTY - EXHAUST SYSTEM NOT OPERATING - RUBBER FLAPS MISSING FROM EXHAUST HOODS -

SURVEYOR C.M.R.

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JULY 8, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Poor	DUST COLLECTORS NOT OPERATING - AN EQUIPMENT OPERATOR IN THE AREA SAID THAT THE DUST COLLECTORS HAD NOT OPERATED FOR SEVERAL WEEKS
	Ore Unloading	Dust	Visual	Good	A SMALL AMOUNT OF DUST VISIBLE IN AREA
	Rodding Room-General	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL FAIRLY HIGH
	Stub Press & Unbolting Station	Dust	Visual	Good	ONLY A SMALL AMOUNT OF DUST VISIBLE IN EITHER AREA
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE IN AREA NO FUMES VISIBLE
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	CLEANING PROCESS NOT IN OPERATION SMALL AMOUNT OF DUST VISIBLE IN AREA
	Ring Furnace	Dust CO	Visual Detector Tube	Good	NO WORK IN PROGRESS - VERY LITTLE DUST VISIBLE IN ANY FURNACE BUILDING CO .0%
	Butt Unloading & Crushing	Dust	Visual	Poor	VERY DUSTY IN BOTH UNLOADING AND CRUSHING AREAS AMOUNT OF DUST IN UNLOADING AREA CONSIDERABLY INCREASED AFTER OPERATOR TURNED ON THE EXHAUST HOOD - EXHAUST SYSTEM GOOD
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	SOME DUST VISIBLE - NO FUMES VISIBLE FAIRLY STRONG PUFF OF HOT STEAM NOTICEABLE IN AREA

SURVEYOR

CHR

411082 0675

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JULY 8, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	FAIR	HOOD OVER BELT STILL OPEN - FUMES VISIBLE RISING FROM BELT AND DRIFTING TOWARD THE MIXER FLOOR
	Press Room	Fumes	Visual	Good	NO FUMES VISIBLE IN EITHER ROOM - SIGHT OVER CP PITCH NOTICEABLE IN BOTH ROOMS - BOTH ROOMS WELL VENTILATED
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	NO EQUIPMENT IN OPERATION - EXHAUST SYSTEM GOOD - AREA WELL VENTILATED
	Garage - General	Fumes CO	Visual Detector Tube	Good	NO EQUIPMENT IN OPERATION AREA WELL VENTILATED
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	ONLY ONE WELDING OPERATION IN PROGRESS - SMALL AMOUNT OF FUMES VISIBLE - NO IRRITATION AREA WELL VENTILATED
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION EXHAUST SYSTEM (GOOD)
	Blacksmith Shop	CO	Detector Tube	Good	ONE LARGE OPERATING - AREA WELL VENTILATED 1.0% TRICHLOROETHYLENE 35 ppm - THIS READING TAKEN AT MASS LEVEL DIRECTLY IN FRONT OF OPERATING UNIT WITH
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	UNIT OPERATING - EXHAUST SYSTEM FAIR
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN ANY AREA - SEPTIC TANK AREA BEHIND BLDG. HAS GENERALLY DRY NO DUST

SURVEYOR

CHC

411082 0676

ROCKDALE TONDS

INDUSTRIAL HYGIENE SURVEY

DATE: JULY 8, 1962

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Miscellaneous Dump	Smoke Fumes Odor	Visual Sensory	Good	IN GENERAL, AREA OVERALLY - NO SMOKE OR FUMES VISIBLE - NO COCA
	NOTES: 1. Weather partly cloudy, hot and humid with southerly winds of 5-10 mph.				
	2. Due, possibly to air currents in the room, the hood installed in the Pottery Department is not effective in removing the fumes created during the heating of glass joint Compound No. 2.				
	3. A fairly large amount of dust was escaping from the Process unit bag filter and being blown into the courtyard between Bldgs 18 and 20. A workman in the area said that new bags had been installed the previous week.				

411082 0677

SURVEYOR C.H.R.

100 18 m/s

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: MAY 9 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	Atmosphere Clear
	Furnace Area & Casting	Cl ₂ , HCl, SO ₂	Detector Tubes	Good	No Irritation No Fumes Visible - No Irritation 0.0 ppm HCl, 0.0 ppm SO ₂ , 0.0 ppm Cl ₂ Clear of Natural Gas Noticeable Around Both Furnaces
	Homogenizing Furnace	CO	Detector Tube	Good	CO - 0.0 ppm 0.0 ppm Catwalk
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No Vapor Visible
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	Exhaust System Good - All Visible Fumes And Spray Being Removed By Exhaust System
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	No Irritation Very Little Steam In Room - No Dust Or Fumes Visible - No Irritation - HCl 0.0 ppm Exhaust System Very Poor
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	Saw Operating But Using Water - No Dust Visible In Area
	Rectifier Station	Mercury Vapor	Detector Tube	Good	Some Mercury Visible In Sink Area - No Visible Vapor On Storage Cabinets Shelves - Room Well Ventilated - Mercury Vapor 0.0 mg/m ³
	Potrooms - General	Dust & Fumes	Visual	Good	Slight Haze Visible In All Rooms Per Cover Placement - General (Good) Per Cover Condensate - Fair +
	Bath Storage	Dust	Visual & Sensory	Good	No Dust Visible
	Bath Crushing	Dust	Visual-Smoke Tube	Good	No Irritation Leakage Not Operating Because Of Construction Work In Building - Exhaust System Good

SURVEYOR

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: MAY 5, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	DUST COLLECTORS NOT OPERATING DUE TO CONSTRUCTION WORK IN BUILDING
	Ore Unloading	Dust	Visual	Fair	FAIRLY DUSTY - MOST OF DUST PROBABLY CAUSED BY A STRONG WIND BLOWING THROUGH THE BUILDING
					11
	Rodding Room-General	Dust & Fumes	Visual	Good	VERY LITTLE DUST AND NO FUMES VISIBLE IN AREA
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL FAIRLY HIGH
	Stub Press & Unbolting Station	Dust	Visual	Good	VERY LITTLE DUST VISIBLE IN ENTIRE AREA
	Potlining-Mixer Area	Dust & Fumes	Visual	Fair	MODERATE AMOUNT OF FUMES RISING FROM 2 MIXERS - STRONG CO. OF PITCH FUMES NOTICEABLE ON FLOOR - SOME DUST VISIBLE
	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	A MODERATE AMOUNT OF DUST STARTING FROM CLEANING OPERATION - DUST BEING BLOWN BY WIND TOWARD RELOADING AREA
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY NEAR PICKING AND UNLOADING OPERATIONS CO. 11
	Butt Unloading & Crushing	Dust	Visual	Fair	EXHAUST SYSTEM REMOVES MAJOR PORTION OF DUST CAUSED DURING UNLOADING OPERATION - MODERATE AMOUNT OF DUST ESCAPING FROM CRUSHING OPERATION
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	SMALL AMOUNT OF DUST VISIBLE - ODDOR OF PITCH NOTICEABLE - SOME PITCH FUMES VISIBLE NEAR EXTREME EAST END OF FLOOR

