```cpp
// =================== PrimaryGeneratorAction.hh Header File =================
//
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// Modified by Darren Holland 2020-11-02
// =========================================================================
//
// This file initiates the particle source generation
// =========================================================================
//
#ifndef B4PrimaryGeneratorAction_h
#define B4PrimaryGeneratorAction_h 1
#include "G4VUserPrimaryGeneratorAction.hh"
#include "G4ParticleGun.hh"
#include "globals.hh"
#include "G4GeneralParticleSource.hh"  // Create General Particle
// =========================================================================
//
class G4ParticleGun;
class G4Event;
class B4PrimaryGeneratorAction : public G4VUserPrimaryGeneratorAction
{
public:
  B4PrimaryGeneratorAction();
  virtual ~B4PrimaryGeneratorAction();
  virtual void GeneratePrimaries(G4Event* event);
  // Set methods
  void SetRandomFlag(G4bool value);
  // Method to access particle gun:
  const G4GeneralParticleSource* GetParticleGun() const { return fParticleGun; }
private:
  G4GeneralParticleSource*  fParticleGun; // G4 particle gun
};
#endif
```