Eraring Power Station - EPA Licence 1429
Rocky Point Rd, Dora Creek NSW 2264

# Environmental Monitoring Data January 2023



## Unit 1A Boiler Continuous Emission Monitoring Summary

*EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air*
*Unit 1A Unit Out of Service 1, 3, 5-14 and 20 January 2023.*
*NOx Unit Out of Service 2 and 27 January 2023.*

| | NOx | | | $SO_2$ | | |
|---|---|---|---|---|---|---|
| | mg/Nm³ (7% $O_2$) | | | mg/Nm³ (7% $O_2$) | | |
| | Daily Ave | Max Hourly | Min Hourly | Daily Ave | Max Hourly | Min Hourly |
| 1 January | - | - | - | - | | - |
| 2 January | - | - | - | 873 | 1100 | 705 |
| 3 January | - | - | - | - | - | - |
| 4 January | 317 | 361 | 230 | 622 | 689 | 585 |
| 5 January | - | - | - | - | - | - |
| 6 January | - | - | - | - | - | - |
| 7 January | - | - | - | - | - | - |
| 8 January | - | - | - | - | - | - |
| 9 January | - | - | - | - | - | - |
| 10 January | - | - | - | - | - | - |
| 11 January | - | - | - | - | - | - |
| 12 January | - | - | - | - | - | - |
| 13 January | - | - | - | - | - | - |
| 14 January | - | - | - | - | - | - |
| 15 January | 351 | 460 | 305 | 561 | 715 | 360 |
| 16 January | 331 | 448 | 287 | 634 | 780 | 514 |
| 17 January | 322 | 347 | 295 | 517 | 574 | 463 |
| 18 January | 311 | 342 | 285 | 543 | 612 | 507 |
| 19 January | 335 | 388 | 286 | 612 | 789 | 505 |
| 20 January | - | - | - | - | - | - |
| 21 January | 402 | 555 | 300 | 733 | 907 | 652 |
| 22 January | 349 | 408 | 301 | 541 | 750 | 435 |
| 23 January | 375 | 443 | 286 | 630 | 709 | 571 |
| 24 January | 396 | 452 | 355 | 683 | 835 | 623 |
| 25 January | 385 | 471 | 282 | 691 | 819 | 623 |
| 26 January | 376 | 434 | 304 | 590 | 693 | 485 |
| 27 January | - | - | - | 733 | 809 | 624 |
| 28 January | 327 | 388 | 263 | 701 | 978 | 642 |
| 29 January | 348 | 403 | 309 | 750 | 808 | 684 |
| 30 January | 349 | 432 | 247 | 700 | 853 | 583 |
| 31 January | 354 | 416 | 303 | 705 | 874 | 609 |

## Unit 1B Boiler Continuous Emission Monitoring Summary

*EPA Identification no.7 - Air emissions monitoring, Boiler 1 stack discharge to air*
*Unit 1B Out of Service 2 and 5-15 January 2023*

| | NOx | | | $SO_2$ | | |
|---|---|---|---|---|---|---|
| | mg/Nm$^3$ (7% $O_2$) | | | mg/Nm$^3$ (7% $O_2$) | | |
| | Daily Ave | Max Hourly | Min Hourly | Daily Ave | Max Hourly | Min Hourly |
| 1 January | 289 | 310 | 229 | 810 | 899 | 733 |
| 2 January | - | - | - | - | - | - |
| 3 January | 266 | 321 | 234 | 826 | 917 | 760 |
| 4 January | 304 | 397 | 258 | 711 | 784 | 663 |
| 5 January | - | - | - | - | - | - |
| 6 January | - | - | - | - | - | - |
| 7 January | - | - | - | - | - | - |
| 8 January | - | - | - | - | - | - |
| 9 January | - | - | - | - | - | - |
| 10 January | - | - | - | - | - | - |
| 11 January | - | - | - | - | - | - |
| 12 January | - | - | - | - | - | - |
| 13 January | - | - | - | - | - | - |
| 14 January | - | - | - | - | - | - |
| 15 January | - | - | - | - | - | - |
| 16 January | 306 | 333 | 280 | 669 | 756 | 556 |
| 17 January | 309 | 332 | 280 | 550 | 581 | 505 |
| 18 January | 297 | 330 | 272 | 568 | 627 | 539 |
| 19 January | 306 | 369 | 245 | 630 | 702 | 600 |
| 20 January | 323 | 409 | 272 | 713 | 786 | 664 |
| 21 January | 353 | 412 | 286 | 720 | 775 | 650 |
| 22 January | 313 | 376 | 266 | 577 | 638 | 547 |
| 23 January | 346 | 424 | 260 | 615 | 646 | 587 |
| 24 January | 367 | 420 | 307 | 650 | 677 | 634 |
| 25 January | 336 | 445 | 246 | 633 | 676 | 601 |
| 26 January | 357 | 414 | 281 | 572 | 607 | 530 |
| 27 January | 344 | 398 | 305 | 645 | 666 | 613 |
| 28 January | 307 | 397 | 251 | 676 | 700 | 662 |
| 29 January | 318 | 377 | 278 | 660 | 678 | 640 |
| 30 January | 329 | 425 | 253 | 658 | 676 | 628 |
| 31 January | 332 | 389 | 290 | 676 | 714 | 618 |

## *Unit 2A Boiler Continuous Emission Monitoring Summary*

*EPA Identification no. 9 - Air emissions monitoring, Boiler 2 stack discharge to air*
*Unit 2A Out of Service 3, 5, 11, 14 and 29-31 January 2023*
*$SO_2$ Unit Out of Service 6-8 and15-17 January 2023*

| | NOx | | | $SO_2$ | | |
|---|---|---|---|---|---|---|
| | mg/Nm$^3$ (7% $O_2$) | | | mg/Nm$^3$ (7% $O_2$) | | |
| | Daily Ave | Max Hourly | Min Hourly | Daily Ave | Max Hourly | Min Hourly |
| 1 January | 303 | 334 | 274 | 757 | 890 | 685 |
| 2 January | 290 | 315 | 251 | 817 | 970 | 683 |
| 3 January | - | - | - | - | - | - |
| 4 January | 301 | 336 | 267 | 644 | 752 | 602 |
| 5 January | - | - | - | - | - | - |
| 6 January | 294 | 328 | 260 | - | - | - |
| 7 January | 316 | 370 | 274 | - | - | - |
| 8 January | 313 | 355 | 264 | - | - | - |
| 9 January | 310 | 356 | 259 | 614 | 650 | 568 |
| 10 January | 321 | 375 | 272 | 615 | 711 | 524 |
| 11 January | - | - | - | - | - | - |
| 12 January | 275 | 303 | 246 | 576 | 650 | 523 |
| 13 January | 295 | 359 | 242 | 491 | 537 | 457 |
| 14 January | - | - | - | - | - | - |
| 15 January | 290 | 332 | 256 | - | - | - |
| 16 January | 288 | 345 | 209 | - | - | - |
| 17 January | 315 | 341 | 255 | - | - | - |
| 18 January | 301 | 347 | 268 | 474 | 498 | 440 |
| 19 January | 305 | 354 | 268 | 550 | 617 | 499 |
| 20 January | 274 | 330 | 234 | 610 | 630 | 582 |
| 21 January | 270 | 320 | 238 | 653 | 682 | 585 |
| 22 January | 279 | 350 | 227 | 539 | 580 | 491 |
| 23 January | 324 | 418 | 225 | 529 | 545 | 492 |
| 24 January | 399 | 525 | 325 | 539 | 560 | 521 |
| 25 January | 431 | 512 | 311 | 494 | 518 | 481 |
| 26 January | 458 | 574 | 318 | 470 | 496 | 447 |
| 27 January | 430 | 488 | 359 | 533 | 560 | 478 |
| 28 January | 389 | 488 | 265 | 574 | 622 | 537 |
| 29 January | - | - | - | - | - | - |
| 30 January | - | - | - | - | - | - |
| 31 January | - | - | - | - | - | - |

