RCRA LAND DISPOSAL RESTRICTION COMPLIANCE INSPECTION
INTEL CORPORATION, JONES FARM CAMPUS
HILLSBORO, OREGON

1.0 INTRODUCTION

On 9 June 1988, Tetra Tech, Inc., under the U.S. Environmental Protection Agency (EPA) Region X Technical Enforcement Support contract, conducted a Resource Conservation and Recovery Act (RCRA) land disposal restriction (LDR) compliance inspection at Intel Corporation, Jones Farm Campus, located at 2111 N.E. 25th Avenue, Hillsboro, Oregon. The purpose of the inspection was to determine the status of compliance with LDR regulations set forth in 40 CFR 268, pertaining to treatment, storage, and disposal of listed F-solvent wastes (40 CFR 261.31) and California list wastes (Federal Register Vol. 52, No. 130, p. 25761).

This report includes a discussion of the facility's waste management practices, a review and discussion of facility documents pertinent to land disposal restrictions, observations made during the inspection, and a list of potential violations on the part of the facility. Photographs taken during the inspection (Attachment A), and documents requested by Tetra Tech inspectors (Attachments B and C) are included as attachments to this report.

2.0 BACKGROUND

Intel Corporation is a manufacturer of semiconductor logic and memory chips used in computer systems. The Jones Farm Campus of Intel Corporation is primarily a research and testing facility. No semiconductor production or circuit board assembly is conducted at this location.

Records filed with Oregon Department of Environmental Quality (DEQ), Northwest Region Headquarters in Portland, were reviewed prior to the facility inspection. The Notification of Hazardous Waste Activity (U.S. EPA

Form 8700-12) was not available for review, although the facility has received a U.S. EPA identification number.

Based on a review of waste generation records, Jones Farm Campus of Intel Corporation generates approximately 69 kg/mo of hazardous waste (including contaminated freon, soldering flux, and cleaning solvents containing a mixture of F-solvents) (Table 1). The Jones Farm Campus is qualified as a conditionally exempt small quantity generator.

3.0 RECORD REVIEW

The inspection team arrived at the Jones Farm Campus of Intel Corporation at approximately 1200 hours. After obtaining security clearance badges at the front desk, the inspection team met with Ms. Gariepy, Facilities Engineer, and Mr. Wagner of Intel Corporation in the cafeteria to review waste handling records. The inspection of the Jones Farm Campus directly followed the inspection of Intel Corporation's Hawthorne Farms Campus, and the presentation of credentials and explanation of the purpose of the inspection were waived by Ms. Gariepy.

All waste manifests from January 1987 to the present were reviewed. Wastes generated from cleaning operations include freon, soldering flux (isopropyl alcohol and amine salts with unspecified mixed solvents), and used lubricating oil.

The hazardous waste manifests indicate wastes are sent to Romic Corporation (East Palo Alto, CA) for treatment. Wastes generated at Jones Farm Campus are apparently treated and not land disposed. Notification of applicable treatment standards began in May 1988.

According to Ms. Gariepy, quantities of acid generated at the facility are typically less than a liter, and not enough to require a discharge permit. A small onsite wastewater treatment system is used to neutralize the small amounts of acid that are discharged (under an NPDS permit) to the public sewer system. (Ms. Gariepy explained that permission for these

TABLE 1. INTEL CORPORATION-JONES FARMS CAMPUS
CALCULATIONS OF TOTAL QUANTITIES OF HAZARDOUS WASTE
GENERATED SINCE NOVEMBER 1986

Manifest Date	Freon (gal)	Solvents (gal)	Weight[a] lb (kg)
01/30/87	25	30	557 (253)
06/03/87	25	25	517 (234)
08/25/87	--	10	80 (36)
10/21/87	20	--	254 (115)
04/19/88	35	--	444 (201)
TOTAL			1,852 (839)

[a] Freon is 12.68 lb/gal; solvents are approximately 8 lb/gal.

discharges has been granted to the Intel Corporation by the United Sewerage Agency.)

4.0 SITE INSPECTION

The visual inspection of the Jones Farm Campus began at approximately 1220 hours in the hazardous waste storage area. Waste freon, oil, and mixed solvents are stored here in separate drums. Fresh chemicals are stored in this area also. Mixed waste solvents are logged on the drum and pre-approved by an Intel facility engineer for compatibility. Mixed solvents include methylene chloride, ethylamine, acetone, 2-aminoethanol, and N-methyl-2-pyrolidone. Waste solvents are accumulated in 5-gal fire cans under exhaust hoods prior to transfer to drums in the hazardous waste storage area. Wastes are shipped offsite every 70 days regardless of quantities generated.

5.0 POTENTIAL VIOLATIONS

The inspection team noted that Intel Corporation, Jones Farm Campus qualifies as a conditionally exempt small quantity generator, but manages its waste as if it were a large quantity generator. The waste is shipped to a transport, storage, and disposal facility to be treated and is not land disposed.

No potential violations were discovered as a result of the 9 June 1988 LDR compliance inspection.