

# RugFreeCoins Audit



Metamoon Token

Smart Contract Security Audit

December 7, 2021

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### **Audit details**



### **Audited project**

Metamoon Token



#### **Contract Address**

0x6378AAD8c6693F38beECB1C0dBc0194B99cf050b



#### **Client contact**

Metamoon Token Team



#### **Blockchain**

Binance smart chain



#### **Project website**

https://metamoontoken.org/

### **Disclaimer**

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the disclaimer below – please make sure to read it in full.

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## **Background**

Rugfreecoins was commissioned by Metamoon Token to perform an audit of the smart contract.

#### https://bscscan.com/address/0x6378AAD8c6693F38beECB1C0dBc0194B99cf050b

The focus of this audit is to verify that the smart contract is secure, resilient and working according to the specifications.

The information in this report should be used to understand the risk exposure of the smart contract, project feasibility, long term sustainability and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

## About the project

Metamoon token is a deflationary token built on the Binance Smart Chain, NFT, and NFT game + Defi. As holders of Metamoon token receive 6% distribution in BNB, 2 percentage on all transactions auto liquidate and burn thereby making the value of Metamoon reduce drastically as more and more transaction is done. Metamoon is a longterm project with an enjoyable and entertaining P2E game. On metaverse, Metamoon will be the first blockchain game to give BNB back to its holders.

#### **Features**

- ❖ 6% of each transaction when buying and selling gets sent amongst all holders in BNB rewards. The holders will be eligible to receive BNB, every one hour, and rewards are proportional to how many tokens each individual holds.
- ❖ The sustainability fee of 2% when buying and selling for marketing is what allows Metamoon to hold the aforementioned promise. Tokens will be swapped into BNBs and will be sent to a marketing wallet, which will be allocated for marketing. This way, the Metamoon token will have enough funds to promote the coin and spend for future development without selling tokens as the traditional way.
- ❖ The additional component included under the sustainability section is a liquidity fee of 2% when buying and selling, which is a redistribution mechanism that ensures the trading pool always has sufficient liquidity. This is a key element for decentralized exchanges like Pancakeswap.

### **Tokenomics**

#### 10% fee when buying & selling

- 6% of trade goes to holders pockets in BNB.
- 2% of trade goes to the burn wallet.
- 2% of trade goes to development and marketing.

### Roadmap

### Q1 2021: Stage 1 Team building White paper Roadmap Website building Public Presale 10000 telegram members Launch Metamoon token (Pancakeswap) Aggressive marketing. 20000 holders Q1 2022: Stage 2 CEX listing • Build NFT characters • Game launch • More NFTs • Accept and announce all • partnerships plans Q2 2022: Stage 3 • Two other major exchange listing Creations of NFT marketplace • Game creation (warzone) Add more utility Q3 2022: Stage 4 Staking Dapps launch • Strategic partnership with metaverse Weekly AMA Another CEX listing • Many more news and updates to take project to the moon 07

## Target market and the concept

#### **Target market**

- ❖ Anyone who's interested in the Crypto space with long term investment plans.
- ❖ Anyone who's ready to earn a passive income in BNB by holding tokens.
- Anyone who's interested in owning NFTs.
- ❖ Any casual or hardcore gamers out there play games and win rewards.
- ❖ Anyone who's interested in collecting NFTs or trading NFTs.
- ❖ Anyone who's interested in trading tokens.
- ❖ Anyone who's interested in staking Metamoon and get rewards.
- ❖ Anyone who's interested in taking part with the future plans of the Metamoon token.
- Anyone who's interested in making financial transactions with any other party using Metamoon or BNB as the currency.

#### **Core concept**

#### The BNB reward system

6% of each transaction when buying and selling gets sent amongst all holders in BNB rewards. The holders will be eligible to receive BNB, every one hour, and rewards are proportional to how many tokens each individual holds.

