

**PREPRODUCTION INITIATIVE-NELP  
CAN CRUSHER/BALER  
TEST PLAN**

**SITE: NAS NORTH ISLAND**

**1.0 OBJECTIVE**

This test plan describes the process data collection procedure for the can crusher/baler. The data will be used to determine the efficiency, effectiveness, overall success of the unit to bale empty, steel, 1-to 5-gallon cans, and the unit's ability to interface successfully with the site can recycling program.

**2.0 DESCRIPTION**

Currently, 1- to 5-gallon cans on-site are not being crushed. To set up the can crushing and recycling program, a memorandum was issued stating that the Recycling Center will accept only cans that meet the California State definition of an empty container. Cans that formerly held paint, lube oil, grease, hydraulic fluid, antifreeze, or unused thinner or solvent (*i.e.*, virgin product) will be accepted by the Recycling Center. Galley cans will be accepted as well.

One- to five-gallon containers are considered empty if:

- No material can be poured or drained from the container when the container is held in any orientation (*e.g.*, tilted, inverted).
- The container held a non-pourable material (*e.g.*, grasses, sludge, dried paint, etc.) that was scraped out. No material shall remain in the container.

The Recycling Center will not accept containers that held acute hazardous waste or extremely hazardous waste. These types of waste include, but are not limited to, spent solvent, spent paint thinner, and leaded paint.

The resulting 24" x 24" x 36" bale (approximately 500 lbs) produced by the can crusher/baler will take up less space and will be easier to transport. The bales will be sold to a civilian steel recycling company. Bales shall meet size and tightness requirements.

**3.0 TEST PLAN**

This test plan will be used to evaluate the effectiveness of the can crushing/baling method in reducing volume, facilitating the handling of the 1- to 5-gallon cans, and recouping costs or producing funds through the sale of the crushed cans to a local recycler.

### 3.1 Approach

Quantitative and qualitative data will be acquired by completion of Table 1.

#### 3.1.1 Instructions for Completing Table 1

- **Date:** Indicate dates the can/crusher baler was used (month and day).
- **Item Use**
  - **Frequency:** Indicate the frequency of usage on a given date (*e.g.*, 1, 2, 3 times).
  - **Quantity:** Indicate total quantity or volume of 1- to 5-gallon cans deposited in the unit for baling on given date.
- **Time/Task:** Record time per unit task (*i.e.*, length of time required to collect enough cans for baling; the time to bale them; and the time to unload the bale for transport to the recycler).
- **Downtime/Month**
  - **Time Period:** Record periods when the unit was not in use.
  - **Reason:** Explain whether downtime was due to repairs, maintenance, workload, or other factors.
- **Repair Time:** Indicate time required to repair system.
- **Repair Parts Required:** List repair parts required and the cost.
- **Recycling**
  - **No. Bales Sold/Month:** Record number of bales sold per month to the recycler.
  - **Funds Received:** Indicate amount of funds received for each bale sold to the recycler.
- **Qualitative Assessment:** Provide a narrative evaluation of the abilities of the can crusher/baler. Briefly discuss:
  - Efficiency of this method (*e.g.*, time and cost savings)
  - Ease of use and the unit's ability to successfully interface with site recycling operations
  - Efficiency and cost-effectiveness of the can crushing/baling method.

#### **4.0 REPORTING**

The data entry forms are a concise method of data collection. Forms should be completed on a daily basis. Data will be collected for 1 year. During this time, periodic status reports on the testing will be submitted to NAWCADLKE. The final report will include detailed results and observations, assess the efficiency and cost-effectiveness of the unit, and evaluate its ability to interface with site operations.