SURVEYOR

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411082 0679

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: MAY 9, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Fair	HAZARD OVER BELT FROM MIXER - Fumes Visible - INSIDE FROM BELT CH. 2.0. FROM GEAR
	Press Room	Fumes	Visual	Good	NO Fumes Visible - SOUND OVER OF FUMES NOTICABLE IN AREA
					1 11
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	EXHAUST SYSTEM GOOD NO EQUIPMENT IN OPERATION
	Garage - General	Fumes CO	Visual Detector Tube	Good	NO EQUIPMENT IN OPERATION
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO MIST VISIBLE NO INHALATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	UNDER 2 WELDING OPERATIONS IN PROGRESS - NO Fumes Visible - NO INHALATION - NO EQUIPMENT
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION
	Blacksmith Shop	CO	Detector Tube	Good	2 Fumes Inhalation - NO INHALATION
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Poor	TECHNOLOGICAL FUMES IN AREA - NO EQUIPMENT IN OPERATION - NO Fumes Visible - NO INHALATION
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN AREA - NO EQUIPMENT IN OPERATION - NO Fumes Visible - NO INHALATION

SURVEYOR

J. H. H.

411082 0680

INDUSTRIAL HYGIENE SURVEY

DATE: MAY 9 1968

[illegible]

SURVIVOR

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411082 0681

Yes!
On the basis of
previous reports
"poor" would mean
that it's too late
for the doctor.

An in-person,
heart-to-heart talk
concerning this reporting
is on the schedule for
the near future

Tom

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

Dist "of air" in room "Person"?

DATE: APRIL 4, 1968

1/2

ALL

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE CLEAR
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	(Good)	NO IRRITATION NO FUMES VISIBLE - NO IRRITATION
	Homogenizing Furnace	CO	Detector Tube	(Good)	CO - 0.1 FLOOR 0.1% CO - 0.1% FAIRLY STRONG ODOR OF NATURAL GAS NOTICED AROUND BOTH FURNACES 1' 11"
	Cutting Oil Supply Tank	Oil Vapor	Visual	(Good)	NO VAPOR VISIBLE - SAW USING THERM OIL
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	(Good)	NOT OPERATING EXHAUST SYSTEM (GOOD) - ALL VISIBLE FUMES AND SPRAY BEING REMOVED BY EXHAUST SYSTEM
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	NO IRRITATION ROOM CONTAINED VERY LITTLE SMOKE - NO DUST OR FUMES VISIBLE - NO IRRITATION - NO OFFENSIVE
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	EXHAUST SYSTEM STILL NOT OPERATING SAW NOT IN OPERATION - NO DUST VISIBLE FROM OTHER RESIDUE SOURCES
	Rectifier Station	Mercury Vapor	Detector Tube	Good	ROOM CLOSED AND NOT BEING USED - SOME MERCURY STILL VISIBLE ALONG WITH AND IN SODIUM CILINET. MERCURY VAPOR 0.0 mg/m ³
	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE VISIBLE IN ALL ROOMS AT COVER PLACEMENT - GENERALLY GOOD PER COVER CONDITION - FAIR
	Bath Storage	Dust	Visual & Sensory	Good	NO DUST VISIBLE NO IRRITATION
	Bath Crushing	Dust	Visual-Smoke Tube	Fair	FAIRLY DUSTY - RUBBER FUMES ON DUST HAD EITHER MISSED OR HAD C.T. OF RESIDUE BY WIND - FINE HAZE OF DUST ESCAPING THROUGH OPENINGS IN SIDE OF CRUSHER EXHAUST SYSTEM GOOD

SURVEYOR

CNR

411082 0683

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: April 4, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Fair	Fair Amount of Dust Visible Coming from West Unit - No Dust Visible from East Unit
	Ore Unloading	Dust	Visual	Fair	Quite Dusty - Most of Dust Probably from Unit A 20 to 25 feet down from conveyor - Fairly noticeable
					1 11
	Rodding Room-General	Dust & Fumes	Visual	Good	Small Amount of Dust Visible - No Fumes Visible
	Wheelabrator	Noise	Audio	Fair	Noise Level Fairly High
	Stub Press & Unbolting Station	Dust	Visual	Good	Small Amounts of Dust Visible in Ditch Areas
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	A Small Amount of Fumes Noticeable in Mixer Area - (Very Little) - No D.F.
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	Excellent Cleaning Operation - Not in Fumes - Only a Small Amount of Dust Visible in Area
	Ring Furnace	Dust CO	Visual Detector Tube	Good	Dust Visible Only Near Furnace Area
	Butt Unloading & Crushing	Dust	Visual	Good	Unloading Operations - Only Small Amount of Dust Visible - Exhausts and During Unloading Operation - Performance - System Better than Usual
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	Very Little Dust - Small Amount of Fumes Noticeable - Fumes Visible at East End of Floor - No D.F. - Coming from Conveyors Carrying Hot Molten Pig

SURVEYOR

CHN

411082 0684

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: April 4, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	FAIR	HAND OVER BELT STILL OPEN - FUMES VISIBLE RISING FROM BELT - FUMES FROM THIS AREA VISIBLE MOVING INTO MIXER FLASK
	Press Room	Fumes	Visual	FAIR	ATON FUMES VISIBLE FROM MM AS IT ENTERS PRESS - STANDING DOWN UP RICH NOTICED IN ROOM
					1 11
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	EXHAUST SYSTEM GOOD
	Garage - General	Fumes CO	Visual Detector Tube	Good	NO EQUIPMENT IN OPERATION
					NO EQUIPMENT IN OPERATION
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO MIST VISIBLE
					NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	ONLY A FEW WELDING OPERATIONS IN PROGRESS - NO IRRITATION - SMALL AMOUNT OF FUMES VISIBLE WHEN ASKING RAPIDLY TO THE CARPENTERING - AREA WELL VENTILATED
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	NO EQUIPMENT IN OPERATION
	Blacksmith Shop	CO	Detector Tube	Good	NO FORGES IN OPERATION
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE OPEN - THIS HANGING TARE AT A LEVEL DIRECTLY IN FRONT OF BREASTING UNIT - UNIT COULD EXHAUST HOP OPERATING - WORK IN PROGRESS IN ROOM
	Atomizer - General	Dust	Visual	Good	NO DUST VISIBLE IN ANY AREA - SEPTIC TANK BEHIND BLDG NOT APPARENTLY OVERFLOWING AGAIN WATER STANDING IN AREA - COOL QUITE STRONG

SURVEYOR

CHR

411082 0685

INDUSTRIAL HYGIENE SURVEY

DATE: April 1, 1968

[illegible]

