



Cyberscope

# Audit Report

## **BeePro**

December 2022

Type           BEP20

Network       BSC

Address       0x3498EA63bBa189228F8aF0bDA775ac1Cc339E119

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## Contract Review

<b>Contract Name</b>	AntiBotLiquidityGeneratorToken
<b>Compiler Version</b>	v0.8.4+commit.c7e474f2
<b>Optimization</b>	200 runs
<b>Licence</b>	MIT
<b>Explorer</b>	<a href="https://bscscan.com/token/0x3498EA63bBa189228F8aF0bDA775ac1Cc339E119">https://bscscan.com/token/0x3498EA63bBa189228F8aF0bDA775ac1Cc339E119</a>
<b>Symbol</b>	BEPRO
<b>Decimals</b>	9
<b>Total Supply</b>	1,000,000,000
<b>Domain</b>	beepro.dev

## Source Files

<b>Filename</b>	<b>SHA256</b>
<b>contract.sol</b>	085d72cf8534260b8f6411f47055b7a60f5a3ac2da59c339d681dafa329d19e0

## Audit Updates

<b>Initial Audit</b>	14th December 2022
<b>Corrected</b>	

# Contract Analysis

● Critical ● Medium ● Minor / Informative ● Pass

Severity	Code	Description	Status
●	ST	Stops Transactions	Passed
●	OCTD	Transfers Contract's Tokens	Passed
●	OTUT	Transfers User's Tokens	Passed
●	ELFM	Exceeds Fees Limit	Passed
●	ULTW	Transfers Liquidity to Team Wallet	Passed
●	MT	Mints Tokens	Passed
●	BT	Burns Tokens	Passed
●	BC	Blacklists Addresses	Passed

# Contract Diagnostics

● Critical   ● Medium   ● Minor / Informative

Severity	Code	Description	Status
●	PVC	Price Volatility Concern	Unresolved
●	RSML	Redundant SafeMath Library	Unresolved
●	L04	Conformance to Solidity Naming Conventions	Unresolved
●	L07	Missing Events Arithmetic	Unresolved
●	L09	Dead Code Elimination	Unresolved

## PVC - Price Volatility Concern

<b>Criticality</b>	minor / informative
<b>Location</b>	contract.sol#L1292
<b>Status</b>	Unresolved

### Description

The numTokensSellToAddToLiquidity could produce a dramatically price volatility. If the variable set to a high number, then the contract will sell a huge amount of tokens in a single transaction.

```
function setSwapBackSettings(uint256 _amount) external onlyOwner {  
    require(_amount >= totalSupply().mul(5).div(10**4), "Swapback amount should  
be at least 0.05% of total supply");  
    numTokensSellToAddToLiquidity = _amount;  
    emit SwapAndLiquifyAmountUpdated(_amount);  
}
```

### Recommendation

The contract could ensure that it will not sell more than a reasonable amount of tokens once. A suggested implementation could check that the maximum amount should be less than a fixed percentage of the total supply.

## RSML - Redundant SafeMath Library

<b>Criticality</b>	minor / informative
<b>Location</b>	contract.sol#L201
<b>Status</b>	Unresolved

### Description

The Solidity versions that are greater than or equal to 0.8.0 do not need the use of SafeMath Library. The usage of the SafeMath library produces unnecessary additional gas.

```
library SafeMath {  
    ...  
}
```

### Recommendation

The team is advised to remove the SafeMath library as it is safe to do math operations without it.

## L04 - Conformance to Solidity Naming Conventions

<b>Criticality</b>	minor / informative
<b>Location</b>	contract.sol#L1435,1068,961,969,1431,1292,641,958,964,1443
<b>Status</b>	Unresolved

### Description

Solidity defines a naming convention that should be followed. Rule exceptions:

- Allow constant variable name/symbol/decimals to be lowercase.
- Allow `_` at the beginning of the `mixed_case` match for private variables and unused parameters.

```
_amount  
_enable  
_liquidityFee  
_charityAddress  
WETH  
_taxFee  
_charityFee  
...
```

### Recommendation

Follow the Solidity naming convention.

<https://docs.soliditylang.org/en/v0.8.17/style-guide.html#naming-conventions>.



## L07 - Missing Events Arithmetic

<b>Criticality</b>	minor / informative
<b>Location</b>	contract.sol#L1284,1273,1265
<b>Status</b>	Unresolved

### Description

Detected missing events for critical arithmetic parameters. There are functions that have no event emitted, so it is difficult to track off-chain changes.

```
_charityFee = charityFeeBps  
_liquidityFee = liquidityFeeBps  
_taxFee = taxFeeBps
```

### Recommendation

Emit an event for critical parameter changes.

## L09 - Dead Code Elimination

<b>Criticality</b>	minor / informative
<b>Location</b>	contract.sol#L610,469,523,593,583,537,556,441,504,566,494
<b>Status</b>	Unresolved

### Description

Functions that are not used in the contract, and make the code's size bigger.

```
verifyCallResult  
sendValue  
functionCallWithValue  
functionDelegateCall  
functionStaticCall  
isContract  
functionCall  
...
```

### Recommendation

Remove unused functions.