#### Sustainable mechanism

The sustainability fee of 2% when buying and selling is allocated to the marketing and development. This is what allows Metamoon Token to promote the token and use funds to further the development of the platform. Tokens will be swapped into BNB and will be sent to a marketing wallet. This way, Metamoon Token will have access to the funds without selling tokens as the traditional way, which will enable them to consume funds without hurting the project.

The liquidity fee of 2% when buying and selling, which is a redistribution mechanism that ensures the trading pool always has sufficient liquidity

# Potential to grow with score points

| 1.                         | Project efficiency      | 9/10 |
|----------------------------|-------------------------|------|
| 2.                         | Project uniqueness      | 9/10 |
| 3                          | Information quality     | 8/10 |
| 4                          | Service quality         | 8/10 |
| 5                          | System quality          | 8/10 |
| 6                          | Impact on the community | 9/10 |
| 7                          | Impact on the business  | 9/10 |
| 8 Preparing for the future |                         | 9/10 |
| Total                      | 8.625/10                |      |

### **Contract details**

### Token contract details for 07th December 2021

| Contract name                    | Metamoon                                   |
|----------------------------------|--|
| Contract address                 | 0x6378AAD8c6693F38beECB1C0dBc0194B99cf050b |
| Token supply                     | 200,000,000                                |
| Token ticker                     | MMT  |
| Decimals                         | 18   |
| Token holders                    | 1  |
| Transaction count                | 3  |
| Marketing wallet address         | 0x95e65e95645937695028143e56491d5484d5e9e7 |
| Dividend tracker                 | 0x97dee8e8f8d084cab213cab6499bc3ff36da2512 |
| Contract deployer address        | 0x3C998FA92f7cEFE27752f78c0e49B092EaD8D81c |
| Contract's current owner address | 0xa41204bdd42eb910fb02d0725027adad589dda59 |

## **Contract code function details**

| No | Category                              | Item   | Result    |
|----|---------------------------------------|--|-----------|
|    |                                       | BRC20 Token standards                            | pass      |
|    |                                       | compile errors                                   | pass      |
|    |                                       | Compiler version security                        | pass      |
|    |                                       | visibility specifiers                            | pass      |
|    |                                       | Gas consumption                                  | low issue |
| 1  | Coding conventions                    | SafeMath features                                | pass      |
|    |                                       | Fallback usage                                   | pass      |
|    |                                       | tx.origin usage                                  | pass      |
|    |                                       | deprecated items                                 | pass      |
|    |                                       | Redundant code                                   | pass      |
|    |                                       | Overriding variables                             | pass      |
|    | Function call audit                   | Authorization of function call                   | pass      |
| 2  |                                       | Low level function (call/delegate call) security | pass      |
|    |                                       | Returned value security                          | pass      |
|    |                                       | Selfdestruct function security                   | pass      |
|    |                                       | Access control of owners                         | pass      |
| 3  | Business security                     | Business logics                                  | low issue |
|    |                                       | Business implementations                         | pass      |
| 4  | Integer overflow/underflow            |  | pass      |
| 5  | Reentrancy                            |  | pass      |
| 6  | Exceptional reachable state           |  | pass      |
| 7  | Transaction ordering dependence       |  | pass      |
| 8  | Block properties dependence           |  | pass      |
| 9  | Pseudo random number generator (PRNG) |  | pass      |
| 10 | DoS (Denial of Service)               |  | pass      |
| 11 | Token vesting implementation          |  | pass      |
| 12 | Fake deposit                          |  | pass      |
| 13 | Event security                        |  | pass      |

# **Contract description table**

Below table represents the summary of the contracts and methods in the token contract. We scanned the whole contract and listed down all the Interfaces, functions and implementations with its visibility and mutability.

