Public Input

in support of an

Environmental Impact Statement

for

Nuclear Fuel Services, Inc. 40-year License Renewal Request – A MAJOR FEDERAL ACTION

March 15, 2010

(Studsvik Binder)

AGREEMENT BETWEEN ATOMIC ENERGY COMMISSION AND STATE OF TENNESSEE DISCONTINUANCE OF CERTAIN COMMISSION REGULATORY AUTHORITY AND RESPONSIBILITY WITHIN THE STATE

Notice is hereby given that Commissioner James T. Ramey, on behalf of the Atomic Energy Commission, and the Honorable Frank G. Clement, Governor of the State of Tennessee have signed the Agreement below for discontinuance of certain Commission regulatory authority. The Agreement is published in accordance with the requirements of Public Law 86-373 (section 274 of the Atomic Energy Act of 1954, as amended). The exemptions from the licensing requirements of Chapters 6, 7, and 8 of the Atomic Energy Act are contained in Part 150 of the Commission's regulations (10 CFR Part 150), which was published in the February 14, 1962, issue of the FEDERAL REGISTER (27 F.R. 1351).

Dated at Germantown, Md., this 18th day of August 1965.

For the Atomic Energy Commission.

F. T. HOBBS,

Acting Secretary.

WHEREAS, the U.S. Atomic Energy Commission (hereinafter referred to as the Commission) is authorized under section 274 of the Atomic Energy Act of 1954, as amended (hereinafter referred to as the Act), to enter into agreements with the Governor of any State providing for discontinuance of the regulatory authority of the Commission within the State under Chapters 6, 7, and 8, and section 161 of the Act with respect to byproduct materials, source materials, and special nuclear materials in quantities not sufficient to form a critical mass; and

WHEREAS, the Governor of the State of Tennessee is authorized under section 53-3103 of the Tennessee Code Annotated to enter into this Agreement with the Commission; and

WHEREAS, the Governor of the State of Tennessee certified on May 1, 1965, that the State of Tennessee (hereinafter referred to as the State) has a program for the control of radiation hazards adequate to protect the public health and safety with respect to the materials within the State covered by this Agreement, and that the State desires to assume regulatory responsibility for such materials; and

WHEREAS, The Commission found on July 23, 1965, that the program of the State for the regulation of the materials covered by this Agreement is compatible with the Commission's program for the regulation of such materials and is adequate to protect the public health and safety; and

WHEREAS, the State and the Commission recognize the desirability and importance of cooperation between the Commission and the State in the formulation of standards for protection against hazards of radiation and in assuring that State and Commission programs for protection against hazards of radiation will be coordinated and compatible; and

WHEREAS, the Commission and the State recognize the desirability of reciprocal recognition of licenses and exemption from licensing of those materials subject to this Agreement; and

WHEREAS, this Agreement is entered into pursuant to the provisions of the Atomic Energy Act of 1954, as amended;

NOW, THEREFORE, it is hereby agreed between the Commission and the Governor of the State, acting in behalf of the State, as follows:

ARTICLE I

Subject to the exceptions provided In Articles II, III, and IV, the Commission shall discontinue, as of the effective date of this Agreement; the regulatory authority of the Commission in the State under Chapters 6, 7, and 8, and section 161 of the Act with respect to the following materials:

A. Byproduct materials;

B. Source materials; and

C. Special nuclear materials in quantities not sufficient to form a critical mass.

ARTICLE II

This Agreement does not provide for discontinuance of any authority and the Commission shall retain authority and responsibility with respect to the regulation of:

A. The construction and operation of any production or utilization facility;

B. The export from or import into the United States of byproduct, source, or special nuclear material, or of any production or utilization facility;

C. The disposal into the ocean or sea of byproduct, source, or special nuclear waste materials as defined in regulations or orders of the Commission;

D. The disposal of such other byproduct, source, or special nuclear material as the Commission from time to time determines by regulation or order should; because of the hazards or potential hazards thereof, not be so disposed of without a license from the Commission.

ARTICLE III

Notwithstanding this Agreement, the Commission may from time to time by rule, regulation, or order, require that the manufacturer, processor, or producer of any equipment, device, commodity, or other product containing source, byproduct, or special nuclear material shall not transfer possession or control of such product except pursuant to a license or an exemption from licensing issued by the Commission.

ARTICLE IV

This Agreement shall not affect the authority of the Commission under subsection 161 b. or i. of the Act to issue rules, regulations, or orders, to protect the common defense and security, to protect restricted data or to guard against the loss or diversion of special nuclear material.

