

NOTICE OF INTENT TO APPROVE A CLOSURE PLAN
FOR A HAZARDOUS WASTE MANAGEMENT UNIT

The Tennessee Department of Environment and Conservation's (TDEC) Division of Solid Waste Management (DSWM) proposes to approve the closure plan at Security Signals, Inc. at 9610 Highway 64, Oakland, Fayette County, TN 38060, TNR 00 002 0883.

Security Signals (SSI) manufactures pyrotechnic flares for the Department of Defense and in the process generates energetic contaminated wastes and other wastes that are contaminated with flare composition and/or black powder.

During an inspection, DSWM and the Environmental Protection Agency (EPA) discovered four areas at the facility where wastes were treated in the past by burning and one area where wash water contaminated with flare composition and black powder was discharged onto the ground. Two of these areas had previously been investigated and soil removals performed. SSI performed a site-wide investigation to identify additional potential areas of contamination at the facility which included all areas mentioned above. The results of the investigation concluded that perchlorate contamination in soil was above relevant action levels at Building 10 and the groundwater at the Gravel Road Site contained perchlorate above the EPA Interim Drinking Water Health Advisory of 15 parts per billion (ppb). There were no other areas at the facility that had contamination above relevant action levels. A soil removal was proposed at Building 10 and continued groundwater monitoring was proposed at the Gravel Road Site.

A Removal Action Report was submitted to DSWM on October 28, 2009. SSI removed 319 tons of soil at Building 10. Because of utilities, the adjacent building foundation and the operations in Building 10 the excavation activities were not able to remove all the identified perchlorate contaminated soil safely. To address residual contamination, one foot of mulch was added to the excavation to promote degradation of any perchlorate contamination remaining then backfilled with clean soil. Groundwater sampling at two monitoring wells at the Gravel Road Site continued until there were four quarters of analytical results below the advisory of 15 ppb. A Health Consultation performed by the Tennessee Department of Health concluded that there is no threat to human health remaining at the site. The EPA performed a RCRA Facility Assessment (RFA) at SSI on February 22, 2010. The Final RFA Report dated September 22, 2010 identified thirty Solid Waste Management Units (SWMUs) and six Areas of Concern (AOCs), however none of the identified SWMUs and AOCs required any further action. Based on the above information DSWM has determined that SSI has completed closure and does not intend to require additional investigation or removal.

Copies of plans, reports, and a Fact Sheet are available for public inspection at the Fayette County Public Library, 216 West Market Street, Somerville, TN 38068-1592, (901-465-5248) or at the Memphis Environmental Field Office (MEFO), 8383 Wolf Lake Drive, Bartlett, TN 38133, (901-371-3000). Normal office hours at the MEFO are 8:00 a.m. to 4:30 p.m. on weekdays, excluding legal holidays.

Any interested persons may submit comments or request a public hearing by contacting Mr. Roger Donovan, Division of Solid Waste Management, Corrective Action Section; 5th Floor, L & C Tower; 401 Church Street; Nashville, TN 37243-1535; (615-532-0864); e-mail Roger.Donovan@tn.gov. A request for a hearing requires a significant degree of public interest, shall be in writing, including the contact information of the requestor, and shall state the nature of the issues to be raised at the hearing. All comments received by the comment deadline of 4:30 p.m. July 29, 2011, will be assured of consideration by DSWM in making its final decision.

Persons who wish to be on DSWM's mailing list should request a Mailing List Request Form by calling or writing: Public Participation Officer; Division of Solid Waste Management; TDEC; 5th Floor, L& C Tower; 401 Church Street; Nashville, TN 37243-1535; (615-532-0798) or e-mail Solid.Waste@tn.gov.

TDEC is committed to principles of equal opportunity, equal access, and affirmative action. Contact the EEO/AA Coordinator or the ADA Coordinator at 1-888-867-2757 for further information. Hearing impaired callers may use the Tennessee Relay Service (1-800-848-0298).

Notice Issued: June 29, 2011

FACT SHEET

INTENT TO APPROVE A CLOSURE PLAN FOR A HAZARDOUS WASTE MANAGEMENT UNIT

FACILITY NAME: Security Signals, Inc.

LOCATION: Oakland, Fayette County, Tennessee

FACILITY ADDRESS: Security Signals, Inc.
9610 Highway 64
Oakland, TN 37060

OWNER/OPERATOR: Security Signals, Inc

FACILITY CONTACT: Ms. Susan Lee
Security Signals, Inc.
9610 Highway 64
Oakland, TN 37060

EPA ID No.: TNR000020883

UNITS: Former Concrete Pad Burn Area,
Former Gravel Road Burn Area,
Former Building 1 Burn Area,
Former Building 12 Burn Area,
Former Building 10 Disposal Area

COMMENT PERIOD: Begins: June 29, 2011
Ends: July 29 2011

FACILITY BACKGROUND

Security Signals, Inc. (SSI) is a manufacturing facility located at 9610 Highway 64, Oakland, in Fayette County, Tennessee. The facility manufactures pyrotechnic flares (including handheld flares and pin flares) for the Department of Defense and in the process generates hazardous off spec energetic, parts cleaning and paint/solvent-contaminated wastes (D001/D002/D003/D005/D007/F002/F003/F005). The business began operation in August of 1997.