| Contract       | Туре           | Bases      |            |           |
|----------------|----------------|------------|------------|-----------|
| L              | Function Name  | Visibility | Mutability | Modifiers |
|                |                |            |            |           |
| IERC20         | Interface      |            |            |           |
| L              | totalSupply    | External [ |            | NO        |
| L              | balanceOf      | External [ |            | NO        |
| L              | transfer       | External [ |            | NO        |
| L              | allowance      | External [ |            | NO[       |
| L              | approve        | External [ |            | NO[       |
| L              | transferFrom   | External [ |            | NO        |
|                |                |            | 1          |           |
| IERC20Metadata | Interface      | IERC20     |            |           |
| L              | name           | External [ |            | NO]       |
| L              | symbol         | External [ |            | NO        |
| L              | decimals       | External [ |            | NO        |
|                |                |            |            |           |
| Context        | Implementation |            |            |           |

| L  | _msgSender                 | Internal 🖺                         |            |    |
|--|----------------------------|------------------------------------|------------|----|
| L  | _msgData                   | Internal 🖺                         |            |    |
|  |                            |                                    |            |    |
| DividendPayingToken<br>Interface         | Interface                  |                                    |            |    |
| L  | dividendOf                 | External 🌡                         |            | NO |
| L  | distributeDividend<br>s    | External 🌡                         | <u>d</u> p | NO |
| L  | withdrawDividend           | External 🌡                         |            | NO |
|  |                            |                                    |            | ,  |
| DividendPayingToken<br>OptionalInterface | Interface                  |                                    |            |    |
| L  | withdrawableDivid<br>endOf | External [                         |            | NO |
| L  | withdrawnDividend<br>Of    | External [                         |            | NO |
| L  | accumulativeDivid endOf    | External 🌡                         |            | NO |
|  |                            |                                    |            |    |
| ERC20                                    | Implementation             | Context, IERC20,<br>IERC20Metadata |            |    |
| L  |                            | Public [                           |            | NO |
| L  | name                       | Public [                           |            | NO |
| L  | symbol                     | Public [                           |            | NO |
| L  | decimals                   | Public [                           |            | NO |
| L  | totalSupply                | Public [                           |            | NO |

| L               | balanceOf                | Public [   | NO[ |
|-----------------|--------------------------|------------|-----|
| L               | transfer                 | Public [   | NO[ |
| L               | allowance                | Public [   | NO[ |
| L               | approve                  | Public [   | МОЁ |
| L               | transferFrom             | Public [   | NO[ |
| L               | increaseAllowance        | Public [   | МО[ |
| L               | decreaseAllowanc<br>e    | Public [   | NO[ |
| L               | _transfer                | Internal 🖺 |     |
| L               | _mint                    | Internal 🖺 |     |
| L               | _burn                    | Internal 🖺 |     |
| L               | _approve                 | Internal 🖺 |     |
| L               | _beforeTokenTran<br>sfer | Internal 🖺 |     |
|                 |                          |            |     |
| IterableMapping | Library                  |            |     |
| L               | get                      | Public [   | NO[ |
| L               | getIndexOfKey            | Public [   | NO[ |
| L               | getKeyAtIndex            | Public [   | NO[ |
| L               | size                     | Public 🎚   | NOÏ |

| L                 | set            | Public 🎚   |   | NO[ |
|-------------------|----------------|------------|---|-----|
| L                 | remove         | Public [   |   | NO[ |
|                   |                |            |   |     |
| IUniswapV2Factory | Interface      |            |   |     |
| L                 | feeTo          | External 🎚 |   | NO[ |
| L                 | feeToSetter    | External 🎚 |   | NO[ |
| L                 | getPair        | External 🎚 |   | NO[ |
| L                 | allPairs       | External [ |   | NO[ |
| L                 | allPairsLength | External [ |   | NO[ |
| L                 | createPair     | External [ |   | NO[ |
| L                 | setFeeTo       | External [ |   | NO[ |
| L                 | setFeeToSetter | External [ |   | NO[ |
|                   |                |            | , |     |
| IUniswapV2Pair    | Interface      |            |   |     |
| L                 | name           | External [ |   | NO[ |
| L                 | symbol         | External [ |   | NO[ |
| L                 | decimals       | External [ |   | NO[ |
| L                 | totalSupply    | External [ |   | NO[ |
| L                 | balanceOf      | External [ |   | NO[ |