Surveyor **C442**

INDUSTRIAL HYGIENE SURVEY

DATE: MARCH 8, 1968

AOC
LJC

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE GENERALLY CLEAR
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	NO IRRITATION NO FUMES VISIBLE - NO IRRITATION CL ₂ 0 ppm HCl 0 ppm CO 0.16
	Homogenizing Furnace	CO	Detector Tube	Good	ONLY A SLIGHT COCK OF NATURAL GAS NOTICEABLE THIS MONTH
	Cutting Oil Supply Tank	Oil Vapor	Visual	FAIR	CO - 0.16 ppm CH ₄ 0.16 ppm VAPOR VISIBLE RISING FROM TANK - VAPOR BEING BLOWN INTO BLDG 34 BY WIND
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	ALL VISIBLE FUMES AND SPRAY BEING REMOVED BY EXHAUST SYSTEM - NO IRRITATION EXHAUST SYSTEM GOOD
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	ROOM NEARLY EMPTY - NO FUMES OR DUST VISIBLE NO IRRITATION HCl 0 ppm EXHAUST SYSTEM STILL NOT OPERATING
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT IN OPERATION
	Rectifier Station	Mercury Vapor	Detector Tube	Good	MERCURY STILL VISIBLE AROUND STILL AND IN THE STORAGE CABINETS - ROOM WELL VENTILATED MERCURY VAPOR - 0 mg/m ³
	Potrooms - General	Dust & Fumes	Visual	Good	SLIGHT HAZE VISIBLE IN ALL ROOMS POT COVER PLACEMENT - GENERALLY GOOD P.T. COVER CONDITION - FAIR NO DUST VISIBLE
	Bath Storage	Dust	Visual & Sensory	Good	NO IRRITATION
	Bath Crushing	Dust	Visual-Smoke Tube	FAIR	NOT AS DUTY AS USUAL - RUBBER FOOTED DUST HOODS STILL HELD C.P. OF PROTECTION 8% ARE MISSING, ON HAND HOODS IN THEM - EXHAUST SYSTEM GOOD

SURVEYOR

CNR

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: MARCH 8, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	NO DUST VISIBLE FROM EITHER UNIT
	Ore Unloading	Dust	Visual	Good	VERY LITTLE DUST NOTICEABLE IN AREA
					1' 11"
	Rodding Room-General	Dust & Fumes	Visual	Good	NO FUMES VISIBLE SMALL AMOUNT OF DUST VISIBLE
	Wheelabrator	Noise	Audio	Fair	NOISE LEVEL FAIRLY HIGH
	Stub Press & Unbolting Station	Dust	Visual	Good	A SMALL AMOUNT OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	A SMALL AMOUNT OF DUST VISIBLE IN AREA A SMALL AMOUNT OF FUMES NOTICEABLE RISING FROM ONE MIXER
	Carbon Plant Electrode Cleaning	Dust	Visual	Fair	NORMAL CLEANING MACHINE NOT IN OPERATION - A FAIR AMOUNT OF DUST IS CREATED WHEN BAKED CASE DROPS FROM END OF CONVEYOR LITE FROM MIXER
	Ring Furnace	Dust CO	Visual Detector Tube	Good	DUST VISIBLE ONLY NEAR PACKING AND UNPACKING OPERATIONS C.C. 10%
	Butt Unloading & Crushing	Dust	Visual	Good	NOT IN OPERATION
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	DUST ALSO NOT IN OPERATION VERY LITTLE DUST IN AREA - ONLY FUMES NOTICEABLE NEAR A MIXER WHICH WAS IN PROCESS OF BEING DUMPED

SURVEYOR

CAR

FOCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: MAR 14 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	FAIR	HOOD OVER BELT STILL OPEN - FUMES VISIBLE RISING FROM MIX ON BELT
	Press Room	Fumes	Visual	(GOOD)	PRESS NOT OPERATING DUE TO MAINTENANCE WORK - SIGHT COULD BE FROM FUMES ALONG BELT
					1 1/2
	Carpenter Shop	Dust	Visual & Smoke Tube	(GOOD)	EXHAUST SYSTEM USED
	Garage - General	Fumes CO	Visual Detector Tube	(GOOD)	NO EQUIPMENT IN OPERATION
					NO EQUIPMENT IN OPERATION
	Electric Shop-General	Acid Mist	Visual & Sensory	(GOOD)	NO MIST VISIBLE
					NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	(GOOD)	ONLY A FEW WELDING OPERATIONS IN PROGRESS
	Marinite Finishing Room	Dust	Visual Smoke Tube	(GOOD)	NO IRRITATION - SMALL AMOUNT OF FUMES VISIBLE - AREA WELDED CONTINUED
					NO DUST VISIBLE IN ROOM
	Blacksmith Shop	CO	Detector Tube	(GOOD)	EXHAUST SYSTEM USED
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	(GOOD)	NO FUMES IN OPERATION
					TRICHLOROETHYLENE 11:00 PM - THIS READING TAKEN AT NEAR LEVEL DIRECTLY IN FRONT OF DEGREASING UNIT
					WALL COVERED - FUMES NOT OPERATING
	Atomizer - General	Dust	Visual	(GOOD)	NO DUST VISIBLE IN ANY AREA - SOME WATER STANDING IN SENSITIV TANK AREA BEHIND BORDERS
					NO COCK

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: MARCH 5, 1968

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INDUSTRIAL HYGIENE SURVEY

DATE: Feb 8, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE CLEAR
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	No IRRITATION No Fumes Visible - No Irritation Cl ₂ Open HCl Open CO c/c
	Homogenizing Furnace	CO	Detector Tube	Good	STRONG ODEUR OF NATURAL GAS ON FURNACE CAPWALK CO - ON FLOOR c/c 1' ON CAPWALK 0%
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No VAPOR VISIBLE
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	EXHAUST SYSTEM GOOD - Fumes AND SPRAY VISIBLE Rising From Tank Were Being Removed BY THE EXHAUST HOOD - No IRRITATION Room Almost Empty Of SKIM - No DUST OR Fumes Visible No IRRITATION HCl Open
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	EXHAUST SYSTEM STILL DOES NOT SEEM TO BE OPERATIVE No DUST PRODUCING OPERATIONS IN PROGRESS
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT OPERATING
	Rectifier Station	Mercury Vapor	Detector Tube	Good	A FAIR AMOUNT OF MERCURY ON SHELVES IN STORAGE CABINETS AND ON FLOOR NEAR STILL - ROOM WALL VENTILATED - MERCURY VAPOR - 0.01 mg/m ³
	Potrooms - General	Dust & Fumes	Visual	Good	SUBSTANTIAL VAPOR VISIBLE IN ALL ROOMS PER COVER PLACEMENT - GENERALLY GOOD PER COVER CONDITION - FAIR + No DUST VISIBLE
	Bath Storage	Dust	Visual & Sensory	Good	No IRRITATION
	Bath Crushing	Dust	Visual-Smoke Tube	Fair	BUILDING FAIRLY DUSTY - RUBBER FLAPS ON DUST HOODS ARE EITHER MISSING OR HOLD OUT OF POSITION BY WIND - EXHAUST SYSTEM GOOD