## Unit 2B Boiler Continuous Emission Monitoring Summary

*EPA Identification no. 10 - Air emissions monitoring, Boiler 2 stack discharge to air*
*Unit 2B Out of Service 5 and 11 January 2023*
*NOx Unit Out of Service 26 January 2023*
*$SO_2$ Unit Out of Service 4 January 2023*

| | NOx | | | $SO_2$ | | |
|---|---|---|---|---|---|---|
| | mg/Nm$^3$ (7% $O_2$) | | | mg/Nm$^3$ (7% $O_2$) | | |
| | Daily Ave | Max Hourly | Min Hourly | Daily Ave | Max Hourly | Min Hourly |
| 1 January | 276 | 336 | 198 | 661 | 836 | 405 |
| 2 January | 267 | 326 | 197 | 696 | 951 | 394 |
| 3 January | 252 | 312 | 176 | 743 | 1029 | 564 |
| 4 January | 280 | 332 | 243 | - | - | - |
| 5 January | - | - | - | - | - | - |
| 6 January | 266 | 318 | 184 | 574 | 703 | 439 |
| 7 January | 277 | 328 | 178 | 608 | 847 | 321 |
| 8 January | 267 | 314 | 147 | 539 | 665 | 279 |
| 9 January | 238 | 333 | 152 | 474 | 622 | 296 |
| 10 January | 225 | 322 | 153 | 432 | 586 | 244 |
| 11 January | - | - | - | - | - | - |
| 12 January | 207 | 275 | 160 | 414 | 590 | 283 |
| 13 January | 194 | 391 | 139 | 309 | 443 | 219 |
| 14 January | 207 | 266 | 158 | 385 | 467 | 252 |
| 15 January | 246 | 335 | 179 | 581 | 836 | 394 |
| 16 January | 223 | 273 | 196 | 444 | 571 | 339 |
| 17 January | 236 | 278 | 167 | 387 | 503 | 318 |
| 18 January | 236 | 434 | 195 | 368 | 420 | 313 |
| 19 January | 247 | 331 | 195 | 445 | 537 | 370 |
| 20 January | 232 | 283 | 193 | 520 | 603 | 408 |
| 21 January | 256 | 298 | 195 | 594 | 640 | 451 |
| 22 January | 222 | 283 | 195 | 444 | 554 | 360 |
| 23 January | 253 | 314 | 204 | 407 | 494 | 299 |
| 24 January | 282 | 350 | 240 | 388 | 503 | 333 |
| 25 January | 283 | 336 | 223 | 343 | 437 | 261 |
| 26 January | - | -- | - | 349 | 428 | 282 |
| 27 January | 309 | 413 | 261 | 381 | 432 | 337 |
| 28 January | 292 | 346 | 221 | 436 | 552 | 333 |
| 29 January | 270 | 307 | 234 | 387 | 477 | 306 |
| 30 January | 262 | 312 | 232 | 388 | 524 | 325 |
| 31 January | 268 | 351 | 233 | 367 | 517 | 273 |

## Unit 3A Boiler Continuous Emission Monitoring Summary

*EPA Identification no. 11 - Air emissions monitoring, Boiler 3 stack discharge to air*
*Unit 3A Out of Service 4-15 and 28-31January 2023*
*NOx Unit Out of Service 24 January 2023*

| | NOx | | | $SO_2$ | | |
|---|---|---|---|---|---|---|
| | $mg/Nm^3$ (7% $O_2$) | | | $mg/Nm^3$ (7% $O_2$) | | |
| | Daily Ave | Max Hourly | Min Hourly | Daily Ave | Max Hourly | Min Hourly |
| 1 January | 320 | 400 | 285 | 807 | 910 | 737 |
| 2 January | 361 | 499 | 310 | 900 | 1051 | 790 |
| 3 January | 376 | 412 | 302 | 929 | 1094 | 813 |
| 4 January | - | - | - | - | - | - |
| 5 January | - | - | - | - | - | - |
| 6 January | - | - | - | - | - | - |
| 7 January | - | - | - | - | - | - |
| 8 January | - | - | - | - | - | - |
| 9 January | - | - | - | - | - | - |
| 10 January | - | - | - | - | - | - |
| 11 January | - | - | - | - | - | - |
| 12 January | - | - | - | - | - | - |
| 13 January | - | - | - | - | - | - |
| 14 January | - | - | - | - | - | - |
| 15 January | - | - | - | - | - | - |
| 16 January | 359 | 475 | 308 | 782 | 861 | 717 |
| 17 January | 359 | 422 | 292 | 641 | 721 | 598 |
| 18 January | 356 | 422 | 325 | 608 | 645 | 578 |
| 19 January | 318 | 374 | 251 | 674 | 719 | 642 |
| 20 January | 369 | 428 | 316 | 780 | 829 | 715 |
| 21 January | 380 | 456 | 324 | 837 | 868 | 784 |
| 22 January | 370 | 426 | 326 | 677 | 779 | 629 |
| 23 January | 349 | 371 | 323 | 697 | 733 | 667 |
| 24 January | - | - | - | 744 | 769 | 711 |
| 25 January | 309 | 339 | 269 | 685 | 755 | 633 |
| 26 January | 378 | 445 | 313 | 644 | 696 | 620 |
| 27 January | 341 | 384 | 291 | 727 | 772 | 616 |
| 28 January | - | - | - | - | - | - |
| 29 January | - | - | - | - | - | - |
| 30 January | - | - | - | - | - | - |
| 31 January | - | - | - | - | - | - |

## Unit 3B Boiler Continuous Emission Monitoring Summary

*EPA Identification no. 12 - Air emissions monitoring, Boiler 3 stack discharge to air*
*Unit 3B Out of Service 4-15 and 28-31January 2023*

| | NOx | | | $SO_2$ | | |
|---|---|---|---|---|---|---|
| | mg/Nm$^3$ (7% $O_2$) | | | mg/Nm$^3$ (7% $O_2$) | | |
| | Daily Ave | Max Hourly | Min Hourly | Daily Ave | Max Hourly | Min Hourly |
| 1 January | 300 | 393 | 262 | 735 | 820 | 666 |
| 2 January | 312 | 421 | 261 | 828 | 937 | 752 |
| 3 January | 342 | 391 | 267 | 858 | 999 | 750 |
| 4 January | - | - | - | - | - | - |
| 5 January | - | - | - | - | - | - |
| 6 January | - | - | - | - | - | - |
| 7 January | - | - | - | - | - | - |
| 8 January | - | - | - | - | - | - |
| 9 January | - | - | - | - | - | - |
| 10 January | - | - | - | - | - | - |
| 11 January | - | - | - | - | - | - |
| 12 January | - | - | - | - | - | - |
| 13 January | - | - | - | - | - | - |
| 14 January | - | - | - | - | - | - |
| 15 January | - | - | - | - | - | - |
| 16 January | 325 | 364 | 275 | 712 | 759 | 666 |
| 17 January | 335 | 386 | 260 | 592 | 620 | 551 |
| 18 January | 331 | 436 | 292 | 565 | 600 | 532 |
| 19 January | 295 | 382 | 258 | 616 | 654 | 569 |
| 20 January | 319 | 345 | 291 | 706 | 743 | 666 |
| 21 January | 323 | 362 | 287 | 753 | 779 | 721 |
| 22 January | 314 | 348 | 284 | 611 | 692 | 566 |
| 23 January | 297 | 313 | 284 | 623 | 647 | 603 |
| 24 January | 295 | 317 | 282 | 663 | 681 | 641 |
| 25 January | 304 | 341 | 274 | 612 | 659 | 568 |
| 26 January | 357 | 437 | 302 | 583 | 624 | 545 |
| 27 January | 312 | 518 | 254 | 660 | 718 | 602 |
| 28 January | - | - | - | - | - | - |
| 29 January | - | - | - | - | - | - |
| 30 January | - | - | - | - | - | - |
| 31 January | - | - | - | - | - | - |