| L | allowance                | External [ | NO  |
|---|--------------------------|------------|-----|
| L | approve                  | External [ | NO[ |
| L | transfer                 | External [ | NO[ |
| L | transferFrom             | External [ | NO[ |
| L | DOMAIN_SEPAR<br>ATOR     | External [ | NO[ |
| L | PERMIT_TYPEHA<br>SH      | External [ | NO[ |
| L | nonces                   | External [ | NO  |
| L | permit                   | External [ | NO[ |
| L | MINIMUM_LIQUID<br>ITY    | External [ | NO[ |
| L | factory                  | External [ | NO[ |
| L | token0                   | External [ | NO  |
| L | token1                   | External [ | NO  |
| L | getReserves              | External [ | NO  |
| L | price0CumulativeL<br>ast | External [ | NO  |
| L | price1CumulativeL<br>ast | External [ | NO  |
| L | kLast                    | External [ | NO  |
| L | mint                     | External [ | NO  |
| L | burn                     | External [ | NOÏ |

| L                  | swap                             | External [ |           | NO  |
|--------------------|----------------------------------|------------|-----------|-----|
| L                  | skim                             | External [ |           | NO  |
| L                  | sync                             | External [ |           | NO  |
| L                  | initialize                       | External [ |           | NO[ |
|                    |                                  |            |           |     |
| IUniswapV2Router01 | Interface                        |            |           |     |
| L                  | factory                          | External [ |           | NO[ |
| L                  | WETH                             | External [ |           | NO  |
| L                  | addLiquidity                     | External [ |           | NO  |
| L                  | addLiquidityETH                  | External [ | ap        | NO  |
| L                  | removeLiquidity                  | External [ |           | NO  |
| L                  | removeLiquidityET<br>H           | External [ |           | NO  |
| L                  | removeLiquidityWi<br>thPermit    | External [ |           | NO  |
| L                  | removeLiquidityET<br>HWithPermit | External [ |           | NO  |
| L                  | swapExactTokens<br>ForTokens     | External [ |           | NO  |
| L                  | swapTokensForEx<br>actTokens     | External [ |           | NO  |
| L                  | swapExactETHFor<br>Tokens        | External [ | <b>dD</b> | NO  |
| L                  | swapTokensForEx<br>actETH        | External [ |           | NOÏ |

| L                  | swapExactTokens<br>ForETH   | External [         |           | NO   |
|--------------------|---|--------------------|-----------|------|
| L                  | swapETHForExact<br>Tokens   | External [         | <b>CD</b> | ио]  |
| L                  | quote   | External 🌡         |           | NO   |
| L                  | getAmountOut  | External [         |           | NO   |
| L                  | getAmountIn   | External [         |           | NO   |
| L                  | getAmountsOut   | External [         |           | NO   |
| L                  | getAmountsIn  | External [         |           | NO   |
|                    |   |                    |           |      |
| IUniswapV2Router02 | Interface   | IUniswapV2Router01 |           |      |
| L                  | removeLiquidityET<br>HSupportingFeeO<br>nTransferTokens               | External [         |           | ио]  |
| L                  | removeLiquidityET<br>HWithPermitSupp<br>ortingFeeOnTransf<br>erTokens | External 🎚         |           | ио]] |
| L                  | swapExactTokens<br>ForTokensSupport<br>ingFeeOnTransfer<br>Tokens     | External 🎚         |           | ио]] |
| L                  | swapExactETHFor<br>TokensSupporting<br>FeeOnTransferTo<br>kens        | External 🌡         | <u>an</u> | ио]  |
| L                  | swapExactTokens<br>ForETHSupporting<br>FeeOnTransferTo<br>kens        | External 🌡         |           | МОД  |
|                    |   |                    |           |      |
| Ownable            | Implementation  | Context            |           |      |