SURVEYOR

CAR

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: FEB. 8, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	Good	No DUST VISIBLE FROM EITHER UNIT
	Ore Unloading	Dust	Visual	Good	NO UNLOADING IN PROGRESS - BUILDING EMPTY OF ORE CARS -
					1 '11
	Rodding Room-General	Dust & Fumes	Visual	FAIR	GREATEST AMOUNT OF DUST VISIBLE IN AREA SINCE SURVEY STARTED - SOURCE OF DUST UNKNOWN
	Wheelabrator	Noise	Audio	FAIR	NOISE LEVEL FAIRLY HIGH
	Stub Press & Unbolting Station	Dust	Visual	FAIR	MODERATE AMOUNTS OF DUST VISIBLE IN BOTH AREAS
	Potlining-Mixer Area	Dust & Fumes	Visual	FAIR	HEAVY FUMES VISIBLE RISING FROM MIXERS - DUST OF PITCH FUMES NOTICEABLE AT FLOOR LEVEL - AREA SOMEWHAT DUSTIER THAN USUAL
	Carbon Plant Electrode Cleaning	Dust	Visual	FAIR	NORMAL CLEANING MACHINE NOT IN OPERATION - LARGE AMOUNT OF DUST VISIBLE IN AREA OF TEMPORARY CLEANING MAY BE SOURCE OF DUST VISIBLE IN AREA
	Ring Furnace	Dust CO	Visual Detector Tube	Good	ATMOSPHERE IN ALL OPERATING FURNACE BUILDINGS GREENISH CLEAR - DUST VISIBLE ONLY NEAR PAVING AND UNDER OPERATIONS - CO 15%
	Butt Unloading & Crushing	Dust	Visual	Good	NOT IN OPERATION - EXHAUST SYSTEM FAIR NEAR CENTER OF DUST HOOD; POOR NEAR EDGE
	Mixer Floor	Dust & Pitch Fumes	Visual	FAIR	MORE DUST THAN USUAL IN AREA - SOME PITCH FUMES VISIBLE - STRONG ODOR OF PITCH NOTICEABLE IN AREA

SURVEYOR

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: FEB. 2, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	FAIR	HOOD OVER BELT STILL OPEN - FUMES VISIBLE RISING FROM MIX ON BELT
	Press Room	Fumes	Visual	GOOD	NO FUMES VISIBLE SLIGHT ODOR OF PITCH NOTICEABLE
	Carpenter Shop	Dust	Visual & Smoke Tube	GOOD	NO EQUIPMENT IN OPERATION EXHAUST SYSTEM GOOD
	Garage - General	Fumes CO	Visual Detector Tube	GOOD	NO EQUIPMENT IN OPERATION
	Electric Shop-General	Acid Mist	Visual & Sensory	GOOD	NO MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	GOOD	ONLY ONE WELDING OPERATION IN PROGRESS NO FUMES VISIBLE - NO IRRITATION
	Marinite Finishing Room	Dust	Visual Smoke Tube	GOOD	NO EQUIPMENT IN OPERATION 2 GAS FIRED FENCES IN OPERATION
	Blacksmith Shop	CO	Detector Tube	GOOD	CO 0.0% TRICHLOROETHYLENE 35 PPM - THIS READING TAKEN AT HOSE LEVEL DIRECTLY IN FRONT OF DEGREASING UNIT
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	GOOD	EXHAUST HOOD OVER UNIT OPERATING
	Atomizer - General	Dust	Visual	GOOD	NO DUST VISIBLE IN ANY AREA - SEPTIC TANK AREA BEHIND BLDG 405 GENERALLY DRY - NO ODOR

SURVEYOR

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: FEB. 8, 1968

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JAN 10, 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	Atmosphere Clear No Irritation
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	No Fumes Visible - No Irritation Cl ₂ - 0 ppm HCl - 0 ppm CO - 0.1% Slight Cough On Natural Gas H ₂ in Bldg. Furnace
	Homogenizing Furnace	CO	Detector Tube	Good	CO On Floor - 0.1% On Ceiling - 0.1%
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No Vapor Visible
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	Exhaust System Good - Fumes Visible Rising From Tank Were Being Removed By The Exhaust Hood No Spray Visible - No Irritation
	Skin Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	More Skin Tann Visible In Room - No Dust or Fumes Visible - No Irritation - HCl 0 ppm Exhaust System Still Does Not Seem To Be Working
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	Saw Not In Operation
	Rectifier Station	Mercury Vapor	Detector Tube	Good	A Fair Amount Of Mercury On Shelves In Storage Cabinets - A Small Amount Around Still Mercury Vapor - 0.1 mg/m ³
	Potrooms - General	Dust & Fumes	Visual	Good	Potrooms 22, 24, 26 Very Smoky - In All Cases Potrooms Only A Slight Haze Noticeable Pot Rooms - Placement Generally Good - Limited For No Dust Visible
	Bath Storage	Dust	Visual & Sensory	Good	No Irritation
	Bath Crushing	Dust	Visual-Smoke Tube	Fair	Smoking Dust - That Of Dust Caused By Hand Blowing Through Blowing - No Skin Flare Caused H ₂ H ₂ Out Of Room By Wire - Exhaust System Good

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: AN. 10. 1968

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	FAIR	EAST UNIT EMITTING LITTLE IF ANY DUST WEST UNIT EMITTING A SMALL AMOUNT OF DUST
	Ore Unloading	Dust	Visual	FAIR	QUITE DUSTY - HOWEVER A STRONG DOWNWIND BLOWING THROUGH THE BUILDING PROBABLY CAUSED THE DUSTY CONDITIONS
	Rodding Room-General	Dust & Fumes	Visual	(GOOD)	A SMALL AMOUNT OF DUST AND FUMES VISIBLE IN AREA
	Wheelabrator	Noise	Audio	FAIR	NOISE LEVEL FAIRLY HIGH
	Stub Press & Unbolting Station	Dust	Visual	(GOOD)	ONLY A SMALL AMOUNT OF DUST VISIBLE IN EITHER AREA
	Potlining-Mixer Area	Dust & Fumes	Visual	GOOD	SOME DUST VISIBLE IN AREA - FUMES VISIBLE ARISING FROM MIXERS - ONLY A SLIGHT CURT OF ATEN FUMES NOTICEABLE AT FLOOR LEVEL
	Carbon Plant Electrode Cleaning	Dust	Visual	GOOD	SMALL AMOUNT OF DUST VISIBLE IN AREA ALL OPERATING FURNACES VERY DUSTY - THE HIGH DUST CONCENTRATION W/ A FREQUENT HIGH DEGREE THE DUST CONCENTRATION WAS NOT NEARLY AS HIGH AS THE DUST CONCENTRATION IN THE POTLINING AREA
	Ring Furnace	Dust CO	Visual Detector Tube	FAIR	QUITE DUSTY - MAJORITY OF DUST SEEMED TO BE ENTERING THIS AREA FROM UNKOWN SOURCES EXCEPT NEAR CENTER OF DUST PILE
	Butt Unloading & Crushing	Dust	Visual	FAIR	FAIR AMOUNT OF DUST IN AIR - NEAR ENDS OF PILE FROM A FREQUENTLY MIXED PILE - DUST VISIBLE IN AREA
	Mixer Floor	Dust & Pitch Fumes	Visual	FAIR	

