



SMART CONTRACT SECURITY AUDIT

WATCHTOWER

DISCLAIMER

Watchtower has completed this report to provide a summary of the Smart Contract functions, and any security, dependency or cybersecurity vulnerabilities. This is often a constrained report on our discoveries based on our investigation and understanding of the current programming versions as at the date of this report. In order to understand the full scope of our analysis, it is vital for you to review the complete report. Although we have done our best in conducting our investigation and creating this report, it is vital to note that you should not depend on this report and cannot make any claim against Watchtower or its Subsidiaries and Team members on the premise of what has or has not been included in the report. Please remember to conduct your own independent examinations before making any investment choices. We do not provide investment advice or in any way claim to determine if the project will be successful or not.

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ABOUT THE AUDITOR:

Watchtower is an Anti-Scam Token Utility which reviews Smart Contracts and Token information to Identify Rug Pull and Honey Pot scamming activity.

Watchtowers Development Team consists of a number of Smart Contract creators, Auditors Developers and Blockchain experts.

Watchtowers Website Scanner reviews a number of Risk factors to provide an adequate Risk summary of token projects.

In Addition to this the team also helps with Creation of Smart Contracts for legitimate projects, Audits and Promotion.





OVERVIEW

Watchtower was commissioned by MetaMonstas to complete a Smart Contract audit.

The objective of the Audit is to achieve the following:

- Review the Project and experience and Development team
- Ensure that the Smart Contract functions are necessary and operate as intended.
- Identify any vulnerabilities in the Smart Contract code.

DISCLAIMER: This Audit is intended to inform about token Contract Risks, the result does not imply an endorsement or provide financial advice in any way, All investments are made at your own risk.

(<https://www.cryptowatchtower.io/>)



SMART CONTRACT REVIEW



Contract Created on the 30th November 2021

Solidity compiler v0.8.10

Contract name	MetaMonstas
Contract address	0x82598bb4C9B40217C0bB28b63eAae3a7aAbD9b7e
Total supply	100,000,000,000
Token ticker	MONSTA
Decimals	18
Token holders	4
Transactions count	11
Top 5 holders dominance	Not Launched
Tax fee	12%
Total fees	12% ~ BUY / 12% ~ SELL
Contract deployer address	0xb28382cE5a53B947a96fa340e7f153b1b04bDDA5
Contract's current owner address	0xcd5ce471408292f017cb6039e7be232cac36a9b1



Project Overview



Project Details: (Website: <http://metamonstas.com>)

MetaMonstas is a 3D NFT battle game being developed on the Binance Smart Chain. It will include Minting NFT's called MetaMonstas to train and fight in a play to earn (\$MONSTA) 3D game.

Tokenomics:

Supply: 100,000,000,000 (100 Billion)

12% Tax comprising of:

- 4% Marketing
- 4% Development
- 2% Reflections
- 2% Auto Liquidity

Team Review:

Watchtower reviewed a number of factors including the teams background and Cryptocurrency experience, social media interaction and availability, project momentum, token risks and community trust score.

The MetaMonstas team have an expert understanding of Cryptocurrency.

The Team are currently developing their Play to earn game and have created the website for Minting their NFTs' for the game. Their social media profiles have a good following with over 5000 followers on their Telegram and Twitter accounts (2/12/2021)

TEAM DOXXED/KYC:

Watchtower is not aware of the team being doxxed nor have they been privately doxxed to Watchtower.



CONTRACT FUNCTIONS DETAILS

Functions (Public)

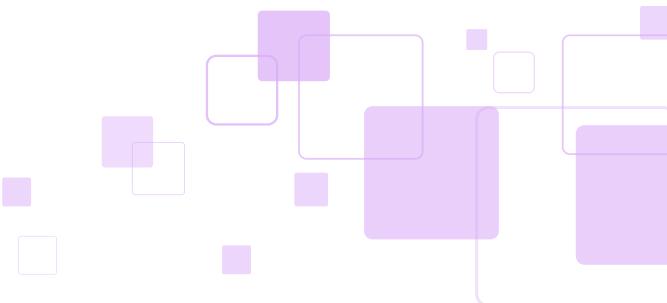
This contract has 16 available public functions which the owner can call. They can be viewed on BSC Scan.

LINK:

<https://bscscan.com/token/0x82598bb4c9b40217c0bb28b63eaae3a7aab9b7e#writeContract>

Function risks:

-No scam functions identified.



Contract Stress Test

Imported Libraries / Interfaces

- IERC20
- SafeMath
- Context
- Address
- Ownable
- IUniswapV2Factory
- IUniswapV2Pair
- IUniswapV2Router01
- IUniswapV2Router02

Overview

1. ADDITION OF COMMENTS:	8
2. CALL STACK DEPTH ATTACK:	10
3. TIME STAMP DEPENDENCY:	10
4. PARTY MULTISIG BUG:	10
5. USE OF LIBRARIES/DEPENDENCIES (FROM TRUSTED SOURCES):	
a. TRANSACTION-ORDERING DEPENDENCY:	8
6. ACCESS CONTROL AND AUTHORIZATION:	10
7. REENTRANCY ATTACKS:	10
8. ERC/BEP STANDARD VIOLATIONS:	10
9. USAGE OF VISIBILITY LEVELS:	10



ISSUES CHECKING STATUS



Issue description	Checking status
1. Compiler errors.	Passed
2. Race conditions and Reentrancy. Cross-function race conditions.	Passed
3. Possible delays in data delivery.	Passed
4. Oracle calls.	Passed
5. Front running.	Passed
6. Timestamp dependence.	Passed
7. Integer Overflow and Underflow.	Passed
8. DoS with Revert.	Passed
9. DoS with block gas limit.	Passed
10. Methods execution permissions.	Passed



Issue description	Checking status
11. Economy model of the contract.	Passed
12. The impact of the exchange rate on the logic.	Passed
13. Private user data leaks.	Passed
14. Malicious Event log.	Passed
15. Scoping and Declarations.	Passed
16. Uninitialized storage pointers.	Passed
17. Arithmetic accuracy.	Passed
18. Design Logic.	Passed
19. Cross-function race conditions.	Passed
20. Safe Open Zeppelin contracts implementation and usage.	Passed
21. Fallback function security.	Passed



SECURITY ISSUES



High Severity Issues

Nil

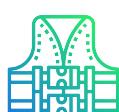


Medium Severity Issues

Centralisation Risk: (Common with rewards contracts)

authorized addresses have the privilege to:

1. set fees to 100% blocking all trades



Low Severity Issues

- **Gas Efficiency:**

When the contract enters the branch else if (!_isExcluded[sender] && !_isExcluded[recipient]), the contract will execute the same piece of code
_transferStandard(sender, recipient, amount)



CONCLUSION



Watchtower reviewed the MetaMonstas deployed and verified contract to conduct this audit.

Watchtower is satisfied that the contract is void of any malicious coding and that the team are operating with integrity.

Watchtower Disclaimer:

Please check the disclaimer page and note, this Audit is intended to inform about token Contract Risks, the result does not imply an endorsement or in any way provide financial advice, please do your own research. By reading this report you accept and agree to the disclaimer and understand investments are made at your own risk.

(<https://www.cryptowatchtower.io/>)

Contact Us

 @Watchtower_WTW

 Watchtower-WTW

 Watchtowercrypto