| L        |                                  | Public [       |     | NO[       |
|----------|----------------------------------|----------------|-----|-----------|
| L        | owner                            | Public [       |     | NO[       |
| L        | renounceOwnershi<br>p            | Public [       |     | onlyOwner |
| L        | transferOwnership                | Public [       |     | onlyOwner |
|          |                                  |                |     |           |
| Metamoon | Implementation                   | ERC20, Ownable |     |           |
| L        |                                  | Public [       |     | ERC20     |
| L        |                                  | External [     | GiD | №         |
| L        | updateDividendTr<br>acker        | Public [       | •   | onlyOwner |
| L        | updateUniswapV2<br>Router        | Public [       |     | onlyOwner |
| L        | excludeFromFees                  | Public [       |     | onlyOwner |
| L        | excludeMultipleAc countsFromFees | Public [       |     | onlyOwner |
| L        | setMarketingWalle<br>t           | External [     |     | onlyOwner |
| L        | setBNBRewardsF<br>ee             | External [     |     | onlyOwner |
| L        | setLiquiditFee                   | External [     |     | onlyOwner |
| L        | setMarketingFee                  | External [     |     | onlyOwner |
| L        | setAutomatedMark<br>etMakerPair  | Public [       |     | onlyOwner |
| L        | blacklistAddress                 | External [     |     | onlyOwner |

| L | _setAutomatedMa<br>rketMakerPair   | Private 🖺  |           |
|---|------------------------------------|------------|-----------|
| L | updateGasForPro<br>cessing         | Public [   | onlyOwner |
| L | updateClaimWait                    | External 🌡 | onlyOwner |
| L | getClaimWait                       | External 🌡 | NO        |
| L | getTotalDividends<br>Distributed   | External [ | NO        |
| L | isExcludedFromFe<br>es             | Public 🎚   | NO        |
| L | withdrawableDivid<br>endOf         | Public 🎚   | NO        |
| L | dividendTokenBal<br>anceOf         | Public [   | NO        |
| L | excludeFromDivid ends              | External [ | onlyOwner |
| L | setBuyFees                         | Public 🎚   | onlyOwner |
| L | setSellFees                        | Public [   | onlyOwner |
| L | setFeeOnBuy                        | Private 🖺  |           |
| L | setFeeOnSell                       | Private 🖺  |           |
| L | getAccountDividen<br>dsInfo        | External 🌡 | NO        |
| L | getAccountDividen<br>dsInfoAtIndex | External [ | NO        |
| L | processDividendTr<br>acker         | External [ | NO        |
| L | claim                              | External [ | NO        |
| L | getLastProcessedl<br>ndex          | External 🌡 | NO        |

| L                   | getNumberOfDivid<br>endTokenHolders | External [  |            | NO[       |
|---------------------|-------------------------------------|---|------------|-----------|
| L                   | setExcludedFrom<br>AntiWhale        | Public [  |            | onlyOwner |
| L                   | isExcludedFromAn tiWhale            | Public [  |            | NO        |
| L                   | _transfer                           | Internal 🖺  |            | antiWhale |
| L                   | maxTransferAmou<br>nt               | Public [  |            | NO[       |
| L                   | setMaxTransferA<br>mountRate        | Public [  |            | onlyOwner |
| L                   | swapAndSendToF<br>ee                | Private 🖺   |            |           |
| L                   | swapAndLiquify                      | Private 🖺   |            |           |
| L                   | swapTokensForEt<br>h                | Private 🖺   |            |           |
| L                   | addLiquidity                        | Private 🖺   |            |           |
| L                   | swapAndSendDivi<br>dends            | Private 🖺   |            |           |
|                     |                                     |   |            |           |
| DividendPayingToken | Implementation                      | ERC20, DividendPayingToken Interface, DividendPayingToken OptionalInterface |            |           |
| L                   |                                     | Public [  |            | ERC20     |
| L                   |                                     | External [  | <u>d</u> D | NO        |
| L                   | distributeDividend<br>s             | Public [  | ap         | NO        |
| L                   | withdrawDividend                    | Public 🎚  |            | NO[       |

