

**DRAFT ENGINEERING EVALUATION**  
**L-3 Communications SSG- Tinsley, Plant: 7234**  
**4050 Lakeside Drive, Richmond CA 94511**  
**Application: 18704**

**Background**

Tinsley Laboratories is applying for an Authority to Construct and Permit to Operate for an outdoor barrel compactor used for compacting equipment wipes and disposable clothing used in production areas. The compacted waste may contain trace amounts of beryllium. The compactor is scheduled to begin operation in March 2009.

Equipment to be permitted:

**S29– Compactor; SRS CMP 40 Heavy Duty Compactor; abated by A8- HEPA filter**

The compactor operates on 10 minute cycles, with intervals of 10 minutes between each cycle. Approximately 4 cycles take place per hour. The compactor will operate 8 hours/day, 5 days/week, and 52 weeks/year.

**Emissions Calculations**

No emissions of toxic particulates are expected after abatement by the HEPA filter, as confirmed by a District engineer who has conducted source tests of similar equipment at other facilities and has reviewed the specifications and operating procedure for this compactor.

As described in the compactor operating procedure, waste bags are double bagged (using a clean exterior bag) prior to leaving the building and loading into the compactor, to ensure zero emissions prior to compaction. Between each compaction cycle, all particulate matter produced during compaction is effectively captured within the compactor chamber by means of negative pressurization of the chamber and HEPA filtration of the exhaust stream. Additionally, after each compaction the blower assembly continues to operate for several minutes to allow the chamber to be flushed and all exhausted air cleaned through the HEPA blower assembly before exhausting to the environment.

**Criteria Pollutant Emissions Summary**

The daily maximum emissions are summarized in the table below.

Operation Daily Maximum Emissions (lb/day)						
Pollutant	NOx	NPOC	POC	CO	SO <sub>2</sub>	PM <sub>10</sub>
S29	0	0	0	0	0	0

**BACT Review and Determination**

In accordance with Regulation 2, Rule 2, Section 301, BACT is triggered for any

new or modified source with the potential to emit 10 pounds or more per highest day of POC, NPOC, NO<sub>x</sub>, CO, SO<sub>2</sub> or PM<sub>10</sub>.

BACT is not required for POC, NPOC, NO<sub>x</sub>, CO, SO<sub>2</sub> or PM<sub>10</sub> because no emissions are expected from the operation of S29.

### Plant Cumulative Increase and Offsets

The cumulative increase is shown below. Pursuant to Regulation 2-2-302, offsets are required for any increase in emissions at a facility that emits over 10 tons per year of POC or NO<sub>x</sub>, or is located at a Major Facility and is over 1.0 ton per year since April 5, 1991 for PM<sub>10</sub> or SO<sub>2</sub>. This facility does not emit over 10 tons per year of POC or NO<sub>x</sub>, so offsets are not required.

Plant Cumulative Emissions (ton/yr)						
Pollutant	NO <sub>x</sub>	NPOC	POC	CO	SO <sub>2</sub>	PM <sub>10</sub>
Previous Emissions	0	0.656	8.611	0	0	0
S29	0	0	0	0	0	0
Cumulative Total	0	0.656	8.611	0	0	0

### Statement of Compliance

#### Toxics NSR/TBACT

This source is subject to the Toxic Risk Provisions of Regulation 2-5. A Health Risk Screening Analysis is not required because no toxic emissions are expected from the operation of S29.

#### District Rules

S29 Compactor is subject to Regulation 8-2, Miscellaneous Operations. S29 complies with Regulation 8-2 because POC emissions do not exceed 15 pounds per day.

S29 Compactor is subject to Regulation 6-1, Particulate Matter- General Requirements. S29 complies with Regulation 6-1 because no particulate emissions are expected from operation of S29.

S29 Compactor is subject to Regulation 11-3, Beryllium. S29 complies with Regulation 11-3 because no beryllium emissions are expected from operation of S29.

#### Federal Rules

PSD, NESHAPS, and NSPS are not triggered for this source.

## CEQA

This application is considered to be ministerial under the District's Regulation 2-1-311 and therefore is not subject to CEQA review. The engineering review for this project requires only the application of standard permit conditions and standard emission factors in accordance with Permit Handbook Chapter 4.

## Public Notices

This facility is located 1000 feet of the nearest school. Any facility with new sources resulting in an increase in toxic emissions is subject to public school notification (pursuant to Regulation 2-1-412, Public Notice, Schools) if it is located 1000 feet of the nearest school. Although no toxic emissions are expected from S29, public school notification will still be conducted as a precautionary measure. The notice was distributed on (DATE). It expired on (DATE). (COMMENTS HERE) The District response is that the project meets all requirements and therefore the project is approvable.

## Recommendation

Issue Authority to Construct and Permit to Operate to L-3 Communications SSG-Tinsley, for:

**S29– Compactor; SRS CMP 40 Heavy Duty Compactor; abated by A8- HEPA filter**

## Permit Conditions

Application 18704: L-3 Communications SSG- Tinsley: Plant 7234: Conditions for S29

1. Prior to leaving Building 4050 and loading into S29 Compactor, all waste bags shall be double bagged using a clean exterior bag. (Basis: Cumulative Increase)
2. A8 HEPA filter shall be kept in good operating conditions to abate the particulate emissions from the S29 Compactor. (Basis: Cumulative Increase)
3. S29 shall not be used if it is not abated by A8 HEPA filter. (Basis: Cumulative Increase)
4. S29 shall not be used to crush any containers that contain liquid wastes. (Basis: Cumulative Increase)
5. Within 60 days of startup, the owner/operator of S29 shall provide the District a HEPA filter integrity test report to demonstrate the collection efficiency of A8 HEPA filter. (Basis: Cumulative Increase)

By: \_\_\_\_\_

Jimmy Cheng  
Air Quality Engineer

Date: \_\_\_\_\_  
3/16/09