## Unit 4A Boiler Continuous Emission Monitoring Summary

*EPA Identification no. 13 - Air emissions monitoring, Boiler 4 stack discharge to air*
*Unit 4A Out of Service 1 and 16-26 January 2023*
*NOx Unit Out of Service 14-15 January 2023*

| | NOx | | | $SO_2$ | | |
|---|---|---|---|---|---|---|
| | mg/Nm³ (7% $O_2$) | | | mg/Nm³ (7% $O_2$) | | |
| | Daily Ave | Max Hourly | Min Hourly | Daily Ave | Max Hourly | Min Hourly |
| 1 January | - | - | - | - | - | - |
| 2 January | 350 | 400 | 281 | 666 | 796 | 589 |
| 3 January | 350 | 397 | 300 | 753 | 784 | 705 |
| 4 January | 307 | 346 | 251 | 657 | 757 | 612 |
| 5 January | 297 | 331 | 257 | 697 | 750 | 651 |
| 6 January | 299 | 327 | 263 | 756 | 854 | 686 |
| 7 January | 307 | 340 | 277 | 768 | 876 | 659 |
| 8 January | 310 | 379 | 256 | 713 | 783 | 639 |
| 9 January | 317 | 380 | 274 | 673 | 699 | 608 |
| 10 January | 392 | 496 | 277 | 671 | 748 | 599 |
| 11 January | 358 | 424 | 277 | 623 | 655 | 562 |
| 12 January | 312 | 364 | 274 | 649 | 726 | 572 |
| 13 January | 297 | 367 | 265 | 595 | 611 | 536 |
| 14 January | - | - | - | 608 | 639 | 543 |
| 15 January | - | - | - | 743 | 1049 | 263 |
| 16 January | - | - | - | - | - | - |
| 17 January | - | - | - | - | - | - |
| 18 January | - | - | - | - | - | - |
| 19 January | - | - | - | - | - | - |
| 20 January | - | - | - | - | - | - |
| 21 January | - | - | - | - | - | - |
| 22 January | - | - | - | - | - | - |
| 23 January | - | - | - | - | - | - |
| 24 January | - | - | - | - | - | - |
| 25 January | - | - | - | - | - | - |
| 26 January | - | - | - | - | - | - |
| 27 January | 430 | 486 | 334 | 642 | 722 | 591 |
| 28 January | 399 | 475 | 294 | 654 | 696 | 615 |
| 29 January | 390 | 467 | 306 | 641 | 692 | 597 |
| 30 January | 336 | 429 | 272 | 608 | 632 | 569 |
| 31 January | 359 | 447 | 284 | 623 | 688 | 584 |

**Unit 4B Boiler Continuous Emission Monitoring Summary**

*EPA Identification no. 14 – Air emissions monitoring, Boiler 4 stack discharge to air*
*Unit 4B Out of Service 1 and 16-26 January 2023*
*NOx Unit Out of Service 7-9, 12, 15 and 27January 2023*

| | NOx | | | $SO_2$ | | |
|---|---|---|---|---|---|---|
| | mg/Nm$^3$ (7% $O_2$) | | | mg/Nm$^3$ (7% $O_2$) | | |
| | Daily Ave | Max Hourly | Min Hourly | Daily Ave | Max Hourly | Min Hourly |
| 1 January | - | - | - | - | - | - |
| 2 January | 385 | 547 | 205 | 587 | 720 | 206 |
| 3 January | 393 | 523 | 320 | 745 | 818 | 560 |
| 4 January | 298 | 356 | 234 | 658 | 786 | 537 |
| 5 January | 283 | 324 | 237 | 621 | 745 | 469 |
| 6 January | 292 | 323 | 248 | 750 | 865 | 633 |
| 7 January | - | - | - | 719 | 830 | 534 |
| 8 January | - | - | - | 737 | 818 | 631 |
| 9 January | - | - | - | 707 | 767 | 560 |
| 10 January | 453 | 587 | 307 | 694 | 799 | 587 |
| 11 January | 393 | 490 | 321 | 650 | 744 | 486 |
| 12 January | - | - | - | 719 | 770 | 564 |
| 13 January | 316 | 384 | 259 | 630 | 690 | 534 |
| 14 January | 407 | 546 | 295 | 604 | 646 | 492 |
| 15 January | - | - | - | 733 | 1051 | 399 |
| 16 January | - | - | - | - | - | - |
| 17 January | - | - | - | - | - | - |
| 18 January | - | - | - | - | - | - |
| 19 January | - | - | - | - | - | - |
| 20 January | - | - | - | - | - | - |
| 21 January | - | - | - | - | - | - |
| 22 January | - | - | - | - | - | - |
| 23 January | - | - | - | - | - | - |
| 24 January | - | - | - | - | - | - |
| 25 January | - | - | - | - | - | - |
| 26 January | - | - | - | - | - | - |
| 27 January | - | - | - | 654 | 705 | 531 |
| 28 January | 484 | 618 | 343 | 656 | 713 | 509 |
| 29 January | 444 | 616 | 278 | 668 | 697 | 564 |
| 30 January | 371 | 457 | 280 | 656 | 685 | 446 |
| 31 January | 398 | 529 | 311 | 667 | 709 | 556 |

## Unit 1 Boiler Emission Test Results

*EPA Identification no. 3 - Air emissions monitoring, Boiler 1 stack discharge to air*

| Name | Reading | Units | Licence Limit | Date |
|---|---|---|---|---|
| Chlorine | 0.014 | $mg/m^3$ | 20 | 20/12/2022 |
| Fluorine | 9.8 | $mg/m^3$ | 30 | 20/12/2022 |
| Hydrogen chloride | 13 | $mg/m^3$ | 50 | 20/12/2022 |
| Solid Particles | 8.8 | $mg/m^3$ | 50 | 20/12/2022 |
| Sulfuric acid mist and sulfur trioxide (as SO3) | 4.7 | $mg/m^3$ | 100 | 20/12/2022 |
| Volatile organic compounds as n-propane equivalent | <0.01 | $mg/m^3$ | 10 | 20/12/2022 |
| | | | | |
| Cadmium | <0.0003 | $mg/m^3$ | 0.2 | 26/07/2022 |
| Mercury | <0.0002 | $mg/m^3$ | 0.05 | 26/07/2022 |
| Solid Particles | 1.9 | $mg/m^3$ | 50 | 26/07/2022 |
| Type 1 and 2 substances in Aggregate | <0.02 | $mg/m^3$ | 0.75 | 26/07/2022 |