| L                     | _withdrawDividend<br>OfUser                      | Internal 🖺                         |                          |
|-----------------------|--|------------------------------------|--------------------------|
| L                     | dividendOf                                       | Public [                           | NO                       |
| L                     | withdrawableDivid<br>endOf                       | Public [                           | NO]                      |
| L                     | withdrawnDividend<br>Of                          | Public [                           | NO                       |
| L                     | accumulativeDivid endOf                          | Public [                           | NO                       |
| L                     | _transfer  | Internal 🖺                         |                          |
| L                     | _mint  | Internal 🖺                         |                          |
| L                     | _burn  | Internal 🖺                         |                          |
| L                     | _setBalance                                      | Internal 🖺                         |                          |
|                       |  |                                    |                          |
|                       |  | Ownable,                           |                          |
| MMTDividendTracker    | Implementation                                   | DividendPayingToken                |                          |
| MMTDividendTracker  L | Implementation                                   | DividendPayingToken  Public        | DividendPa<br>yingToken  |
|                       | Implementation _transfer                         |                                    |                          |
| L                     |  | Public [                           |                          |
| L<br>L                | _transfer  | Public  Internal                   | yingToken                |
| L<br>L                | _transfer withdrawDividend excludeFromDivid      | Public    Internal    Public       | yingToken  NO[]          |
| L L                   | _transfer withdrawDividend excludeFromDivid ends | Public  Internal  Public  External | yingToken  NO  onlyOwner |

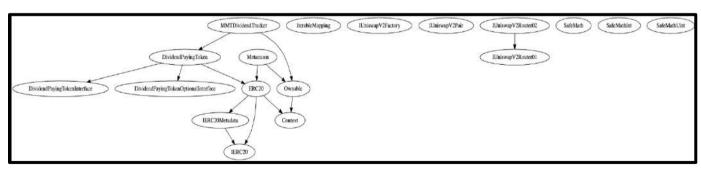
| L           | getAccount        | Public [   | NO[       |
|-------------|-------------------|------------|-----------|
| L           | getAccountAtIndex | Public [   | NO[       |
| L           | canAutoClaim      | Private 🖺  |           |
| L           | setBalance        | External [ | onlyOwner |
| L           | process           | Public [   | NO[       |
| L           | processAccount    | Public [   | onlyOwner |
|             |                   |            |           |
| SafeMath    | Library           |            |           |
| L           | add               | Internal 🖺 |           |
| L           | sub               | Internal 🖺 |           |
| L           | sub               | Internal 🖺 |           |
| L           | mul               | Internal 🖺 |           |
| L           | div               | Internal 🖺 |           |
| L           | div               | Internal 🖺 |           |
| L           | mod               | Internal 🖺 |           |
| L           | mod               | Internal 🖺 |           |
|             |                   |            |           |
| SafeMathInt | Library           |            |           |
| L           | mul               | Internal 🖺 |           |

| L            | div           | Internal 🖺 |  |
|--------------|---------------|------------|--|
| L            | sub           | Internal 🖺 |  |
| L            | add           | Internal 🖺 |  |
| L            | abs           | Internal 🖺 |  |
| L            | toUint256Safe | Internal 🖺 |  |
|              |               |            |  |
| SafeMathUint | Library       |            |  |
| L            | toInt256Safe  | Internal 🖺 |  |

#### Legend

| Symbol | Meaning                   |
|--------|---------------------------|
|        | Function can modify state |
| ØĐ.    | Function is payable       |

### **Inheritance Hierarchy**



## Security issue checking status

### High severity issues No high severity issues found.

### Medium severity issues No medium severity issues found.

#### Low severity issues

• In the excludeMultipleAccountsFromFees function, if they use a long wallet list there can be an OUT\_OF\_GAS issue, better to use a small array list at once.

```
ftrace|funcSig
function excludeMultipleAccountsFromFees(
    address[] memory accounts1,
    bool excluded1
) public onlyOwner {
    for (uint256 i = 0; i < accounts1.length; i++) {
        LisExcludedFromFees[accounts1][i]] = excluded1;
    }
    emit ExcludeMultipleAccountsFromFees(accounts1, excluded1);
}</pre>
```

Wrong Logic when applying the selling fee.