# Contract Functions

Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
<b>IERC20</b>	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
<b>Context</b>	Implementation			
	_msgSender	Internal		
	_msgData	Internal		
<b>Ownable</b>	Implementation	Context		
	<Constructor>	Public	✓	-
	owner	Public		-
	renounceOwnership	Public	✓	onlyOwner
	transferOwnership	Public	✓	onlyOwner
	_setOwner	Private	✓	
<b>SafeMath</b>	Library			
	tryAdd	Internal		
	trySub	Internal		
	tryMul	Internal		
	tryDiv	Internal		
	tryMod	Internal		
	add	Internal		
	sub	Internal		
	mul	Internal		
	div	Internal		

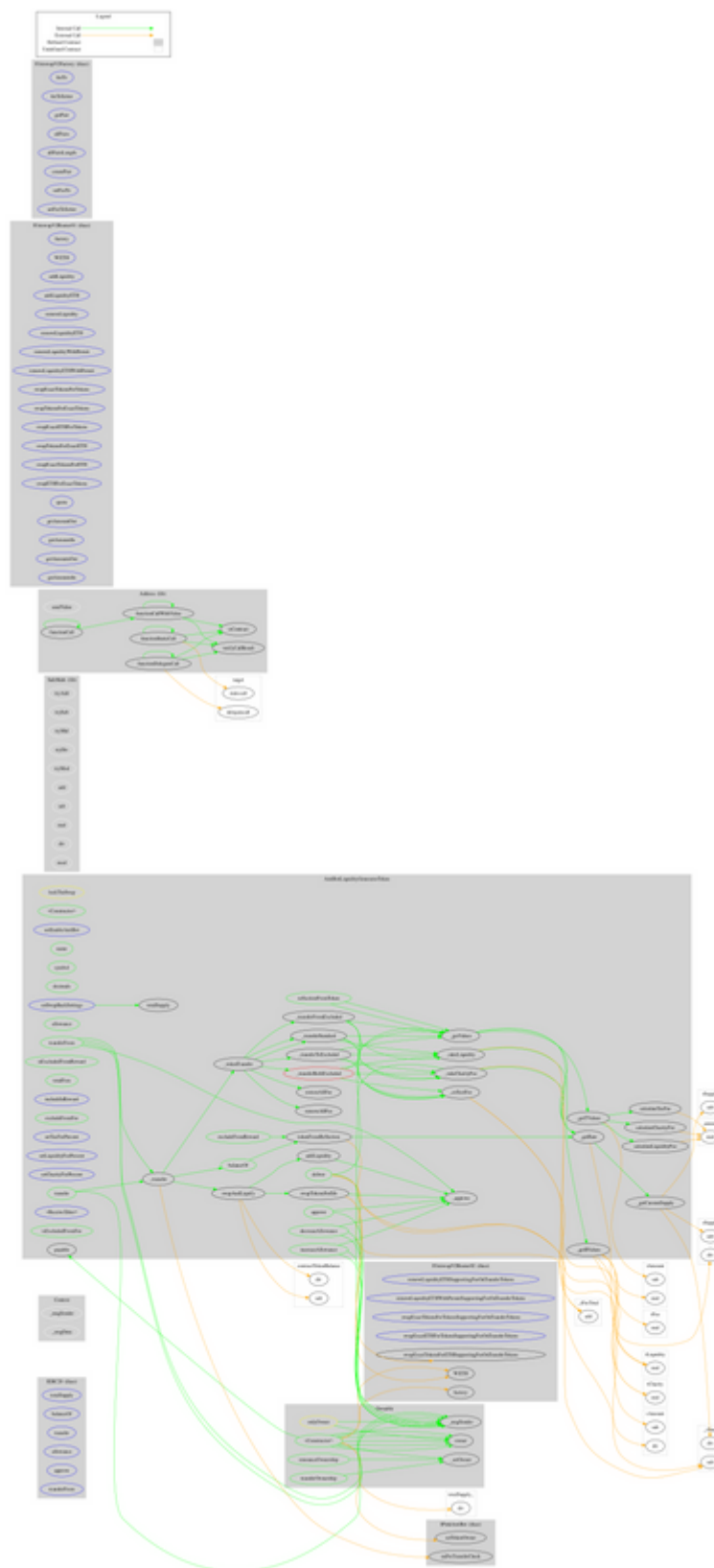
	mod	Internal		
	sub	Internal		
	div	Internal		
	mod	Internal		
<b>Address</b>	Library			
	isContract	Internal		
	sendValue	Internal	✓	
	functionCall	Internal	✓	
	functionCall	Internal	✓	
	functionCallWithValue	Internal	✓	
	functionCallWithValue	Internal	✓	
	functionStaticCall	Internal		
	functionStaticCall	Internal		
	functionDelegateCall	Internal	✓	
	functionDelegateCall	Internal	✓	
	verifyCallResult	Internal		
<b>IUniswapV2Router01</b>	Interface			
	factory	External		-
	WETH	External		-
	addLiquidity	External	✓	-
	addLiquidityETH	External	Payable	-
	removeLiquidity	External	✓	-
	removeLiquidityETH	External	✓	-
	removeLiquidityWithPermit	External	✓	-
	removeLiquidityETHWithPermit	External	✓	-
	swapExactTokensForTokens	External	✓	-
	swapTokensForExactTokens	External	✓	-
	swapExactETHForTokens	External	Payable	-
	swapTokensForExactETH	External	✓	-
	swapExactTokensForETH	External	✓	-
	swapETHForExactTokens	External	Payable	-
	quote	External		-
	getAmountOut	External		-