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: JAN 10, 1962

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	FAIR	HOOD COVER BELT STILL OPEN - FUMES VISIBLE RISING FROM MIX ON BELT
	Press Room	Fumes	Visual	GOOD	SLIGHT COCK OF PITCH FUMES NOTICEABLE NO FUMES VISIBLE IN ROOM
	Carpenter Shop	Dust	Visual & Smoke Tube	GOOD	NO EQUIPMENT IN OPERATION EXHAUST SYSTEM GOOD
	Garage - General	Fumes CO	Visual Detector Tube	GOOD	NO EQUIPMENT IN OPERATION
	Electric Shop-General	Acid Mist	Visual & Sensory	GOOD	NO MIST VISIBLE NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	GOOD	NO WELDING OPERATIONS IN PROGRESS
	Marinite Finishing Room	Dust	Visual Smoke Tube	GOOD	NO EQUIPMENT IN OPERATION 2 GAS FIRED FURNACES IN OPERATION
	Blacksmith Shop	CO	Detector Tube	GOOD	CO - .001% TRICHLOROETHYLENE - 0.4 ppm - THIS READING TAKEN AT HIGH LEVEL DIRECTLY IN FRONT OF DEGREASING UNIT - EXHAUST HIGH OVER UNIT (CLEAN)
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	GOOD	
	Atomizer - General	Dust	Visual	GOOD	NO DUST VISIBLE IN AIR - SOME DUST ON FLOOR NEAR LOADING AREA - WORK ON SEPTIC TANK AT REAR OF BLDG NOW IN PROGRESS -

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	ATMOSPHERE CLEAR - NO IRRITATION
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	NO FUMES VISIBLE - NO IRRITATION ON-OPEN CO - 0.0000 HCL - 0.0000 FAIRLY STRONG ODOR OF NATURAL GAS ON FURNACE CATWALKS
	Homogenizing Furnace	CO	Detector Tube	Good	CO ON FLOOR - 0.0000 ON CATWALK - 0.0000
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	NO VAPOR VISIBLE EXHAUST SYSTEM GOOD - NO FUMES OR SMOKY VISIBLE NEAR TANK - NO IRRITATION
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	ONLY SMALL AMOUNT OF SMOKE IN ROOM - NO DUST OR FUMES VISIBLE - NO IRRITATION - H ₂ S 0.0000 EXHAUST SYSTEM STILL DOES NOT SEEM TO BE OPERATING
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	SAW NOT IN OPERATION
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	ROOM CLEAR AND ORDERLY
				Something wrong	
	Rectifier Station	Mercury Vapor	Detector Tube	(FAIR)	FAIRLY LARGE AMOUNT OF MERCURY IN SKIM, ON CABINET SHELVES, AND ON FLOOR - VENTILATION GOOD MERCURY VAPOR - .05 mg/m ³
	Potrooms - General	Dust & Fumes	Visual	Good	A SLIGHT HAZE NOTICEABLE IN ALL ROOMS NOT COARSE PLACEMENT - GENERALLY GOOD PER GIVES LIMITATION - FAIR +
	Bath Storage	Dust	Visual & Sensory	Good	NO DUST VISIBLE NO IRRITATION
	Bath Crushing	Dust	Visual-Smoke Tube	Good	CRUSHER NOT IN OPERATION - EXHAUST SYSTEM GOOD RUBBER FLAPS ON DUST HOODS EITHER MISSING OR MISSING OUT OF POSITION BY WIRE

SURVEYOR

DATE

INDUSTRIAL HYGIENE SURVEY

DATE: Dec 1, 1967

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Rath Crushing Bag Filter	Dust	Visual	Good	Caution Not in Operation - Unable to Tell Condition of Bag Filter
	Ore Unloading	Dust	Visual	Good	Only A Small Amount of Dust Visible in Area
	Rolling Room-General	Dust & Fumes	Visual	Good	A Small Amount of Dust Visible Visible in Area
	Wheelabrator	Noise	Audio	Good	Noise Level Low
	Stub Press & Unbolting Station	Dust	Visual	Good	Only A Small Amount of Dust Visible in Entire Area
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	Some Fumes Visible Rising from Mixer Small Amount of Dust Visible Dust Not Visible from Floor Level
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	Some Dust in Room - Not in Dust in the Carbon Plant Electrode Cleaning System
	Ring Furnace	Dust CO	Visual Detector Tube	Good	All Furnace Areas Generally Clear - Some Dust Visible Along Packing and Burners (Packing CO - 0 ppm)
	Butt Unloading & Crushing	Dust	Visual	Good	Not in Operation
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	Small Amount of Dust and Fumes Visible in Area

SURVEYOR

CHP

INDUSTRIAL HYGIENE SURVEY

DATE: DEC. 1, 1961

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Fair	Good Over Belt Still Open - From Fumes Visible Rising From Belt - Fumes Trapped To Nose
	Press Room	Fumes	Visual	Good	Barney And Associate Quicker Sawdust From Press - Some Fumes Visible - Some Oil Vapor From Sawdust Press Associate Also Visible
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	2 Saws In Operation No Dust Visible
	Garage - General	Fumes CO	Visual Detector Tube	Good	No Equipment In Operation
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Mist Visible - No Operation - Only One Being Used To Clean Chrome Parts Quite Small Amount Final Cleaning Area Visible
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	Only After Welding Operations In Progress Small Amount of Fumes Visible - Fumes Rising Rapidly - No Operation
	Marinlite Finishing Room	Dust	Visual Smoke Tube	Good	No Equipment In Operation 2 Jars Filled Fumes In Operation
	Blacksmith Shop	CO	Detector Tube	Good	No - Only
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	Trichloroethylene Dispenser - This Reading Taken At High Level Distance In Front Of Dispenser Unit Exhaust Hood Over Unit Operative
	Atomizer - General	Dust	Visual	Good	No Dust Visible - Some Fumes Visible 2-04 Jet Still Operating - Only Some Soot

SURVEYOR

C. H. R.

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Dec 1 1961

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SURVEYOR
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INDUSTRIAL HYGIENE SURVEY

DATE: Nov. 13, 1961

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	Atmosphere Clear - No Irritation
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	Only Fumes Visible 3, 4, 5 ft. In Operation No Fumes Visible - No Irritation CO - 0 ppm O ₂ - 0 ppm H ₂ - 0 ppm Slight Odor of Natural Gas in Chitwalk
	Homogenizing Furnace	CO	Detector Tube	Good	CO - 0 ppm O ₂ - 0 ppm H ₂ - 0 ppm Small Amount of Vapor Visible Near Tank - At Time of Survey Wind was Blowing Most of the Vapor Outside the Building
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	Exhaust System Good - No Fumes or Spray Visible Near Tank - No Irritation
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	Room Nearly Empty - No Dust or Fumes Visible No Irritation - Exhaust System Still Does Not Seem to be Operating - H ₂ - 0 ppm
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	
	Prick Cutting Area	Dust from Brick Saw	Visual	Good	Saw Not in Operation
	Rectifier Station	Mercury Vapor	Detector Tube	Good	Small Amount of Mercury Still in Sink and Around Mercury Still - Ventilation in Room Good Mercury Vapor - 0 ppm
	Potrooms - General	Dust & Fumes	Visual	Good	Only No Slight Haze Noticeable in All Rooms Pot Cover Placement - Generally Good Air Cover Condition - Fair + Little Dust
	Bath Storage	Dust	Visual & Sensory	Good	No Irritation
	Bath Crushing	Dust	Visual-Smoke Tube	Fair	Atmosphere Very Dusty - Rubber Flaps on Dust Hoods Either Missing or Poorly Torn - Exhaust System Good Surrounding Area Covered with Thick Layer of Dust

