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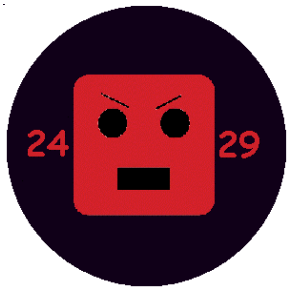
La Canada High School Engineering Club

FIRST ROBOTICS – TEAM 2429

Battery Recycling Program

LUNACY

La Canada Engineering Club



Team 2429

Action Initiative Plan

Cluster Work Group:	La Canada Engineering Club
Prepared by:	Holden Kilbride
Date:	January 27, 2009

Title or Name of the Initiative: *Develop a name for the effort that communicates action and positive outcomes. This initiative will be known as:*

La Canada Engineering Club Battery Recycling Drive

Initiative Champion/Implementation Team Members: *Name and contact information for each person working on this initiative.*

Holden Kilbride	(818) 952-3746 holdenkilbride@gmail.com

Description & Motivation: *What is the nature of the cluster challenge the initiative will address?*

Used batteries are a constant problem with their improper disposal. As they sit in landfills, their toxic chemicals seep out and pollute soil and water. Since almost all of the components in batteries can be recycled, they can be disposed of in an environmentally friendly way.

Objective: *What is the objective of the initiative? How will it impact economic or cluster development in the region? Describe how it relates to the Prosperity Partnership's goal of job creation?*

This project will create community awareness to the issue of improper battery disposal, and the correct way to recycle them. As part of showing correct disposal, the La Canada Engineering Club will place battery recycling receptacles at local businesses.

Obstacles and Impediments Likely to Affect Implementation: *What do you expect to be the most significant obstacles to implementation? How can/will they be overcome? What resources will be required (e.g., political support, lobbying efforts)*

The biggest obstacle will be contacting local businesses to get permission to place our collection bins on their premises. I will personally contact the managers and propose my mission.
The resources needed are as followed

- Plastic bins with lids
- Red and black, high gloss spray paint.
- Basic printing supplied
- Foam-reinforced poster board

Funding*:* *What is the estimated cost of this initiative, in phases beginning with design, the "ramping up" phase, and then for ongoing annual costs? Note alternative sources of funding for each phase.*

This will be funded by either:
-Personal donation (contributions by club members)
-Sponsorship money

Outcome/Results: *How will know that we have achieved our objective? How will we evaluate whether or not we have been successful?*

This project will be successful if we raise enough awareness about this issue. We will know depending on how full our collection bins are. Our goal is to reach 25 pounds of used batteries, and even after this goal, we will continue this project.

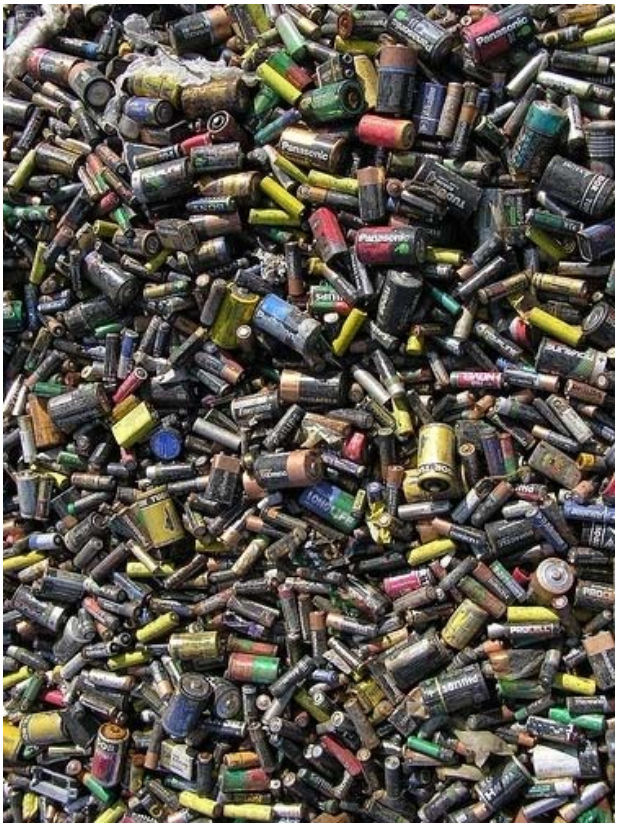
Action Steps: *Describe the initiative in specific steps: Tasks (What, Who, When).*
1. Get permission from local businesses
2. Buy materials and construct bins
3. Place bins at local business
4. Publish article in local newspaper(s) and raise general awareness to our project.

Timeline: *Provide a rough schedule of activity for each step above and the lead person for each task. (*Example: Establish implementation team/Jones, Hold first planning meeting/Johnson, Prepare concept/funding proposal/Smith, dates).

Step	*Key Person*	*Timeline*
1. Create prototype bin	Holden Kilbride	1-2 days
2. Contact local businesses and get permission from them	Holden Kilbride	1 day
3. If prototype is a viable option, create 3-4 more	Holden Kilbride	2-3 days
4. Place bins	Holden Kilbride	1 day
5. Write and publish article in local newspaper	Holden Kilbride and Matt Whitam	1-2 days

Team 2429 Promotes the Disposal of Household Batteries

Our quest for portability and mobility is steadily growing, so is the demand for batteries. The average person owns about two button batteries, ten normal (A, AA, AAA, C, D, 9V, etc.) batteries, and throws out about eight household batteries per year. About three billion batteries are sold annually in the U.S. averaging about 32 per family or ten per person. Where will the mountains of batteries go when spent?



The problem with this is that batteries contain heavy metals and other pollutants that are toxic to the environment. These metals include mercury, nickel cadmium, alkaline, lead acid, and nickel metal hydride. Dry cell batteries contribute about 88 percent of the total mercury and 50 percent of the cadmium in the municipal solid waste stream. In the past, batteries accounted for nearly half of the mercury used in the United States and over half of the mercury and cadmium in the municipal solid waste stream. When left to decay in a landfill, these contents can leach out and pollute groundwater. When incinerated, they release harmful gases into the air. The acids and metals inside a battery are poisonous to people and animals: they can cause irritation and even acid burns upon exposure.

High school students of Team 2429, the La Canada Engineering Club, have decided to do our part to keep batteries out of our landfills. We will collect your batteries and take them to the proper waste disposal site for you!