On May 5, 2008 the Tennessee Department of Environment and Conservation's (TDEC) Division of Solid Waste Management (DSWM) and the United States Environmental Protection Agency (EPA) conducted a Joint Compliance Evaluation Inspection (CEI) at

SSI. During the CEI records review DSWM noted that SSI had not notified the Waste Activity Audit Section (WAAS) of waste activities at the site until July 2005, but had operated at the site since 1997. DSWM inquired about waste generation and management at the facility between 1997 and 2005. Facility personnel stated that prior to July 2005 waste was burned on site. DSWM requested that SSI submit to the Division a description of waste management activities at the facility between 1997 and 2005. On June 4, 2008, DSWM received from SSI documentation that adequately addressed other issues that were noted during the CEI; however the description of waste activities at the site prior to July 2005 was not included. On July 1, 2008, DSWM sent SSI a formal Information Request Letter requesting information about waste activities at the site prior to July 2005. The facility submitted a response to the Information Request letter on September 22, 2008 which stated that the facility generated energetic contaminated debris (HVAC air filters, towels, rags, PPE, floor sweepings, and other waste debris that had been contaminated with flare composition and/or black powder). The waste was burned on a monthly basis in empty drums at an area designated as the Concrete Pad. During this same period the facility also generated waste energetic material (material generated from spills of flare composition and/or black powder, floor sweepings and off spec energetic product) which was burned monthly at either the Concrete Pad or an area known as the Gravel Road. The Response also stated that between 1997 and 2005 SSI generated off spec delays. These delays were burned from off spec metal parts either inside Building 1 or outside Building 12 so that the scrap metal could be recycled. Also during this same time period SSI generated waste rags with acetone, ethanol or isopropyl alcohol that were allowed to dry out and evaporate and then burned in drums at the Concrete Pad on a monthly basis. These waste streams were hazardous for reactivity characteristic (D003) and/or ignitability characteristic (D001), chromium (D007) and/or lead (D008).

Based on information contained in SSI's response to the July 1, 2008, Information Request and findings made by the DSWM staff during the CEI, twelve violations were identified as a result of the inspections. These violations were formally documented in a Notice of Violation (NOV), dated October 7, 2008. The NOV directed SSI to submit written documentation to the DSWM by November 6, 2008, that demonstrated the violations were corrected. DSWM received SSI's written response to the October 7, 2008, NOV on November 6, 2008. DSWM conducted a follow-up inspection by reviewing the information contained in the response documentation. Based on a review of these records, DSWM determined that the violations noted in the October 7, 2008, NOV had been adequately addressed. A Consent Order (the Order) was issued by the Department on January 2, 2009. According to the Order, SSI is voluntarily working with DSWM's State Remediation Section (SRS) to further investigate these areas.

SITE INVESTIGATIONS AND INTERIM MEASURES

In 2005 SSI hired environmental contractors to remediate and sample soils at the Concrete Pad and Gravel Road burn sites. Waste derived from this remediation was shipped off-site beginning on August 1, 2005. An investigation was performed at Building 10 in June 2008. Perchlorate was detected in two of nine surface samples above

the 102.2 milligrams per kilogram (mg/kg) Industrial Preliminary Remediation Goal at 1,550 and 3230 mg/kg. Three of nine subsurface soil samples (4-foot interval) contained perchlorate above the 102.2 mg/kg Industrial PRG at 2,260, 4,670, and 5,680 mg/kg. On October 7, 2008 SSI submitted to DSWM a work plan to sample soil and groundwater at fourteen waste handling areas identified at the facility to include the Concrete Pad, the Gravel Road and additional soil sampling at Building 10. The results of the investigation concluded that perchlorate contamination in soil was above relevant action levels only at Building 10 to a depth of approximately 6 feet and the groundwater at the Gravel Road Site contained perchlorate above the 15 part per billion (ppb) EPA Interim Drinking Water Health Advisory in two monitoring wells at 31.99 and 45.41 ppb. There were no other areas at the facility that had contamination above relevant action levels. A soil removal was proposed at Building 10 and continued groundwater monitoring was proposed at the Gravel Road Site.

A Removal Action Report was submitted to DSWM on October 28, 2009. SSI removed 319 tons of soil at Building 10. Because of utilities, the adjacent building foundation and the mixing operations in Building 10 the excavation activities were not able to remove all the identified perchlorate contaminated soil safely. To address residual contamination, 1 foot of mulch was added to the excavation then backfilled with clean soil. The mulch will act as a long term carbon source to promote degradation of any perchlorate contamination remaining in the excavation. Groundwater sampling conducted at two monitoring wells at the Gravel Road Site continued until there were four quarters of analytical results below the EPA Interim Drinking Water Health Advisory of 15 ppb. The EPA performed a RCRA Facility Assessment (RFA) at SSI on February 22, 2010. The Final RFA Report dated September 22, 2010 identified thirty Solid Waste Management Units (SWMUs) and six Areas of Concern (AOCs), however none of the identified SWMUs and AOCs required any further action. Additionally a Health Consultation was performed by the Tennessee Department of Health that concluded that there is no threat to human health remaining at the site.

PROPOSED ACTION

Based on the site investigation report, soil removal at Building 10, four quarters of groundwater sampling with no exceedances of perchlorate at the Gravel Road Site, the RFA Report and the Health Consultation; DSWM has determine that SSI has completed closure and does not intend to require additional investigation or removal.

INFORMATION/COMMENTS

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All comments received by the comment deadline of 4:30 p.m. July 29, 2011, will be assured of consideration by DSWM in making its final decision.

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