SURVEYOR

CNR

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Nov. 13, 1967

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	FAIR	EAST UNIT EMITTING LITTLE IF ANY DUST WEST UNIT EMITTING LARGE AMOUNT OF DUST INTO SURROUNDING ATMOSPHERE
	Ore Unloading	Dust	Visual	Good	ONLY A SMALL AMOUNT OF DUST IN AIR
					1 11
	Rodding Room-General	Dust & Fumes	Visual	Good	A SMALL AMOUNT OF DUST AND FUMES VISIBLE IN AREA
	Wheelabrator	Noise	Audio	FAIR	NOISE LEVEL QUITE HIGH - RUBBER SURGEES TO BE MAY NEED REPLACED
	Stub Press & Unbolting Station	Dust	Visual	Good	ONLY A SMALL AMOUNT OF DUST VISIBLE IN AREA
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	SOME FUMES VISIBLE RISING FROM MIXERS SLIGHT ODOR OF PITCH FUMES AT FLOOR LEVEL SMALL AMOUNT OF DUST IN AIR
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	SOME DUST IN AREA - DUST SEEMED TO BE ENTERING THIS AREA FROM THE NEARBY RAIL FURNACE AND CONVEYOR SYSTEM
	Ring Furnace	Dust CO	Visual Detector Tube	Good	ALL FURNACE AREAS GENERALLY CLEAR - SOME DUST VISIBLE NEAR PACKING AND UNPACKING OPERATIONS CO 3 ARM
	Butt Unloading & Crushing	Dust	Visual	Good	SOME DUST ESCAPES FROM EDGES OF DUST HOP. LITTLE DUMPING OPERATIONS - EXHAUST SYSTEM (HOP) NEAR CRATER OF HOP; FAIR NEAR EDGES - FAIRLY DUSTY IN NEARBY AREA
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	SMALL AMOUNT OF DUST AND SLIGHT ODOR OF PITCH FUMES IN AREA

SURVEYOR

CHR

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Nov 13, 1961

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Fair	Hood Over Belt Still Open - Fumes Visible Raising From Belt - Fumes Tended To Rise Rapidly And Dissipate Quickly
	Press Room	Fumes	Visual	Good	No Fumes Visible - Press Not In Operation As Maintenance Work Was In Progress
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	No Equipment In Operation
	Garage - General	Fumes CO	Visual Detector Tube	Good	No Equipment In Operation
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Mist Visible
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	No Welding In Progress
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	No Equipment In Operation
	Blacksmith Shop	CO	Detector Tube	Good	No Equipment In Operation
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	Trichloroethylene Solvent - This Reading Taken At Nose Level Directly In Front Of Degreasing Unit Exhaust Hood Over Unit Operating
	Atomizer - General	Dust	Visual	Good	No Dust Visible In Air - Some Dust On Floor Where Unloading Empty Drums - Some Tank At Rear Of Bldg Was Still Overhauled - No Obvious Spills

SURVEYOR

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ROCKDALE
WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Nov. 13, 1967

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SURVEYOR C. H. R.

INDUSTRIAL HYGIENE SURVEY

DATE: OCT. 10, 1967

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	AIRSPHERE: CLEAR - NO IRRITATION
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	ONLY FURNACES 1, 2, 3 & 4 IN OPERATION - VERY LITTLE CP ₂ USED - NO FUMES VISIBLE - NO IRRITATION CO - 0.000 ppm O ₂ - 20.000% H ₂ O - 0.000%
	Homogenizing Furnace	CO	Detector Tube	Good	SLIGHT ODOR OF NATURAL GAS ON CATWALK CO ON FLOOR 0.000 ppm ON CATWALK 0.000 ppm
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	NO VAPOR VISIBLE
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	EXHAUST SYSTEM GOOD - NO FUMES OR SPRAY VISIBLE NEAR TANK - NO IRRITATION
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	ONLY SMALL AMOUNT OF SKIM IN ROOM - EXHAUST SYSTEM INOPERATIVE - NO IRRITATION HCl - 0.000 ppm
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT IN OPERATION
	Rectifier Station	Mercury Vapor	Detector Tube	Good	SMALL AMOUNT OF MERCURY STILL IN SINK, ON SHELVES IN STORAGE CABINET AND AROUND MEREWAY STILL VENTILATION IN ROOM GOOD HG VAPOR - 0.000 ppm
	Potrooms - General	Dust & Fumes	Visual	Good	ONLY A SLIGHT HAZE IN ALL ROOMS POT COVER PLACEMENT - GENERALLY GOOD POT COVER CONDITION - FAIR + LITTLE DUST
	Bath Storage	Dust	Visual & Sensory	Good	NO IRRITATION
	Bath Crushing	Dust	Visual-Smoke Tube	Good	CRUSHER NOT IN OPERATION - RUBBER FLAPS ON DUST HOODS HAVE BEEN REPLACED - EXHAUST SYSTEM GOOD

SURVEYOR

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ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: OCT. 10, 1961

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Rag Filter	Dust	Visual	Good	CRUSHER NOT IN OPERATION SMALL AMOUNT OF DUST IN AREA - DUST PRACTICALLY CAUSED BY A FAIRLY STRONG WIND BLOWING THROUGH THE UNDERGIRTS BUILDING
	Ore Unloading	Dust	Visual	Good	
	Rodding Room-General	Dust & Fumes	Visual	Good	A SMALL AMOUNT OF DUST AND FUMES VISIBLE IN AREA
	Wheelabrator	Noise	Audio	Good	NOISE LEVEL LOWEST SINCE SURVEY STARTED RUBBER SNEELES HAVE BEEN REPLACED
	Stub Press & Unbolting Station	Dust	Visual	Good	VERY LITTLE DUST IN AREA
	Potlining-Mixer Area	Dust & Fumes	Visual	Good	ONLY A SMALL AMOUNT OF DUST AND FUMES VISIBLE IN AREA
	Carbon Plant Electrode Cleaning	Dust	Visual	Good	SOME DUST IN AREA - DUST SEEMED TO COME FROM A NEARBY UNLOADING OPERATION AND THE CONVEYOR SYSTEM
	Ring Furnace	Dust CO	Visual Detector Tube	Good	ALL FURNACE AREAS GENERALLY CLEAR - SOME DUST VISIBLE NEAR PACKING AND UNLOADING OPERATIONS CO - 0.0000
	Butt Unloading & Crushing	Dust	Visual	Good	NOT IN OPERATION - EXHAUST SYSTEM GOOD NEAR CENTER OF DUST HODD. FAIR NEAR THE EGGERS
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	SLIGHT COKE OF PITCH FUMES AND A SMALL AMOUNT DUST IN AREA

SURVEYOR

CARR

411082 0709

ROCKDALE WORKS

INDUSTRIAL HYGIENE SURVEY

DATE: Oct 16, 1963

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	Fair	HEAVY OVER BELT STILL COOL - HOWEVER ONLY A SMALL AMOUNT OF AREA FUMES WERE VISIBLE IN THE AREA AND THEY TENDED TO DISSEMINATE QUICKLY
	Press Room	Fumes	Visual	Good	NO FUMES VISIBLE
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	NO EQUIPMENT IN OPERATION
	Garage - General	Fumes CO	Visual Detector Tube	Good	NO EQUIPMENT IN OPERATION
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	NO MIST OR FUMES VISIBLE
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	ONLY 3 WELDING OPERATIONS IN PROGRESS - SMALL AMOUNT OF FUMES VISIBLE - ALL OPERATIONS TAKING PLACE IN LARGE WELL VENTILATED AREAS
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	NOT IN OPERATION
	Blacksmith Shop	CO	Detector Tube	Good	NO EQUIPMENT IN OPERATION
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE 55 PPM - THIS READING TAKEN AT MISC LEVEL DIRECTLY IN FRONT OF DEGREASING UNIT EXHAUST HOOD OVER UNIT OPERATING
	Atomizer - General	Dust	Visual	Good	PERCENT OPERATIONS IN PROGRESS - NO DUST VISIBLE SEPTIC TANK AT REAR OF BLDG HAS OVERFLOWING SLIGHT ODSR NOTICEABLE