The contract is checking whether the transaction is a "buy," if it's not a buy, it's considered as a sell. Hence, the selling fee is applied when transferring from wallet to wallet.

```
if (takeFee) {
    if (!automatedMarketMakerPairs[from1]) {
        setFeeOnSell();
    } else {
        setFeeOnBuy();
}
```

## Owner privileges

The owner can update the dividend tracker.

```
function updateDividendTracker(address newAddress1) public onlyOwner {
        newAddress != address(dividendTracker),
       "MMT: The dividend tracker already has that address"
   );
   MMTDividendTracker newDividendTracker = MMTDividendTracker(
       payable(newAddress*)
   );
    require(
       newDividendTracker.owner() == address(this),
       "MMT: The new dividend tracker must be owned by the MMT token contract"
   );
   newDividendTracker.excludeFromDividends(address(newDividendTracker));
   newDividendTracker.excludeFromDividends(address(this));
   newDividendTracker.excludeFromDividends(owner());
   newDividendTracker.excludeFromDividends(address(uniswapV2Router));
   emit UpdateDividendTracker(newAddress1, address(dividendTracker));
   dividendTracker = newDividendTracker;
```

The owner can update the router address.

The owner can exclude wallets from fees.

The owner can change the marketing wallet address.

The owner can change all fees.

```
ftrace|funcSig
function setBNBRewardsFee(uint256 value1) external onlyOwner {
    require(value1 <= 10, "max 10%");
    BNBRewardsFee = value1;
    totalFees = BNBRewardsFee.add(liquidityFee).add(marketingFee);
}

ftrace|funcSig
function setLiquiditFee(uint256 value1) external onlyOwner {
    require(value1 <= 5, "max 5%");
    liquidityFee = value1;
    totalFees = BNBRewardsFee.add(liquidityFee).add(marketingFee);
}

ftrace|funcSig
function setMarketingFee(uint256 value1) external onlyOwner {
    require(value1 <= 5, "max 5%");
    marketingFee = value1;
    totalFees = BNBRewardsFee.add(liquidityFee).add(marketingFee);
}</pre>
```

The owner can blacklist wallets.

❖ The owner can update gas fees and claim time in reward.

The owner can exclude wallets from dividends.

```
ftrace|funcSig
function excludeFromDividends(address account1) external onlyOwner {
    dividendTracker.excludeFromDividends(account1);
}
```

The owner can change all buy and sell fees.

```
ftrace | funcSig
function setBuyFees(
    uint256 reflectFee1,
    uint256 marketFee*,
    uint256 liquidFee*
) public onlyOwner {
    require(reflectFee* <= 10, "max 10% reflect");
    require(marketFee  <= 5, "max 5% market");
    require(liquidFee * <= 5, "max 5% liquid");
    _buyFees._reflectFee = reflectFee :
    _buyFees._marketFee = marketFee ;
    buyFees. liquidFee = liquidFee*;
ftrace | funcSig
function setSellFees(
    uint256 reflectFee1,
    uint256 marketFee*,
    uint256 liquidFee*
) public onlyOwner {
    require(reflectFee* <= 10, "max 10% reflect");
    require(marketFee* <= 5, "max 5% market");
    require(liquidFee * <= 5, "max 5% liquid");
    _sellFees._reflectFee = reflectFee1;
    _sellFees._marketFee = marketFee*;
    _sellFees._liquidFee = liquidFee*;
```

The owner can change the max transaction amount.

```
ftrace|funcSig
function setMaxTransferAmountRate(uint256 _val 1) public onlyOwner {
    require(_val 1 <= 50000, "max 5%");
    maxTransferAmountRate = _val 1;
}</pre>
```

## **Audit conclusion**

While conducting the audit of the Metamoon Token smart contract, it was observed that there is nothing alarming with the code, and it only contains low severity issues.