ARTICLE V

The Commission will use its best efforts to cooperate with the State and other agreement States in the formulation of standards and regulatory programs of the State and the Commission for protection against hazards of radiation and to assure that State and Commission programs for protection against hazards of radiation will be coordinated and compatible. The State will use its best efforts to cooperate with the Commission and other agreement States in the formulation of standards and regulatory programs of the State and the Commission for protection against hazards of radiation and other agreement States in the formulation of standards and regulatory programs of the State and the Commission for protection against hazards of radiation and to assure that the State's program will continue to be compatible with the program of the Commission for the regulation of like materials. The State and the Commission will use their best efforts to keep each other informed of proposed changes in their respective rules and regulations and licensing, inspection, and enforcement policies, and criteria, and to obtain the comments and assistance of the other party thereon.

ARTICLE VI

The Commission and the State agree that it is desirable to provide for reciprocal recognition of licenses for the materials listed in Article I licensed by the other party or by any agreement State. Accordingly, the Commission and the State agree to use their best efforts to develop appropriate rules, regulations, and procedures by which such reciprocity will be accorded.

ARTICLE VII

The Commission, upon its own initiative after reasonable notice and opportunity for hearing to the State, or upon request of the Governor of the State, may terminate or suspend this Agreement and reassert the licensing and regulatory authority vested in it under the Act if the Commission finds that such termination or suspension is required to protect the public health and safety.

ARTICLE VIII

This Agreement shall become effective on September 1, 1965, and shall remain in effect unless, and until such time as it is terminated pursuant to Article VII.

Done at Nashville, State of Tennessee, in triplicate, this 12th day of August 1965.

FOR THE UNITED STATES ATOMIC ENERGY COMMISSION. JAMES T. RAMEY, Commissioner.

FOR THE STATE OF TESSESSEE. FRANK G. CLEMENT, Governor.

[F.R. Doc. 65-8899; Filed, Aug. 20, 1965; 8:50 a.m.]



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF RADIOLOGICAL HEALTH L & C Annex, Third Floor 401 Church Street Nashville, TN 37243-3215

February 18, 2009

Erwin Citizens Awareness Network P.O. Box 1151 Erwin, TN 37650

Dear Erwin Citizens Awareness Network:

Thank you for the comments and concerns addressed in your letter dated February 12, 2009 relative to the Rulemaking Hearing scheduled February 23, 2009. The purpose of this rulemaking is to update Tennessee's <u>State Regulations for Protection Against Radiation</u> (SRPAR) such that SRPAR is compatible with changes that the Nuclear Regulatory Commission (NRC) has made to Title 10 of the Code of Federal Regulations. Tennessee's status as an Agreement State requires this compatibility. The NRC's Management Directive 5.9 "Adequacy and Compatibility of Agreement State Programs" states:

"An Agreement State radiation control program is compatible with the Commission's regulatory program when the State program does not create conflicts, duplications, gaps, or other conditions that jeopardize an orderly pattern in the regulation of agreement material (source, byproduct, and small quantities of special nuclear material as identified by Section 274b. of the Atomic Energy Act, as amended) on a nationwide basis."

The NRC establishes deadlines by which Agreement States must adopt regulations. To facilitate meeting these deadlines, the Notice of Rulemaking Hearing was filed with the Secretary of State on December 17, 2008 initiating the comment period which will end on February 27, 2009. All comments received prior to close of business at 4:30 p.m. CST on February 27, 2009 will be considered. Comments received after this date will be considered if it is practical to do so.

To provide for reasonable accommodations regarding public notice of rulemaking hearings, and as required by the <u>Uniform Administrative Procedures Act</u>, Tennessee Code Annotated, Section 4-5-203, the applicable Rulemaking Hearing Notice was published in the January 2009 edition of the Tennessee Administrative Register (T.A.R.). Additional notifications for this hearing also appear in the January 2009 edition of the Tennessee Environmental Law Letter and on the

Division of Radiological Health's (DRH) website. A summary of the amendments and new rules included in this rulemaking are available on DRH's website. Also, since the majority of this rulemaking concerns the medical use of radioactive material, notice of the hearing was sent to all medical radioactive material licensees in Tennessee. In response to your concerns, a copy of the Notice of Rulemaking Hearing, which includes both the current regulations and the changes to be adopted, is now available for review at the Johnson City Field Office.

As an attachment to this letter, we have included a summary of the amendments and new rules included in this rulemaking. If you have additional concerns or questions, please feel free to contact the Division of Radiological Health at (615) 532-0364.

