



# Audit Report

## **PEPPA PIG MAFIA**

December 2021

Type	BEP20
Address	0x4ad1525c316a3b815053d90df256b9bdc56b288f
Audited by	© coinscope

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## Contract Review

<b>Contract Name</b>	PeppaPigMafia
<b>Compiler Version</b>	v0.8.11+commit.d7f03943
<b>Optimization</b>	200 runs
<b>Licence</b>	MIT
<b>Explorer</b>	<a href="https://bscscan.com/token/0x4AD1525C316A3b815053d90DF256B9BdC56b288f">https://bscscan.com/token/0x4AD1525C316A3b815053d90DF256B9BdC56b288f</a>
<b>Symbol</b>	PEPPA
<b>Decimals</b>	18
<b>Total Supply</b>	100,000,000
<b>Source</b>	contract.sol
<b>Domain</b>	peppapigmafia.com

## Audit Updates

<b>Initial Audit</b>	13th January 2022
<b>Corrected</b>	

# Contract Analysis

● Critical   
 ● Medium   
 ● Minor   
 ● Pass

Severity	Code	Description
<span style="color: blue;">●</span>	ST	Contract Owner is not able to stop or pause transactions
<span style="color: blue;">●</span>	OCTD	Contract Owner is not able to transfer tokens from specific address
<span style="color: blue;">●</span>	OTUT	Owner Transfer User's Tokens
<span style="color: blue;">●</span>	ELFM	Contract Owner is not able to increase fees more than a reasonable percent (25%)
<span style="color: blue;">●</span>	ULTW	Contract Owner is not able to increase the amount of liquidity taken by dev wallet more than a reasonable percent
<span style="color: blue;">●</span>	MT	Contract Owner is not able to mint new tokens
<span style="color: blue;">●</span>	BT	Contract Owner is not able to burn tokens from specific wallet
<span style="color: blue;">●</span>	BC	Contract Owner is not able to blacklist wallets from selling

# Contract Diagnostics

● Critical    ● Medium    ● Minor

Severity	Code	Description
●	L01	Public Function could be Declared External
●	L02	State Variables could be Declared Constant
●	L05	Unused State Variable
●	L03	Redundant Statements
●	L04	Conformance to Solidity Naming Conventions
●	L09	Dead Code Elimination
●	L07	Missing Events Arithmetic
●	L08	Tautology or Contradiction

## L01 - Public Function could be Declared External

**Criticality**

minor

**Location**

contract.sol#L474,L465,L186 and 8 more

### Description

Public functions that are never called by the contract should be declared external to save gas.

```
transferOwnership  
renounceOwnership  
decreaseAllowance  
...
```

### Recommendation

Use the external attribute for functions never called from the contract

## L02 - State Variables could be Declared Constant

**Criticality**

minor

**Location**

contract.sol#L1151,L1134,L1136

### Description

Constant state variables should be declared constant to save gas.

```
manualBurnFrequency  
liquidityActiveBlock  
earlyBuyPenaltyEnd
```

### Recommendation

Add the constant attribute to state variables that never change.



## L05 - Unused State Variable

<b>Criticality</b>	minor
<b>Location</b>	contract.sol#L485

### Description

There are segments that contains unused state variable.

SafeMathInt

### Recommendation

Remove unused state variables.

## L03 - Redundant Statements

**Criticality**

minor

**Location**

contract.sol#L11

### Description

Detect the usage of redundant statements that have no effect.

Context

### Recommendation

Remove redundant statements if they congest code but offer no value.

## L04 - Conformance to Solidity Naming Conventions

**Criticality**

minor

**Location**

contract.sol#L1181,L1154,L1739 and 18 more

### 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.

```
_isExcludedMaxTransactionAmount  
feeDivisor  
_Enabled  
...
```

### Recommendation

Follow the Solidity naming convention.

<https://docs.soliditylang.org/en/v0.4.25/style-guide.html#naming-conventions>

## L09 - Dead Code Elimination

**Criticality**

minor

**Location**

contract.sol#L490,L502,L531 and 4 more

### Description

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

```
mul  
div  
abs  
...
```

### Recommendation

Remove unused functions.

## L07 - Missing Events Arithmetic

**Criticality**

minor

**Location**

contract.sol#L1739,L1348,L1339 and 2 more

### 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.

```
lpBurnFrequency = _frequencyInSeconds  
marketingSellFee = _marketingFee  
marketingBuyFee = _marketingFee  
...
```

### Recommendation

Emit an event for critical parameter changes.

## L08 - Tautology or Contradiction

<b>Criticality</b>	minor
<b>Location</b>	contract.sol#L1739

### Description

Detects expressions that are tautologies or contradictions. For instance, an uint variable will always be greater than or equal to zero.

```
require(bool,string)(_percent <= 1000 && _percent >= 0, Must set auto LP burn percent between 0% and 10%)
```

### Recommendation

Fix the incorrect comparison by changing the value type or the comparison.

