Incorrect check for addres(0) will not work as intended in TokenPool::applyChainUpdates()

Summary

Incorrect check for addres(0) will not work as intended.

Vulnerability Details

In TokenPool::applyChainUpdates() the zero address check is done in incorrect way. The length of bytes form of address(0) is not 0, that's why the check will not work, here is how the check is done:

```
if (update.remotePoolAddress.length == 0 ||
update.remoteTokenAddress.length == 0) {
          revert ZeroAddressNotAllowed();
        }
```

It is easy to prove that the length of bytes form of address(0) is not 0.

```
➜ address zero = address(0);
➜ bytes memory zeroAddr = abi.encode(zero);
➜ zeroAddr.length
Type: uint256
├ Hex: 0x20
├ Hex (full word): 0x20
└ Decimal: 32
```

So we can see the length of the bytes form of address(0) is 32.

Impact

The zero address check is this case will not work.

Tools Used

Manual review.

Recommendations

abi.decode the update.remotePoolAddress & update.remoteTokenAddress and then check whether the address is 0 or not.

Related Links

https://github.com/Cyfrin/2024-07-CL-CCIP/blob/73291c868c7136a2b4f84c0f6e2801cf76af6a9f/ccip/pools/TokenPool.sol#L253-L254

https://github.com/Cyfrin/2024-07-CL-CCIP/blob/73291c868c7136a2b4f84c0f6e2801cf76af6a9f/ccip/pools/TokenPool.sol#L58-L59