SURVEYOR CHR

411082 0710

DATE: Oct. 10, 1967

INDUSTRIAL HYGIENE SURVEY

SURVEYOR CAR

411082 0711

H. A. SEMKEN

~~MR. H. F. CHATSCO~~

ROCKDALE WORKS

~~ROCKDALE WORKS~~

September 21, 1967

Copy to: Dr. L. V. Cralley, Pittsburgh

CONFIDENTIAL

RE: INDUSTRIAL HYGIENE COMMITTEE MEETING

The Industrial Hygiene Committee met on September 20 with the following present:

H. A. Semken, J. H. Greene, C. H. Meyers, and B. D. Cockrell.

Occupational Exposure Cases: None were reported to the First Aid during July and August.

F. Level: The fluoride content of vegetation within a 2 - 3 mile radius of the Plant averaged 10 ppm in May, 17 ppm in June, and 15 ppm in July. Rainfall in the above months amounted to 4.42 inches, .00 inch, and 2.18 inches respectively.

Monthly Industrial Hygiene Survey: A systematic, monthly, survey of problem areas and hazardous materials was begun in August. A copy of the report is circulated to interested personnel and it is hoped that all departments will investigate and correct unsafe conditions as soon as possible thereafter.

Potroom Atmosphere: As noted in the monthly report, haze conditions in the potrooms continue to be normal. Placement of covers is generally good but the condition of covers has been getting worse. Some new covers have been made and repair of older ones is being accelerated, which should improve this condition.

Scrubber System: Third quarter sampling and analytical work is complete but results have not, as yet, been evaluated.

Bath Crushing in Bldg. 37: This area is very dusty. The flaps on the hood over the crushed bath receiver need replacing. Some dust is leaking thru the new bag filter. The bags should be replaced where necessary. J. H. Greene and M. D. Cotton will handle.

411082 0712

Wheelabrator in Rodding Room: The noise level in the area of the bar cleaning Wheelabrator is quite high. The rubber sleeves between the air cylinder support and the top of the feed funnel (Wheelabrator part No. 199155) need replacing to suppress the noise level. This should be a regular maintenance item. M. D. Cotton will check.

Carbon Plant Mixer Area: The conveyor cover is open where air sweeps into the conveyor, resulting in dense fumes in this area. M. D. Cotton will check to see if conveyor is open due to construction activities.

Dracco Collector: This system is operating poorly again and we are checking to see what it would take to put it in good operating condition. If repairing the system isn't practical, the pneumatic conveying system should be re-evaluated.

Dryer Stack Clean-up: Messrs. Hittner and Fussell will visit Rockdale on September 25 and 26 to establish objectives and consult with various equipment vendors who may have potential solutions for the problem. The following program has been proposed to

Pittsburgh Environmental Engineering: (1) Continue the services of Professor Harris toward the end of developing a lignite filter that could be tested at approximately 1000 cfm. (2) Reinstate a wet scrubber testing program to evaluate performance ratings. (3) Re-establish the objectives of the program and prepare testing and installation schedules. (4) That our RFA 684 be reconsidered as a means of solving our dryer stack problem.

H. A. SEMKEN

HAS:S

File copy routed to: G. W. Hutton
H. A. Bover
B. D. Cockrell
C. H. Meyers
H. D. Franklin
J. H. Greene

INDUSTRIAL HYGIENE SURVEY

DATE: AUG. 11, 1967

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	Atmosphere Clear Except Near Floor & S. Wall. Was Being Flushed - Fumes Rising Rapidly And Being Exhausted By Roof Fans
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	No Irritation HCl - 0 ppm CO - 0 ppm Cl ₂ - 0 ppm
	Homogenizing Furnace	CO	Detector Tube	Good	CO - ON FLOOR - 0 ppm; ON CATWALK - 0 ppm SOME ODOR OF NATURAL GAS ON CATWALK
	Cutting Oil Supply Tank	Oil Vapor	Visual	Fair	VAPOR FROM TANK BEING BLOWN INTO BUILDING
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	No Irritation VENTILATION GOOD
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	VERY LITTLE SKIM IN ROOM - HOLE IN OUTSIDE WALL WITH REPAIRS IN PROGRESS HCl - 0 ppm
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	SAW NOT IN OPERATION
	Rectifier Station	Mercury Vapor	Detector Tube	Fair	Hg VAPOR - 0 ppm - DROPLETS OF Hg ON FLOOR & TABLE IN SEVERAL PLACES QUITE ABIT OF Hg IN SINK
	Potrooms - General	Dust & Fumes	Visual	Good	ROOMS 14, 15, & 16 SLIGHTLY HAZY POT COVER PLACEMENT GENERALLY GOOD; POT COVER CONDITION FAIR - LITTLE IRRITATION AND JUST
	Bath Storage	Dust	Visual & Sensory	Good	
	Bath Crushing	Dust	Visual-Smoke Tube	Fair	QUITE DUSTY; FLAPS ON HOOD OVER CRUSHED BATH RECEIVER NEED REPLACING

SURVEYOR CHL

411082 0714

INDUSTRIAL HYGIENE SURVEY

DATE: AUG. 11, 1967

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	FAIR	OLD BAG FILTER - GOOD NEW BAG FILTER - SOME DUST DISCHARGED
	Ore Unloading	Dust	Visual	GOOD	NO UNLOADING IN PROGRESS - SOME DUST IN AIR DUE TO FAIRLY STRONG NORTH WIND
	Roading Room-General	Dust & Fumes	Visual	GOOD	IN AREA ONLY SMALL AMOUNTS OF DUST AND FUMES FAIRLY HIGH NOISE LEVEL TO BE
	Wheelabrator	Noise	Audio	FAIR	RUBBER SLEEVES MAY NEED REPLACED
	Stub Press & Unbolting Station	Dust	Visual	GOOD	NO DUST IN EITHER AREA
	Potlining-Mixer Area	Dust & Fumes	Visual	FAIR	SOME DUST IN AREA HEAVY FUMES RISING FROM MIXERS - FUMES RISING RAPIDLY TO UPPER PART OF BUILDING
	Carbo Plant Electrode Cleaning	Dust	Visual	GOOD	SMALL AMOUNT OF DUST IN AIR - EQUIPMENT ONLY PARTIALLY OPERATING
	Ring Furnace	Dust CO	Visual Detector Tube	GOOD	DUST ONLY IN AREAS WHERE CARBON IS BEING PACKED OR UNPACKED CO - 0.4 ppm
	Butt Unloading & Crushing	Dust	Visual	FAIR	NOT IN OPERATION - FLOOR IN AREA COVERED WITH DUST + COKE TO A DEPTH OF SEVERAL INCHES
	Mixer Floor	Dust & Pitch Fumes	Visual	GOOD	ONLY SLIGHT AMOUNT OF DUST OR FUMES VISIBLE IN AREA

