**Week 4 final assignment**

**##Plot 1.** Have total emissions from PM2.5 decreased in the United States from 1999 to 2008?

NEI <- readRDS("summarySCC\_PM25.rds")

SCC <- readRDS("Source\_Classification\_Code.rds")

##Calculate yearly totals for US

nei\_usy<-summarize(group\_by(NEI,year),sum(Emissions))

names(nei\_usy)<-c("year","tot\_em")

##Plot and embellish a little, for my taste…

with(nei\_usy,plot(year,tot\_em,typ="l",lwd=3,ylim= range(nei\_usy$tot\_em), xaxt="n",yaxt="n",bty="n",ylab="MT PM2.5",main="US total emissions from PM2.5 (tons)"))

axis(2, at= c(min(nei\_usy$tot\_em),max( nei\_usy$tot\_em)),labels=formatC**(**c(min(nei\_usy$tot\_em),max( nei\_usy$tot\_em)),format="f",digits=0,big.mark=","**),**lwd=2)

axis(1, at= year(as.Date(as.character(nei\_usy$year),"%Y")),labels= year(as.Date(as.character(nei\_usy$year),"%Y")),lwd=2)

abline(h=nei\_usy$tot\_em,lwd=1,lty="dashed")

abline(v=nei\_usy$year,lwd=1,lty="dashed")

##Copy to png format

dev.copy(png, file = "plot1.png", bg = "white",height=480,width=480)

dev.off()