*EPA Identification no. 7 - Air emissions monitoring, Boiler 1 Exhaust Duct A*

| Name | Reading | Units | Licence Limit | Date |
|---|---|---|---|---|
| Flow Rate | 210 | m3/sec | | 20/12/2022 |
| Moisture | 5.5 | % | | 20/12/2022 |
| Oxygen | 9.3 | % | | 20/12/2022 |
| Solid Particles | 3.1 | mg/m3 | | 20/12/2022 |
| Temperature | 118 | degC | | 20/12/2022 |
| Carbon dioxide | 10.5 | % | | 20/12/2022 |
| Chlorine | 0.014 | mg/m3 | | 20/12/2022 |
| Fluorine | 9.8 | mg/m3 | | 20/12/2022 |
| Hydrogen chloride | 13 | mg/m3 | | 20/12/2022 |
| Sulfuric acid mist and sulfur trioxide (as SO3) | 4.7 | mg/m3 | | 20/12/2022 |
| Volatile organic compounds as n-propane equivalent | <0.01 | mg/m3 | | 20/12/2022 |
| | | | | |
| Cadmium | <0.0003 | mg/m3 | | 26/07/2022 |
| Flow Rate | 330 | m3/sec | | 26/07/2022 |
| Mercury | <0.0002 | mg/m3 | | 26/07/2022 |
| Moisture | 5.4 | % | | 26/07/2022 |
| Oxygen | 9.0 | % | | 26/07/2022 |
| Solid Particles | 1.8 | mg/m3 | | 26/07/2022 |
| Temperature | 113 | degC | | 26/07/2022 |
| Type 1 and Type 2 substances in Aggregate | <0.012 | mg/m3 | | 26/07/2022 |
| Carbon dioxide | 13.1 | % | | 26/07/2022 |

*EPA Identification no. 8 - Air emissions monitoring, Boiler 1 Exhaust Duct B*

| Name | Reading | Units | Licence Limit | Date |
|---|---|---|---|---|
| Flow Rate | 290 | m3/sec | | 21/12/2022 |
| Moisture | 5.6 | % | | 21/12/2022 |
| Oxygen | 9 | % | | 21/12/2022 |
| Solid Particles | 13 | mg/m3 | | 21/12/2022 |
| Temperature | 120 | degC | | 21/12/2022 |
| Carbon dioxide | 10.9 | % | | 21/12/2022 |
| | | | | |
| Cadmium | 0.00026 | mg/m3 | | 26/07/2022 |
| Flow Rate | 330 | m3/sec | | 26/07/2022 |
| Mercury | <0.0002 | mg/m3 | | 26/07/2022 |
| Moisture | 4.2 | % | | 26/07/2022 |
| Oxygen | 8.8 | % | | 26/07/2022 |
| Solid Particles | 1.9 | mg/m3 | | 26/07/2022 |
| Temperature | 113 | degC | | 26/07/2022 |
| Type 1 and Type 2 substances in Aggregate | <0.03 | mg/m3 | | 26/07/2022 |
| Carbon dioxide | 11.1 | % | | 26/07/2022 |

## Unit 2 Boiler Emission Test Results

*EPA Identification no. 4 - Air emissions monitoring, Boiler 2 stack discharge to air*

| Name | Reading | Units | Licence Limit | Date |
|---|---|---|---|---|
| Chlorine | <0.02 | $mg/m^3$ | 20 | 23/11/2022 |
| Fluorine | 17 | $mg/m^3$ | 30 | 23/11/2022 |
| Hydrogen chloride | 16 | $mg/m^3$ | 50 | 23/11/2022 |
| Solid Particles | 6.9 | $mg/m^3$ | 50 | 23/11/2022 |
| Sulfuric acid mist and sulfur trioxide (as SO3) | 1.9 | $mg/m^3$ | 100 | 23/11/2022 |
| Volatile organic compounds as n-propane equivalent | 0.033 | $mg/m^3$ | 10 | 23/11/2022 |
| | | | | |
| Cadmium | <0.0003 | $mg/m^3$ | 0.2 | 27/07/2022 |
| Mercury | 0.0013 | $mg/m^3$ | 0.05 | 27/07/2022 |
| Solid Particles | 11 | $mg/m^3$ | 50 | 27/07/2022 |
| Type 1 and 2 substances in Aggregate | <0.02 | $mg/m^3$ | 0.75 | 27/07/2022 |

*EPA Identification no. 9 - Air emissions monitoring, Boiler 2 Exhaust Duct A*

| Name | Reading | Units | Licence Limit | Date |
|---|---|---|---|---|
| Flow Rate | 230 | m3/sec | | 23/11/2022 |
| Moisture | 5.1 | % | | 23/11/2022 |
| Oxygen | 8.9 | % | | 23/11/2022 |
| Solid Particles | 11 | mg/m3 | | 23/11/2022 |
| Temperature | 122 | degC | | 23/11/2022 |
| Carbon dioxide | 10.8 | % | | 23/11/2022 |
| Chlorine | <0.02 | mg/m3 | | 23/11/2022 |
| Fluorine | 17 | mg/m3 | | 23/11/2022 |
| Hydrogen chloride | 16 | mg/m3 | | 23/11/2022 |
| Sulfuric acid mist and sulfur trioxide (as SO3) | 1.9 | mg/m3 | | 23/11/2022 |
| Volatile organic compounds as n-propane equivalent | 0.033 | mg/m3 | | 23/11/2022 |
| | | | | |
| Cadmium | <0.0003 | mg/m3 | | 27/07/2022 |
| Flow Rate | 260 | m3/sec | | 27/07/2022 |
| Mercury | 0.0013 | mg/m3 | | 27/07/2022 |
| Moisture | 4.8 | % | | 27/07/2022 |
| Oxygen | 9.8 | % | | 27/07/2022 |
| Solid Particles | 14 | mg/m3 | | 27/07/2022 |
| Temperature | 120 | degC | | 27/07/2022 |
| Type 1 and Type 2 substances in Aggregate | <0.029 | mg/m3 | | 27/07/2022 |
| Carbon dioxide | 10.4 | % | | 27/07/2022 |

*EPA Identification no. 10 - Air emissions monitoring, Boiler 2 Exhaust Duct B*

| Name | Reading | Units | Licence Limit | Date |
|---|---|---|---|---|
| Flow Rate | 210 | m3/sec | | 23/11/2022 |
| Moisture | 5.2 | % | | 23/11/2022 |
| Oxygen | 9.3 | % | | 23/11/2022 |
| Solid Particles | 2.5 | mg/m3 | | 23/11/2022 |
| Temperature | 107 | degC | | 23/11/2022 |
| Carbon dioxide | 11.2 | % | | 23/11/2022 |
| | | | | |
| Cadmium | <0.0002 | mg/m3 | | 27/07/2022 |
| Flow Rate | 250 | m3/sec | | 27/07/2022 |
| Mercury | 0.0013 | mg/m3 | | 27/07/2022 |
| Moisture | 4.7 | % | | 27/07/2022 |
| Oxygen | 10.2 | % | | 27/07/2022 |
| Solid Particles | 8.7 | mg/m3 | | 27/07/2022 |
| Temperature | 110 | degC | | 27/07/2022 |
| Type 1 and Type 2 substances in Aggregate | <0.018 | mg/m3 | | 27/07/2022 |
| Carbon dioxide | 12.2 | % | | 27/07/2022 |

## Unit 3 Boiler Emission Test Results

*EPA Identification no. 5 - Air emissions monitoring, Boiler 3 stack discharge to air*

| Name | Reading | Units | Licence Limit | Date |
|---|---|---|---|---|
| Chlorine | <0.02 | mg/m3 | 20 | 22/11/2022 |
| Fluorine | 15 | mg/m3 | 30 | 22/11/2022 |
| Hydrogen chloride | 9.4 | mg/m3 | 50 | 22/11/2022 |
| Solid Particles | 2 | mg/m3 | 50 | 22/11/2022 |
| Sulfuric acid mist and sulfur trioxide (as SO3) | 1.7 | mg/m3 | 100 | 22/11/2022 |
| Volatile organic compounds as n-propane equivalent | <0.04 | mg/m3 | 10 | 22/11/2022 |
| | | | | |
| Cadmium | <0.0003 | mg/m3 | 0.2 | 28/07/2022 |
| Mercury | 0.00084 | mg/m3 | 0.05 | 28/07/2022 |
| Solid Particles | 8.8 | mg/m3 | 50 | 28/07/2022 |
| Type 1 and 2 substances in Aggregate | <0.02 | mg/m3 | 0.75 | 28/07/2022 |