# Contract Functions

Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
Context	Implementation			
	_msgSender	Internal		
	_msgData	Internal		
IUniswapV2Pair	Interface			
	sync	External	✓	-
IUniswapV2Factory	Interface			
	createPair	External	✓	-
IERC20	Interface			
	totalSupply	External		-
	balanceOf	External		-
	transfer	External	✓	-
	allowance	External		-
	approve	External	✓	-
	transferFrom	External	✓	-
IERC20Metadata	Interface	IERC20		
	name	External		-
	symbol	External		-
	decimals	External		-
ERC20	Implementation	Context, IERC20, IERC20Metadata		
	<Constructor>	Public	✓	-

	name	Public		-
	symbol	Public		-
	decimals	Public		-
	totalSupply	Public		-
	balanceOf	Public		-
	transfer	Public	✓	-
	allowance	Public		-
	approve	Public	✓	-
	transferFrom	Public	✓	-
	increaseAllowance	Public	✓	-
	decreaseAllowance	Public	✓	-
	_transfer	Internal	✓	
	_createInitialSupply	Internal	✓	
	_approve	Internal	✓	
<b>DividendPayingTokenOptionallInterface</b>	Interface			
	withdrawableDividendOf	External		-
	withdrawnDividendOf	External		-
	accumulativeDividendOf	External		-
<b>DividendPayingTokenInterface</b>	Interface			
	dividendOf	External		-
	distributeDividends	External	Payable	-
	withdrawDividend	External	✓	-
<b>SafeMath</b>	Library			
	add	Internal		
	sub	Internal		
	sub	Internal		
	mul	Internal		
	div	Internal		
	div	Internal		
	mod	Internal		



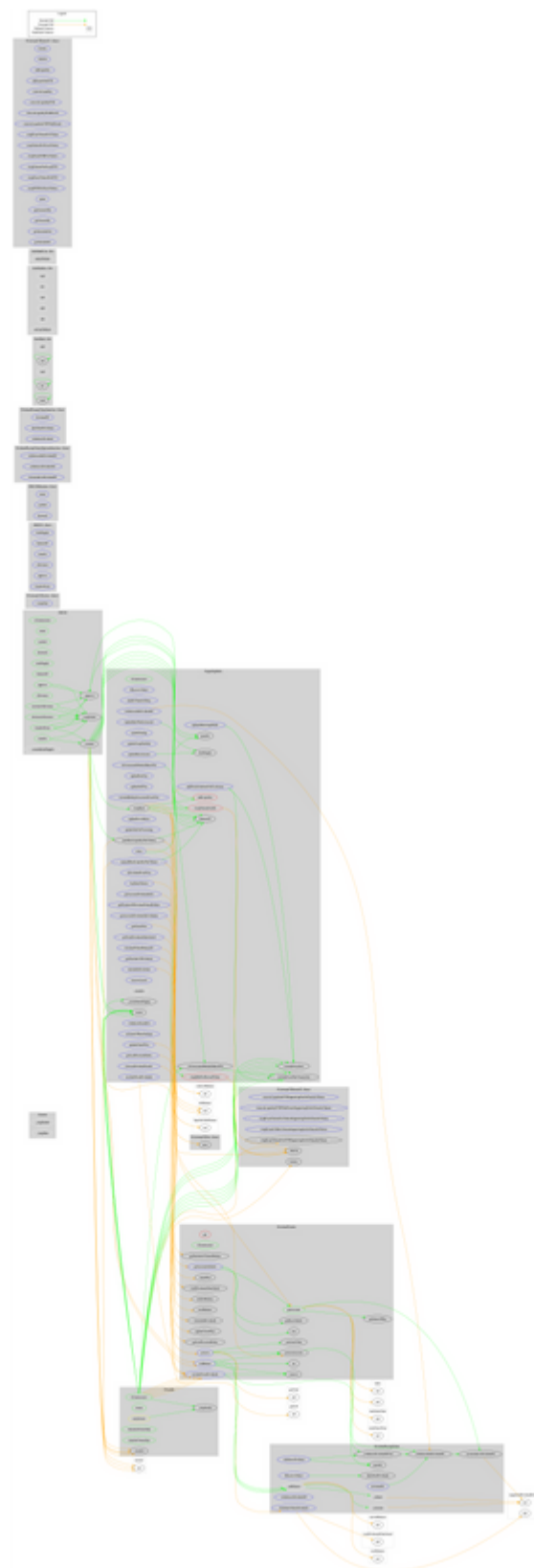
	mod	Internal		
<b>Ownable</b>	Implementation	Context		
	<Constructor>	Public	✓	-
	owner	Public		-
	renounceOwnership	Public	✓	onlyOwner
	transferOwnership	Public	✓	onlyOwner
<b>SafeMathInt</b>	Library			
	mul	Internal		
	div	Internal		
	sub	Internal		
	add	Internal		
	abs	Internal		
	toUint256Safe	Internal		
<b>SafeMathUint</b>	Library			
	toInt256Safe	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>DividendPayingToken</b>	Implementation	DividendPayingTokenInterface, DividendPayingTokenOptionalInterface, Ownable		
	<Receive Ether>	External	Payable	-
	distributeDividends	Public	Payable	-
	distributeTokenDividends	External	✓	onlyOwner
	withdrawDividend	External	✓	-
	_withdrawDividendOfUser	Internal	✓	
	dividendOf	External		-
	withdrawableDividendOf	Public		-
	withdrawnDividendOf	External		-
	accumulativeDividendOf	Public		-
	_increase	Internal	✓	
	_reduce	Internal	✓	
	_setBalance	Internal	✓	
<b>DividendTracker</b>	Implementation	DividendPayingToken		