SURVEYOR: CARL

INDUSTRIAL HYGIENE SURVEY

DATE: AUG. 11, 1967

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	FAIR	COVER OPEN WHERE HOT MIX DROPS ONTO BELT - FUMES FAIRLY HEAVY AND RISING VERY SLOWLY
	Press Room	Fumes	Visual	Good	No Fumes Visible
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	No Equipment In Operation
	Garage - General	Fumes CO	Visual Detector Tube	Good	No Equipment In Operation HOUSEKEEPING COULD BE IMPROVED
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Mist Visible From BATTERIES AND NO IRRITATION
	Machine Shop Welding Operations	Various	Visual & Sensory Smoke Tube	Good	No WELDING OPERATIONS IN PROGRESS
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	No Dust Visible In Room VENTILATION Good
	Blacksmith Shop	CO	Detector Tube	Good	No OPERATIONS IN PROGRESS
	Mold Repair Room Degreaser	Trichloro Ethylene	Detector Tube	Good	TRICHLOROETHYLENE - 0 ppm Hood Over Degreaser OPERATING
	Atomizer - General	Dust	Visual	Good	VERY LITTLE WORK BEING DONE - AREA VERY CLEAN AND ORDERLY

SURVEYOR CAR

411082 0716

ROCKDALE WORDS

INDUSTRIAL HYGIENE SURVEY

DATE: Aug. 11, 1967

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SURVIVOR *aka*

INDUSTRIAL HYGIENE SURVEY

DATE: SEP 8 1967

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Ingot Production Bldg. 34 - General	Various	Visual & Sensory	Good	No Fumes Visible - No Irritation No Furnace Being Fluxed
	Furnace Area & Casting	Cl ₂ HCl CO	Detector Tubes	Good	Only 3 Units Operating - Only Very Small Amount of Chlorine Being Used CO - 0 ppm
	Homogenizing Furnace	CO	Detector Tube	Good	CO - On Floor 0 ppm On Catwalk 0 ppm Slight Color of Natural Gas on Catwalk
	Cutting Oil Supply Tank	Oil Vapor	Visual	Good	No Vapor Visible
	Caustic Cleaning Tank	Fumes & Caustic Spray	Visual & Sensory Smoke Tube	Good	Exhaust System Good - Tank Not in Use At Time of Survey
	Skim Room	Dust & Fumes HCl	Visual & Sensory Detector Tube	Good	Very Little Skim in Room - Exhaust System Seemed Inoperative - No Irritation HCl 0 ppm
	Brick Cutting Area	Dust from Brick Saw	Visual	Good	Saw Not in Operation - Fair Amount of Brick Dust on Floor
	Rectifier Station	Mercury Vapor	Detector Tube	Good	Very Little Mercury Observed on Floor, Cabinet & Table - Small Amount in Sink & Drain Still Hg Vapor - 0 ppm
	Potrooms - General	Dust & Fumes	Visual	Good	Slight Haze in All Rooms Pot Cover Placement Generally Good; Pot Cover Condition Fair + Little Dust
	Bath Storage	Dust	Visual & Sensory	Good	No Irritation
	Bath Crushing	Dust	Visual-Smoke Tube	Good	Some Dust in Air; Flaps on Hoods/Cover Causing Bath Receivers Need Replacing - Exhaust System Fair

SURVEYOR

CMB

INDUSTRIAL HYGIENE SURVEY

DATE: Sept 8, 1967

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Bath Crushing Bag Filter	Dust	Visual	FAIR	OLD BAG FILTER - GOOD NEW BAG FILTER - FAIR AMOUNT OF DUST DISCHARGED FROM UNIT
	Ore Unloading	Dust	Visual	Good	UNLOADING IN PROGRESS WITH ONLY SLIGHT AMOUNT OF DUST IN AIR
	Rodding Room-General	Dust & Fumes	Visual	Good	ONLY SMALL AMOUNT OF DUST AND FUMES VISIBLE IN AREA
	Wheelabrator	Noise	Audio	FAIR	FAIRLY HIGH NOISE LEVEL - RUBBER SLEEVES MAY NEED REPLACING
	Stub Press & Unbolting Station	Dust	Visual	Good	ONLY SMALL AMOUNT OF DUST IN AREA
	Potlining-Mixer Area	Dust & Fumes	Visual	FAIR	HEAVY FUMES INSIDE RARELY FROM MIXER. SMALL AMOUNT OF FUMES AND DUST IN FEAR LEVEL
	Carbon Plant Electrode Cleaning	Dust	Visual	FAIR	SOME DUST IN AREA - FAIRLY HEAVY FUMES RARELY ARE PRESENT IN AREA - SEE ABOVE REMARKS
	Ring Furnace	Dust CO	Visual Detector Tube	Good	ANODES SET, ELECTRICAL - FLOOR IS FAIRLY VENTILATION SYSTEM FOR ABOVE SMOKE DUST FOR MAINTENANCE OF ROOM
	Butt Unloading & Crushing	Dust	Visual	Good	NOT IN OPERATION
	Mixer Floor	Dust & Pitch Fumes	Visual	Good	SOME PITCH FUMES NOTICEABLE NEAR EAST END SMALL AMOUNT OF DUST ARE PRESENT

SURVEYOR

CHK

INDUSTRIAL HYGIENE SURVEY

DATE: Sept 8 1961

Ident.	Operation or Location	Contaminant	Evaluation Method	Evaluation Results	Remarks
	Conveyor Belt From Mixers to Press	Fumes	Visual	FAIR	HEAVY FUMES IN AREA WHERE MIXING DRUMS CHARGE CONVEYER - NOOD OVER BEST STILL OPEN - THESE FUMES ALSO PRESENT ON EAST END OF MESS FLOOR
	Press Room	Fumes	Visual	Good	No Fumes Visible
	Carpenter Shop	Dust	Visual & Smoke Tube	Good	No Equipment in Operation
	Garage - General	Fumes CO	Visual Detector Tube	Good	No Equipment in Operation
	Electric Shop-General	Acid Mist	Visual & Sensory	Good	No Mist Visible No Irritation
	Machine Shop Machine Operations	Various	Visual & Sensory Smoke Tube	Good	Only One Welding Operation in Progress No Visible Fumes and No Irritation
	Marinite Finishing Room	Dust	Visual Smoke Tube	Good	Not in Operation
	Blacksmith Shop	CO	Detector Tube	Good	No Operations in Progress Trichloroethylene is used - This Fumes Taken Air Nose Level Directly in Front of Generating Unit - Exhaust Hood Over Fire V. - Operating
	Mold Repair Room Degreaser	Trichloroethylene	Detector Tube	Good	
	Atomizer - General	Dust	Visual	Good	WORKING OPERATIONS FINISHED FOR DAY - SANDBLASTING AND PAINTING OF IRON MACHINES DONE OUTDOOR - REMOVED REMOVED DUST SANDBLASTING WHEN A REGRINDER

SURVEYOR CHR

411082 0720

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SURVEILLANCE *CHL*