*EPA Identification no. 11 - Air emissions monitoring, Boiler 3 Exhaust Duct A*

| Name | Reading | Units | Licence Limit | Date |
|---|---|---|---|---|
| Flow Rate | 200 | m3/sec | | 22/11/2022 |
| Moisture | 5.6 | % | | 22/11/2022 |
| Oxygen | 8 | % | | 22/11/2022 |
| Solid Particles | 1.6 | mg/m3 | | 22/11/2022 |
| Temperature | 110 | degC | | 22/11/2022 |
| Carbon dioxide | 12.2 | % | | 22/11/2022 |
| Chlorine | <0.02 | mg/m3 | | 22/11/2022 |
| Fluorine | 15 | mg/m3 | | 22/11/2022 |
| Hydrogen chloride | 9.4 | mg/m3 | | 22/11/2022 |
| Sulfuric acid mist and sulfur trioxide (as SO3) | 1.7 | mg/m3 | | 22/11/2022 |
| Volatile organic compounds as n-propane equivalent | <0.04 | mg/m3 | | 22/11/2022 |
| | | | | |
| Cadmium | <0.0003 | mg/m3 | | 28/07/2022 |
| Flow Rate | 240 | m3/sec | | 28/07/2022 |
| Mercury | 0.0014 | mg/m3 | | 28/07/2022 |
| Moisture | 5.0 | % | | 28/07/2022 |
| Oxygen | 8.8 | % | | 28/07/2022 |
| Solid Particles | 15 | mg/m3 | | 28/07/2022 |
| Temperature | 116 | degC | | 28/07/2022 |
| Type 1 and Type 2 substances in Aggregate | <0.019 | mg/m3 | | 28/07/2022 |
| Carbon dioxide | 13.2 | % | | 28/07/2022 |

*EPA Identification no. 12 - Air emissions monitoring, Boiler 3 Exhaust Duct B*

| Name | Reading | Units | Licence Limit | Date |
|---|---|---|---|---|
| Flow Rate | 200 | m3/sec | | 22/11/2022 |
| Moisture | 5.1 | % | | 22/11/2022 |
| Oxygen | 8.6 | % | | 22/11/2022 |
| Solid Particles | 2.4 | mg/m3 | | 22/11/2022 |
| Temperature | 126 | degC | | 22/11/2022 |
| Carbon dioxide | 11 | % | | 22/11/2022 |
| | | | | |
| Cadmium | <0.0004 | mg/m3 | | 28/07/2022 |
| Flow Rate | 210 | m3/sec | | 28/07/2022 |
| Mercury | 0.00022 | mg/m3 | | 28/07/2022 |
| Moisture | 5.1 | % | | 28/07/2022 |
| Oxygen | 9.2 | % | | 28/07/2022 |
| Solid Particles | 2.1 | mg/m3 | | 28/07/2022 |
| Temperature | 112 | degC | | 28/07/2022 |
| Type 1 and Type 2 substances in Aggregate | <0.024 | mg/m3 | | 28/07/2022 |
| Carbon dioxide | 10.8 | % | | 28/07/2022 |

## Unit 4 Boiler Emission Test Results

*EPA Identification no. 6 - Air emissions monitoring, Boiler 4 stack discharge to air*

| Name | Reading | Units | Licence Limit | Date |
|---|---|---|---|---|
| Chlorine | <0.02 | mg/m3 | 20 | 24/11/2022 |
| Fluorine | 14 | mg/m3 | 30 | 24/11/2022 |
| Hydrogen chloride | 18 | mg/m3 | 50 | 24/11/2022 |
| Solid Particles | 2.2 | mg/m3 | 50 | 24/11/2022 |
| Sulfuric acid mist and sulfur trioxide (as SO3) | 2.9 | mg/m3 | 100 | 24/11/2022 |
| Volatile organic compounds as n-propane equivalent | <0.09 | mg/m3 | 10 | 24/11/2022 |
| | | | | |
| Cadmium | <0.0003 | mg/m3 | 0.2 | 29/07/2022 |
| Mercury | 0.0011 | mg/m3 | 0.05 | 29/07/2022 |
| Solid Particles | 2.4 | mg/m3 | 50 | 29/07/2022 |
| Type 1 and 2 substances in Aggregate | <0.02 | mg/m3 | 0.75 | 29/07/2022 |

*EPA Identification no. 13 - Air emissions monitoring, Boiler 4 Exhaust Duct A*

| Name | Reading | Units | Licence Limit | Date |
|---|---|---|---|---|
| Flow Rate | 220 | $m^3$/sec | | 24/11/2022 |
| Moisture | 5.3 | % | | 24/11/2022 |
| Oxygen | 8.9 | % | | 24/11/2022 |
| Solid Particles | 2.4 | mg/$m^3$ | | 24/11/2022 |
| Temperature | 111 | degC | | 24/11/2022 |
| Carbon dioxide | 11.9 | % | | 24/11/2022 |
| Chlorine | <0.02 | mg/$m^3$ | | 24/11/2022 |
| Fluorine | 14 | mg/$m^3$ | | 24/11/2022 |
| Hydrogen chloride | 18 | mg/$m^3$ | | 24/11/2022 |
| Sulfuric acid mist and sulfur trioxide (as SO3) | 2.9 | mg/$m^3$ | | 24/11/2022 |
| Volatile organic compounds as n-propane equivalent | <0.09 | mg/$m^3$ | | 24/11/2022 |
| | | | | |
| Cadmium | <0.0003 | mg/$m^3$ | | 29/07/2022 |
| Flow Rate | 240 | $m^3$/sec | | 29/07/2022 |
| Mercury | 0.0011 | mg/$m^3$ | | 29/07/2022 |
| Moisture | 4.5 | % | | 29/07/2022 |
| Oxygen | 10.8 | % | | 29/07/2022 |
| Solid Particles | 1.5 | mg/$m^3$ | | 29/07/2022 |
| Temperature | 101 | degC | | 29/07/2022 |
| Type 1 and Type 2 substances in Aggregate | <0.026 | mg/$m^3$ | | 29/07/2022 |
| Carbon dioxide | 9.5 | % | | 29/07/2022 |

*EPA Identification no. 14 - Air emissions monitoring, Boiler 4 Exhaust Duct B*

| Name | Reading | Units | Licence Limit | Date |
|---|---|---|---|---|
| Flow Rate | 180 | $m^3$/sec | | 24/11/2022 |
| Moisture | 5.2 | % | | 24/11/2022 |
| Oxygen | 9.5 | % | | 24/11/2022 |
| Solid Particles | 1.9 | mg/$m^3$ | | 24/11/2022 |
| Temperature | 107 | degC | | 24/11/2022 |
| Carbon dioxide | 10.3 | % | | 24/11/2022 |
| | | | | |
| Cadmium | <0.0002 | mg/$m^3$ | | 29/07/2022 |
| Flow Rate | 240 | $m^3$/sec | | 29/07/2022 |
| Mercury | 0.0011 | mg/$m^3$ | | 29/07/2022 |
| Moisture | 5.3 | % | | 29/07/2022 |
| Oxygen | 8.8 | % | | 29/07/2022 |
| Solid Particles | 3.3 | mg/$m^3$ | | 29/07/2022 |
| Temperature | 109 | degC | | 29/07/2022 |
| Type 1 and Type 2 substances in Aggregate | <0.017 | mg/$m^3$ | | 29/07/2022 |
| Carbon dioxide | 13.3 | % | | 29/07/2022 |