	get	Private		
	getIndexOfKey	Private		
	getKeyAtIndex	Private		
	size	Private		
	set	Private	✓	
	remove	Private	✓	
	<Constructor>	Public	✓	-
	excludeFromDividends	External	✓	onlyOwner
	includeInDividends	External	✓	onlyOwner
	updateClaimWait	External	✓	onlyOwner
	getLastProcessedIndex	External		-
	getNumberOfTokenHolders	External		-
	getAccount	Public		-
	getAccountAtIndex	External		-
	canAutoClaim	Private		
	setBalance	External	✓	onlyOwner
	process	External	✓	-
	processAccount	Public	✓	onlyOwner
<b>PeppaPigMafia</b>	Implementation	ERC20, Ownable		
	<Constructor>	Public	✓	ERC20
	<Receive Ether>	External	Payable	-
	addPresaleAddressForExclusions	External	✓	onlyOwner
	disableTransferDelay	External	✓	onlyOwner
	excludeFromDividends	External	✓	onlyOwner
	includeInDividends	External	✓	onlyOwner
	enableTrading	External	✓	onlyOwner
	updateSwapEnabled	External	✓	onlyOwner
	updateMaxAmount	External	✓	onlyOwner
	updateMaxWalletAmount	External	✓	onlyOwner
	updateBuyFees	External	✓	onlyOwner
	updateSellFees	External	✓	onlyOwner
	excludeFromMaxTransaction	Public	✓	onlyOwner
	excludeFromFees	Public	✓	onlyOwner
	excludeMultipleAccountsFromFees	External	✓	onlyOwner

	setAutomatedMarketMakerPair	External	✓	onlyOwner
	_setAutomatedMarketMakerPair	Private	✓	
	updateMarketingWallet	External	✓	onlyOwner
	updateDevAddress	External	✓	onlyOwner
	updateGasForProcessing	External	✓	onlyOwner
	updateClaimWait	External	✓	onlyOwner
	getClaimWait	External		-
	getTotalDividendsDistributed	External		-
	isExcludedFromFees	External		-
	withdrawableDividendOf	External		-
	dividendTokenBalanceOf	External		-
	getAccountDividendsInfo	External		-
	getAccountDividendsInfoAtIndex	External		-
	processDividendTracker	External	✓	-
	claim	External	✓	-
	getLastProcessedIndex	External		-
	getNumberOfDividendTokenHolders	External		-
	getNumberOfDividends	External		-
	removeLimits	External	✓	onlyOwner
	_transfer	Internal	✓	
	swapBnbForRewardToken	Private	✓	
	swapTokensForEth	Private	✓	
	addLiquidity	Private	✓	
	swapBack	Private	✓	
	buyBackTokens	External	✓	onlyOwner
	withdrawStuckEth	External	✓	onlyOwner
	setAutoLPBurnSettings	External	✓	onlyOwner
	autoBurnLiquidityPairTokens	Internal	✓	
	manualBurnLiquidityPairTokens	External	✓	onlyOwner

# Contract Flow



# Domain

<b>Domain Name</b>	peppapigmafia.com
<b>Registry Domain ID</b>	2664684570_DOMAIN_COM-VRSN
<b>Creation Date</b>	2021-12-29T10:24:37.00Z
<b>Updated Date</b>	0001-01-01T00:00:00.00Z
<b>Registry Expiry Date</b>	
<b>Registrar WHOIS Server</b>	whois.namecheap.com
<b>Registrar URL</b>	http://www.namecheap.com
<b>Registrar</b>	NAMECHEAP INC
<b>Registrar IANA ID</b>	1068

The domain has been created 15 days before the creation of the audit.

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

## Summary

The contract analysis did not report any compiler error or critical issue. The smart contract contains features like distribution and auto-burn. Users that behave like bots, will have a hard penalty in the trades opening. There are some informative comments that do not affect the contract security.

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Coinscope is aiming to make crypto discoverable and efficient globally. It provides all the essential tools to assist users draw their own conclusions.



The Coinscope.co team

<https://www.coinscope.co>