	getAmountIn	External		-
	getAmountsOut	External		-
	getAmountsIn	External		-
<b>IUniswapV2Router02</b>	Interface	IUniswapV2Router01		
	removeLiquidityETHSupportingFeeOnTransferTokens	External	✓	-
	removeLiquidityETHWithPermitSupportingFeeOnTransferTokens	External	✓	-
	swapExactTokensForTokensSupportingFeeOnTransferTokens	External	✓	-
	swapExactETHForTokensSupportingFeeOnTransferTokens	External	Payable	-
	swapExactTokensForETHSupportingFeeOnTransferTokens	External	✓	-
<b>IUniswapV2Factory</b>	Interface			
	feeTo	External		-
	feeToSetter	External		-
	getPair	External		-
	allPairs	External		-
	allPairsLength	External		-
	createPair	External	✓	-
	setFeeTo	External	✓	-
	setFeeToSetter	External	✓	-
<b>IPinkAntiBot</b>	Interface			
	setTokenOwner	External	✓	-
	onPreTransferCheck	External	✓	-
<b>BaseToken</b>	Implementation			
<b>AntiBotLiquidityGeneratorToken</b>	Implementation	IERC20, Ownable, BaseToken		
	<Constructor>	Public	Payable	-

	setEnableAntiBot	External	✓	onlyOwner
	name	Public		-
	symbol	Public		-
	decimals	Public		-
	totalSupply	Public		-
	balanceOf	Public		-
	transfer	Public	✓	-
	allowance	Public		-
	approve	Public	✓	-
	transferFrom	Public	✓	-
	increaseAllowance	Public	✓	-
	decreaseAllowance	Public	✓	-
	isExcludedFromReward	Public		-
	totalFees	Public		-
	deliver	Public	✓	-
	reflectionFromToken	Public		-
	tokenFromReflection	Public		-
	excludeFromReward	Public	✓	onlyOwner
	includeInReward	External	✓	onlyOwner
	_transferBothExcluded	Private	✓	
	excludeFromFee	Public	✓	onlyOwner
	setTaxFeePercent	External	✓	onlyOwner
	setLiquidityFeePercent	External	✓	onlyOwner
	setCharityFeePercent	External	✓	onlyOwner
	setSwapBackSettings	External	✓	onlyOwner
	<Receive Ether>	External	Payable	-
	_reflectFee	Private	✓	
	_getValues	Private		
	_getTValues	Private		
	_getRValues	Private		
	_getRate	Private		
	_getCurrentSupply	Private		
	_takeLiquidity	Private	✓	
	_takeCharityFee	Private	✓	
	calculateTaxFee	Private		

	calculateLiquidityFee	Private		
	calculateCharityFee	Private		
	removeAllFee	Private	✓	
	restoreAllFee	Private	✓	
	isExcludedFromFee	Public		-
	_approve	Private	✓	
	_transfer	Private	✓	
	swapAndLiquify	Private	✓	lockTheSwap
	swapTokensForEth	Private	✓	
	addLiquidity	Private	✓	
	_tokenTransfer	Private	✓	
	_transferStandard	Private	✓	
	_transferToExcluded	Private	✓	
	_transferFromExcluded	Private	✓	

# Contract Flow





## Domain Info

<b>Domain Name</b>	beepro.dev
<b>Registry Domain ID</b>	4A412E430-DEV
<b>Creation Date</b>	2022-10-19T20:37:14Z
<b>Updated Date</b>	2022-10-24T20:37:14Z
<b>Registry Expiry Date</b>	2023-10-19T20:37:14Z
<b>Registrar WHOIS Server</b>	whois.namecheap.com
<b>Registrar URL</b>	<a href="https://www.namecheap.com/">https://www.namecheap.com/</a>
<b>Registrar</b>	Namecheap Inc.
<b>Registrar IANA ID</b>	1068

The domain was created about 2 months before the creation of the audit. It will expire in 10 months.

There is no public billing information, the creator is protected by the privacy settings.

## Summary

BeePro is an interesting project that has a friendly and growing community. The Smart Contract analysis reported no compiler error or critical issues. The contract Owner can access some admin functions that can not be used in a malicious way to disturb the users' transactions. There is also a limit of max 25% fees.

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## About Cyberscope

Cyberscope is a blockchain cybersecurity company that was founded with the vision to make web3.0 a safer place for investors and developers. Since its launch, it has worked with thousands of projects and is estimated to have secured tens of millions of investors' funds.

Cyberscope is one of the leading smart contract audit firms in the crypto space and has built a high-profile network of clients and partners.



The Cyberscope team

<https://www.cyberscope.io>