## Eraring Depositional Dust Gauges

*EPA Identification no.17, 18, 19 & 20 - Depositional dust monitoring within 1km of the coal handling operations*

| Eraring Identification | EPA Identification No | Deposited Matter | | |
|---|---|---|---|---|
| | | g/m2/month | | |
| | | Ash | Combustible | Insoluble |
| E2 | 17 | 0.3 | 0.4 | 0.7 |
| E4 | 18 | 1.0 | 0.4 | 1.4 |
| E6 | 19 | 0.5 | 0.9 | 1.4 |
| U6 | 20 | 0.2 | 0.6 | 0.8 |

## Water Quality - Lake Monitoring LM10

*EPA Identification no. 27 - The waters of Lake Macquarie located midway between cooling water inlet and Hungary Point*

| Air Temp | Depth | Water Temp | pH | Salinity | Dissolved Oxygen | | Secchi |
|---|---|---|---|---|---|---|---|
| $^0$C | m | degC | pH unit | ppt | % | mg/L | m |
| 21.08 | 0.50 | 24.93 | 9.04 | 18.9 | 116.3 | 8.45 | 1.75 |

| Name | Reading | Units | Date |
|---|---|---|---|
| Aluminium | 0.103 | mg/L | 10/01/2023 |
| Ammonia | <0.010 | mg/L | 10/01/2023 |
| Arsenic III | <0.004 | mg/ | 10/01/2023 |
| Arsenic V | <0.004 | mg/L | 10/01/2023 |
| Cadmium | <0.0002 | mg/L | 10/01/2023 |
| Chromium (Trivalent) | <0.001 | mg/L | 10/01/2023 |
| Chromium (VI) Compounds | <0.001 | mg/L | 10/01/2023 |
| Copper | 0.001 | mg/L | 10/01/2023 |
| Iron | 0.129 | mg/L | 10/01/2023 |
| Lead | <0.0002 | mg/L | 10/01/2023 |
| Manganese | 0.0080 | mg/L | 10/01/2023 |
| Nickel | 0.0006 | mg/L | 10/01/2023 |
| pH | 8.06 | pH units | 10/01/2023 |
| Selenium | <0.002 | mg/L | 10/01/2023 |
| Total Suspended Solids | 16 | mg/L | 10/01/2023 |
| Vanadium | 0.0029 | mg/L | 10/01/2023 |
| Zinc | <0.005 | mg/L | 10/01/2023 |

## Water Quality - Lake Monitoring LM12

*EPA Identification no. 29 - The waters of Lake Macquarie located at the Eraring/Vales Point mixing zone off Fishery Point*

| Air Temp | Depth | Water Temp | pH | Salinity | Dissolved Oxygen | | Secchi |
|---|---|---|---|---|---|---|---|
| $^0$C | m | degC | pH unit | ppt | % | mg/L | m |
| 22.80 | 0.50 | 25.60 | 9.03 | 18.8 | 105.8 | 7.62 | 1.75 |

| Name | Reading | Units | Date |
|---|---|---|---|
| Aluminium | 0.061 | mg/L | 10/01/2023 |
| Ammonia | <0.010 | mg/L | 10/01/2023 |
| Arsenic III | <0.004 | mg/L | 10/01/2023 |
| Arsenic V | <0.004 | mg/L | 10/01/2023 |
| Cadmium | <0.0002 | mg/L | 10/01/2023 |
| Chromium (Trivalent) | <0.001 | mg/L | 10/01/2023 |
| Chromium (VI) Compounds | <0.001 | mg/L | 10/01/2023 |
| Copper | 0.002 | mg/L | 10/01/2023 |
| Iron | 0.052 | mg/L | 10/01/2023 |
| Lead | <0.0002 | mg/L | 10/01/2023 |
| Manganese | 0.0063 | mg/L | 10/01/2023 |
| Nickel | 0.0006 | mg/L | 10/01/2023 |
| pH | 8.09 | pH units | 10/01/2023 |
| Selenium | <0.002 | mg/L | 10/01/2023 |
| Total Suspended Solids | 21 | mg/L | 10/01/2023 |
| Vanadium | 0.0032 | mg/L | 10/01/2023 |
| Zinc | <0.005 | mg/L | 10/01/2023 |

## Water Quality - Lake Monitoring LM4

*EPA Identification no. 30 - The northern waters of Lake Macquarie east off Lake Macquarie Yacht Club*

| Air Temp | Depth | Water Temp | pH | Salinity | Dissolved Oxygen | | Secchi |
|---|---|---|---|---|---|---|---|
| $^0$C | m | degC | pH unit | ppt | % | mg/L | m |
| 20.10 | 0.50 | 23.39 | 9.14 | 19.2 | 125.6 | 9.37 | 4.25 |

| Name | Reading | Units | Date |
|---|---|---|---|
| Aluminium | 0.029 | mg/L | 10/01/2023 |
| Ammonia | <0.010 | mg/L | 10/01/2023 |
| Arsenic III | <0.004 | mg/L | 10/01/2023 |
| Arsenic V | <0.004 | mg/L | 10/01/2023 |
| Cadmium | <0.0002 | mg/L | 10/01/2023 |
| Chromium (Trivalent) | <0.001 | mg/L | 10/01/2023 |
| Chromium (VI) Compounds | <0.001 | mg/L | 10/01/2023 |
| Copper | 0.002 | mg/L | 10/01/2023 |
| Iron | 0.021 | mg/L | 10/01/2023 |
| Lead | 0.0003 | mg/L | 10/01/2023 |
| Manganese | 0.0044 | mg/L | 10/01/2023 |
| Nickel | <0.0005 | mg/L | 10/01/2023 |
| pH | 8.10 | pH units | 10/01/2023 |
| Selenium | <0.002 | mg/L | 10/01/2023 |
| Total Suspended Solids | 11 | mg/L | 10/01/2023 |
| Vanadium | 0.0020 | mg/L | 10/01/2023 |
| Zinc | <0.005 | mg/L | 10/01/2023 |

## Water Quality - Lake Monitoring LM7

*EPA Identification no. 28 - The waters of Lake Macquarie located off old Wangi power station inlet point in Myuna Bay*

| Air Temp | Depth | Water Temp | pH | Salinity | Dissolved Oxygen | | Secchi |
|---|---|---|---|---|---|---|---|
| $^0$C | m | degC | pH unit | ppt | % | mg/L | m |
| 21.85 | 0.5 | 27.60 | 8.88 | 18.8 | 138.0 | 10.08 | 3.25 |

| Name | Reading | Units | Date |
|---|---|---|---|
| Aluminium | 0.055 | mg/L | 10/01/2023 |
| Ammonia | <0.010 | mg/L | 10/01/2023 |
| Arsenic III | <0.004 | mg/L | 10/01/2023 |
| Arsenic V | <0.004 | mg/L | 10/01/2023 |
| Cadmium | <0.0002 | mg/L | 10/01/2023 |
| Chromium (Trivalent) | <0.001 | mg/L | 10/01/2023 |
| Chromium (VI) Compounds | <0.001 | mg/L | 10/01/2023 |
| Copper | 0.001 | mg/L | 10/01/2023 |
| Iron | 0.064 | mg/L | 10/01/2023 |
| Lead | <0.0002 | mg/L | 10/01/2023 |
| Manganese | 0.0063 | mg/L | 10/01/2023 |
| Nickel | <0.0005 | mg/L | 10/01/2023 |
| pH | 8.07 | pH units | 10/01/2023 |
| Selenium | <0.002 | mg/L | 10/01/2023 |
| Total Suspended Solids | 20 | mg/L | 10/01/2023 |
| Vanadium | 0.0026 | mg/L | 10/01/2023 |
| Zinc | <0.005 | mg/L | 10/01/2023 |

