



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 SafePlus 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 28th October 2021

Contract name	SafePlus
Contract address	0x97d86850237Ef472d290FF449532802f1D047AB3
Total supply	1,000,000,000,000,000
Token ticker	SPLUS
Decimals	18
Token holders	1
Transactions count	1
Top 5 holders dominance	Not Launched
Tax fee	15%
Total fees	15% ~ BUY / SELL
Contract deployer address	0x62FdDde30b2A533121b0A99D388e9cfF4C84EfC2
Contract's current owner address	0x62FdDde30b2A533121b0A99D388e9cfF4C84EfC2



Project Overview

Project Details: (From Project Website)

SafePlus is a token created to reward holders more, those who keep the token over time, earning not only from its appreciation but also from the passive income it generates.

The economy of this special token (so-called Tokenomics) was built to discourage crypto-traders (thus avoiding price drops and manipulations for the benefit of a few experts) and instead reward those who want to have an automatic medium / long-term income, beyond the same appreciation of the token value!

Tokenomics:

Starting Supply: 1,000,000,000,000,000 (1 Quadrillion)

15% Tax for Buys and Sells comprising of:

5% Safemoon Rewards

4% BUSD Rewards

2% Auto Liquidity

4% Marketing (Comprising of 2% Buy Back, 1% Marketing and 1% Greenmoon rewards through DAPP)

Team Doxxed:

The Safeplus team has not yet been doxxed but has made it clear they plan to in the short term.



CONTRACT FUNCTIONS DETAILS

Functions (Public)

This contract has 43 available public functions which the owner can call.

These functions were reviewed and can be viewed on BSC Scan or through a DAPP.

LINK

<https://bscscan.com/token/0x97d86850237ef472d290ff449532802f1d047ab3#writeContract>

Function risks: No Scam Functions Identified!

- Tax fees can be increased to high levels making it harder to sell, which is quite normal with Rewards contracts.
- Watchtower believes the SafePlus owners are operating with honesty as there are no alternate methods of scamming such as a mint function.



Contract Stress Test

Imported Libraries / Interfaces

- Context
- Ownable
- IERC20
- IERC20 Metadata
- IterableMapping
- IDividendPayingTokenOptional
- IDividendPayingToken (<https://github.com/roger-wu>) + edits
- SafeMathInt
- SafeMathUint
- SafeMath
- ERC20
- IUniswapV2Router01
- IUniswapV2Router02
- IUniswapV2Factory
- IUniswapV2Pair

Overview

1. ADDITION OF COMMENTS:	7
2. CALL STACK DEPTH ATTACK:	10
3. TIME STAMP DEPENDENCY:	10
4. PARTY MULTISIG BUG:	10
5. USE OF LIBRARIES/DEPENDENCIES (FROM TRUSTED SOURCES):	10
a. TRANSACTION-ORDERING DEPENDENCY:	10
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

- NO HIGH SEVERITY ISSUES



Medium Severity Issues

- **High Gas Limit:** `gasForProcessing = 600000`. If BNB price increase gas fees can be higher than rewards. It can be adjusted by authorized users.
- **Possible Out of Gas:** The contract should distribute 2 different tokens as rewards. One of these is Safemoon, a reflection token, and this will probably cause gas problems during distribution. Holders will need to increase their Gas fees in order to ensure transfers process in peak times.



Low Severity Issues

- **Sell Limits can be Bypassed:** The limits applied for the sells could be bypassed if someone transfer tokens to a new wallet each time.



CONCLUSION

Watchtower reviewed SafePlus' deployed and verified contract to conduct this audit. Watchtower is satisfied that the team is operating with integrity however as noted above a couple of functions which come standard with rewards contracts can cause higher fees and gas fee issues.

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.
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