## Eraring Ash Dam Effluent Quality Monitoring

*EPA Identification no. 22 - Discharge point below siphon pond weir at Ash Dam*

| Name | Reading | Units | Licence Limit | Date |
|---|---|---|---|---|
| Aluminium | 0.055 | mg/L | - | 10/01/2023 |
| Ammonia | 0.53 | mg/L | - | 10/01/2023 |
| Arsenic III | 0.0011 | mg/L | - | 10/01/2023 |
| Arsenic V | 0.0074 | mg/L | - | 10/01/2023 |
| Cadmium | 0.00010 | mg/L | - | 10/01/2023 |
| Chromium (Trivalent) | <0.001 | mg/L | - | 10/01/2023 |
| Chromium (VI) Compounds | <0.01 | mg/L | - | 10/01/2023 |
| Copper | 0.0044 | mg/L | - | 10/01/2023 |
| Iron | 0.044 | mg/L | - | 10/01/2023 |
| Lead | <0.0001 | mg/L | - | 10/01/2023 |
| Manganese | 0.0365 | mg/L | - | 10/01/2023 |
| Nickel | 0.0024 | mg/L | - | 10/01/2023 |
| Nitrite and Nitrate as N | 3.79 | mg/L | - | 10/01/2023 |
| Nitrogen | 5.2 | mg/L | - | 10/01/2023 |
| pH | 8.40 | pH units | - | 10/01/2023 |
| Phosphorus as P | 1.25 | mg/L | - | 10/01/2023 |
| Reactive Phosphorus as P | 1.25 | mg/L | - | 10/01/2023 |
| Selenium | 0.0112 | mg/L | - | 10/01/2023 |
| Total Kjeldahl Nitrogen | 1.4 | mg/L | - | 10/01/2023 |
| Total Suspended Solids | 5 | mg/L | - | 10/01/2023 |
| Vanadium | 0.0229 | mg/L | - | 10/01/2023 |
| Zinc | 0.003 | mg/L | - | 10/01/2023 |

## Eraring Cooling Water Inlet Canal

*EPA Identification no. 31 - Inlet canal of the cooling water intake from Lake Macquarie*

| Name | Reading | Units | Licence Limit | Date |
|---|---|---|---|---|
| Aluminium | 0.121 | mg/L | - | 10/01/2023 |
| Ammonia | <0.005 | mg/L | - | 10/01/2023 |
| Arsenic III | <0.004 | mg/L | - | 10/01/2023 |
| Arsenic V | <0.004 | mg/L | - | 10/01/2023 |
| Cadmium | <0.0002 | mg/L | - | 10/01/2023 |
| Chromium (Trivalent) | <0.001 | mg/L | - | 10/01/2023 |
| Chromium (VI) Compounds | <0.01 | mg/L | - | 10/01/2023 |
| Copper | 0.0010 | mg/L | - | 10/01/2023 |
| Iron | 0.156 | mg/L | - | 10/01/2023 |
| Lead | <0.0002 | mg/L | - | 10/01/2023 |
| Manganese | 0.0092 | mg/L | - | 10/01/2023 |
| Nickel | <0.0005 | mg/L | - | 10/01/2023 |
| pH | 8.00 | pH units | - | 10/01/2023 |
| Selenium | <0.001 | mg/L | - | 10/01/2023 |
| Total Suspended Solids | 18 | mg/L | - | 10/01/2023 |
| Vanadium | 0.0026 | mg/L | - | 10/01/2023 |
| Zinc | <0.005 | mg/L | - | 10/01/2023 |
| Dissolved Oxygen | 11.25 | mg/L | - | 10/01/2023 |
| Field Temperature | 24.8 | degC | - | 10/01/2023 |
| Salinity | 19.0 | ppt | - | 10/01/2023 |
| Secchi Disk | 2.75 | m | - | 10/01/2023 |
| Temperature – Average | 26.19 | deg C | - | January 2023 |
| Temperature – Minimum | 17.78 | deg C | - | January 2023 |
| Temperature - Maximum | 29.48 | deg C | - | January 2023 |

## Eraring Cooling Water Outlet Canal

*EPA Identification no. 21 - Cooling water outlet canal to Myuna Bay*

| Name | Reading | Units | Licence Limit | Date |
|---|---|---|---|---|
| Copper | 0.0016 | mg/L | 0.005 | 10-11/01/2023 |
| Iron | 0.163 | mg/L | 0.3 | 10-11/01/2023 |
| Selenium | <0.001 | mg/L | 0.002 | 10-11/01/2023 |
| Temperature – Average | 31.37 | deg C | 37.5 | January 2023 |
| Temperature – Minimum | 26.30 | deg C | 37.5 | January 2023 |
| Temperature - Maximum | 35.92 | deg C | 37.5 | January 2023 |
| Maximum Daily Discharge from Ash Dam | 17.1 | ML | 150 | January 2023 |
| Monthly Discharge from Ash Dam | 183.43 | ML | - | January 2023 |

## Emergency Discharge – Toe Drain Pond

*EPA Identification no. 24 - Emergency discharge to toe drain collection pond*
*No Discharge during January 2023, background sample only*

| Name | Reading | Units | Licence Limit | Date |
|---|---|---|---|---|
| Aluminium | 0.010 | mg/L | - | 10/01/2023 |
| Ammonia | 3.01 | mg/L | - | 10/01/2023 |
| Arsenic III | 0.0021 | mg/L | - | 10/01/2023 |
| Arsenic V | 0.0009 | mg/L | - | 10/01/2023 |
| Cadmium | <0.00005 | mg/L | - | 10/01/2023 |
| Chromium (Trivalent) | <0.001 | mg/L | - | 10/01/2023 |
| Chromium (VI) Compounds | <0.01 | mg/L | - | 10/01/2023 |
| Copper | 0.0012 | mg/L | - | 10/01/2023 |
| Iron | 4.17 | mg/L | - | 10/01/2023 |
| Lead | <0.0001 | mg/L | - | 10/01/2023 |
| Manganese | 0.851 | mg/L | - | 10/01/2023 |
| Nickel | 0.0014 | mg/L | - | 10/01/2023 |
| Nitrite and Nitrate as N | 0.172 | mg/L | - | 10/01/2023 |
| Nitrogen | 3.18 | mg/L | - | 10/01/2023 |
| pH | 6.72 | pH units | 6-9.5 | 10/01/2023 |
| Phosphorus as P | 0.220 | mg/L | - | 10/01/2023 |
| Reactive Phosphorus as P | 0.026 | mg/L | - | 10/01/2023 |
| Selenium | 0.0004 | mg/L | - | 10/01/2023 |
| Total Kjeldahl Nitrogen | 3.01 | mg/L | - | 10/01/2023 |
| Total Suspended Solids | 21 | mg/L | 50 | 10/01/2023 |
| Vanadium | 0.0006 | mg/L | - | 10/01/2023 |
| Zinc | 0.001 | mg/L | - | 10/01/2023 |

**MR217**

*EPA Identification no. 23 - Emergency discharge from ash dam outlet at culvert*

*MR217 did not discharge throughout January 2023*

| Name | Reading | Units | Licence Limit | Date |
|---|---|---|---|---|
| Aluminium | | mg/L | - | |
| Ammonia | | mg/L | - | |
| Arsenic III | | mg/L | - | |
| Arsenic V | | mg/L | - | |
| Cadmium | | mg/L | - | |
| Chromium (Trivalent) | | mg/L | - | |
| Chromium (VI) Compounds | | mg/L | - | |
| Copper | | mg/L | - | |
| Iron | | mg/L | - | |
| Lead | | mg/L | - | |
| Manganese | | mg/L | - | |
| Nickel | | mg/L | - | |
| Nitrite and Nitrate as N | | mg/L | - | |
| Nitrogen | | mg/L | - | |
| pH | | pH units | 6-9.5 | |
| Phosphorus as P | | mg/L | - | |
| Reactive Phosphorus as P | | mg/L | - | |
| Selenium | | mg/L | - | |
| Total Kjeldahl Nitrogen | | mg/L | - | |
| Total Suspended Solids | | mg/L | 50 | |
| Vanadium | | mg/L | - | |
| Zinc | | mg/L | - | |

**Groundwater Monitoring**
**Groundwater Well – MW01**

*EPA Identification no. 32 – Groundwater Monitoring Well 01*

| Name | Reading | Units | Date |
|---|---|---|---|
| Aluminium | 0.168 | mg/L | 15/12/2022 |
| Ammonia | 0.02 | mg/L | 15/12/2022 |
| Arsenic (III) | <0.0005 | mg/L | 15/12/2022 |
| Arsenic (V) | <0.0005 | mg/L | 15/12/2022 |
| Cadmium | <0.00005 | mg/L | 15/12/2022 |
| Calcium | 2 | mg/L | 15/12/2022 |
| Chromium (trivalent) | <0.01 | mg/L | 15/12/2022 |
| Chromium (VI) compounds | <0.01 | mg/L | 15/12/2022 |
| Copper | 0.0010 | mg/L | 15/12/2022 |
| Electrical Conductivity | 433 | uS/cm | 15/12/2022 |
| Iron | 0.308 | mg/L | 15/12/2022 |
| Lead | 0.0009 | mg/L | 15/12/2022 |
| Magnesium | 5 | mg/L | 15/12/2022 |
| Manganese | 0.136 | mg/L | 15/12/2022 |
| Nickel | 0.0053 | mg/L | 15/12/2022 |
| pH | 4.84 | pH units | 15/12/2022 |
| Potassium | 4 | mg/L | 15/12/2022 |
| Selenium | <0.0002 | mg/L | 15/12/2022 |
| Sodium | 68 | mg/L | 15/12/2022 |
| Standing Water Level | 8.115 | metres | 15/12/2022 |
| Vanadium | 0.0003 | mg/L | 15/12/2022 |
| Zinc | 0.024 | mg/L | 15/12/2022 |

**Groundwater Monitoring**
**Groundwater Well – MW02**

*EPA Identification no. 33 – Groundwater Monitoring Well 02*

| Name | Reading | Units | Date |
|---|---|---|---|
| Aluminium | 1.02 | mg/L | 14/12/2022 |
| Ammonia | 1.09 | mg/L | 14/12/2022 |
| Arsenic (III) | <0.001 | mg/L | 14/12/2022 |
| Arsenic (V) | <0.001 | mg/L | 14/12/2022 |
| Cadmium | <0.0002 | mg/L | 14/12/2022 |
| Calcium | 306 | mg/L | 14/12/2022 |
| Chromium (trivalent) | <0.001 | mg/L | 14/12/2022 |
| Chromium (VI) compounds | <0.001 | mg/L | 14/12/2022 |
| Copper | <0.001 | mg/L | 14/12/2022 |
| Electrical Conductivity | 34300 | uS/cm | 14/12/2022 |
| Iron | 59.2 | mg/L | 14/12/2022 |
| Lead | 0.0016 | mg/L | 14/12/2022 |
| Magnesium | 639 | mg/L | 14/12/2022 |
| Manganese | 0.640 | mg/L | 14/12/2022 |
| Nickel | <0.0005 | mg/L | 14/12/2022 |
| pH | 6.82 | pH units | 14/12/2022 |
| Potassium | 227 | mg/L | 14/12/2022 |
| Selenium | <0.002 | mg/L | 14/12/2022 |
| Sodium | 6590 | mg/L | 14/12/2022 |
| Standing Water Level | 4.025 | metres | 14/12/2022 |
| Vanadium | 0.0032 | mg/L | 14/12/2022 |
| Zinc | 0.013 | mg/L | 14/12/2022 |

**Groundwater Monitoring**
**Groundwater Well – MW06**

*EPA Identification no. 34 – Groundwater Monitoring Well 06*

| Name | Reading | Units | Date |
|---|---|---|---|
| Aluminium | 0.116 | mg/L | 14/12/2022 |
| Ammonia | 3.35 | mg/L | 14/12/2022 |
| Arsenic (III) | <0.0005 | mg/L | 14/12/2022 |
| Arsenic (V) | 0.0006 | mg/L | 14/12/2022 |
| Cadmium | <0.0002 | mg/L | 14/12/2022 |
| Calcium | 442 | mg/L | 14/12/2022 |
| Chromium (trivalent) | <0.001 | mg/L | 14/12/2022 |
| Chromium (VI) compounds | <0.001 | mg/L | 14/12/2022 |
| Copper | <0.001 | mg/L | 14/12/2022 |
| Electrical Conductivity | 20400 | uS/cm | 14/12/2022 |
| Iron | 13.9 | mg/L | 14/12/2022 |
| Lead | 0.0005 | mg/L | 14/12/2022 |
| Magnesium | 251 | mg/L | 14/12/2022 |
| Manganese | 0.409 | mg/L | 14/12/2022 |
| Nickel | 0.0018 | mg/L | 14/12/2022 |
| pH | 6.63 | pH units | 14/12/2022 |
| Potassium | 113 | mg/L | 14/12/2022 |
| Selenium | <0.002 | mg/L | 14/12/2022 |
| Sodium | 3370 | mg/L | 14/12/2022 |
| Standing Water Level | 1.940 | metres | 14/12/2022 |
| Vanadium | 0.0011 | mg/L | 14/12/2022 |
| Zinc | 0.045 | mg/L | 14/12/2022 |

**Groundwater Monitoring**
**Groundwater Well – EGM/D26**

*EPA Identification no. 35 – Groundwater Monitoring Well D26*
*Groundwater well was dry during sampling in January 2022*

| Name | Reading | Units | Date |
|---|---|---|---|
| Aluminium | - | mg/L | - |
| Ammonia | - | mg/L | - |
| Arsenic (III) | - | mg/L | - |
| Arsenic (V) | - | mg/L | - |
| Cadmium | - | mg/L | - |
| Calcium | - | mg/L | - |
| Chromium (trivalent) | - | mg/L | - |
| Chromium (VI) compounds | - | mg/L | - |
| Copper | - | mg/L | - |
| Electrical Conductivity | - | uS/cm | - |
| Iron | - | mg/L | - |
| Lead | - | mg/L | - |
| Magnesium | - | mg/L | - |
| Manganese | - | mg/L | - |
| Nickel | - | mg/L | - |
| pH | - | pH units | - |
| Potassium | - | mg/L | - |
| Selenium | - | mg/L | - |
| Sodium | - | mg/L | - |
| Standing Water Level | - | metres | - |
| Vanadium | - | mg/L | - |
| Zinc | - | mg/L | - |