Sincerely,

eth mining

Beth Murphy Tennessee Division of Radiological Health

Enclosures: As stated

cc: Governor Phil Bredesen (via Mr. Ryan Gooch) Director of Energy Policy, State of Tennessee Economic and Community Development 312 Rosa L. Parks Avenue, 10th Floor Nashville, TN 37243-0405

> Honorable David B. Hawk Tennessee State Representative 407 Crockett Avenue Greeneville, TN 37745

Commissioner Jim Fyke Tennessee Department of Environment and Conservation L & C Annex, 1st Floor, 401 Church Street Nashville, TN 37243

Mr. Mark Braswell Tennessee Department of Environment and Conservation Johnson City Field Office 2305 Silverdale Road Johnson City, TN 37601-2162

SUMMARY

The rulemaking affects Chapters 1200–02–04 through 1200–02–11. Its various additions and modifications will incorporate:

- Correcting various grammatical mistakes and incorrect references found in Chapters 1200-02-04, 1200-02-05, 1200-02-08, 1200-02-09, and 1200-02-10
- Referencing the new Chapter 1200-02-07 rules where needed in Chapters 1200-02-04, 1200-02-05, and 1200-02-10
- Repealing rules 1200-02-04-.05 (Units of Radiation Dose) and 1200-02-04-.06 (Units of Radioactivity). In a previous rulemaking, the Division moved these rules to Chapter 1200-02-05 and amended them.
- Adding new rules to implement the NRC's National Source Tracking System for certain sealed sources. The amendments require licensees to report certain transactions involving these sealed sources to the National Source Tracking System. These transactions include manufacture, transfer, receipt, disassembly, or disposal of nationally tracked sources. The amendments also require each licensee to provide its initial inventory of nationally tracked sources to the National Source Tracking System and annually reconcile the information in the system with the licensee's actual inventory.
- Amendments to 1200-02-10-.26 (Records) to clarify certain recordkeeping requirements
 pertaining to the receipt, transfer, and disposal of radioactive material. The amended rule adds
 the requirement that a licensee shall transfer records to the new licensee if licensed activities
 will continue at the same site.
- Repealing, amending, and adding new rules pertaining to the medical use of radioactive material in Chapters 1200-02-04, 1200-02-05, 1200-02-07, and 1200-02-10. These new rules and amendments, that are designed to be both risk-informed and more performance based, focus on medical procedures that pose higher risks to workers, patients, and the public.
- Adding the definition of industrial radiography to Rule 1200-02-08-.03
- Adding a footnote to Rule 1200-2-9-.06, Specific Requirements of the Issuance of a Certified Registration. The footnote allows certified registrants to request a variance for physicians who do not meet the training and experience criteria.

PUBLIC NOTICE

The Tennessee Air Pollution Control Division (TAPCD) has received requests for construction of air contaminant sources as noted below. The proposed construction is subject to part 1200-3-9-.01(1)(h) of the rennessee Air Pollution Control Regulations, which requires a public notification and 30-day public comment period. Interested parties may express their comments and concerns in writing to Mr. John W. Walton, Director, Air Pollution Control Division, 9th Floor, L & C Annex, 401 Church Street, Nashville, Tennessee 37243-1531 within thirty (30) days of the date of this notice. Questions concerning a source may be addressed to the assigned Division personnel at the same address or by calling 1-800-511-7991 or 615-532-0554.

Individuals with disabilities who wish to participate should contact the Tennessee Department of Environment and Conservation to discuss any auxiliary aids or services needed to facilitate such participation. Such contact may be in person, by writing, telephone, or other means, and should be made no less than ten days prior to the end of the thirty (30) day public comment period to allow time to provide such aid or service. Contact the Tennessee Department of Environment and Conservation ADA Coordinator, Issac Okoreeh-Baah, 7th Floor Annex, 401 Church Street, Nashville, TN 37243, (615) 532-0059. Hearing impaired callers may use the Tennessee Relay Service (1-800-848-0298).

The first applicant is Valley Castings & Manufacturing, Inc. with a mailing address of 642 Watauga Avenue, Epvin, TN 37650. They seek to obtain air contaminant permits for construction of:

(1) A Sand Pattern Making Process (Division identification number 86-0053-01/44912) at the same address. This proposed operation would be made-up of a sand silo, an electric sand heater and fluidizer, an electric sand mixer and associated equipment which would be used for the sand handling, mixing, and pattern making step of the iron casting process. Two (2) baghouses would be used for pollution control. There would be physical construction and regulated air contaminants would be emitted by this source. Mr. M. Baghernejad is the assigned Division person.

(2) A Ladle Preheat Operation (Division identification numbers 86-0053-02/44913) at the same address. This proposed operation would be made-up a natural gas burner and associated equipment used to preheat metal ladles for use in the iron casting process. There would be no pollution control equipment. There would be physical construction and regulated air contaminants would be emitted by this source. Mr. M. Baghemejad is the assigned Division person.

(3) A Metal Casting Operation (Division identification number 86-0053-03/44914) at the same address. This proposed operation of the iron casting process would be made-up of an electric induction furnace and associated equipment which would be used to melt hard metal into molten metal for pouring from the ladle into the sand pattern molds. There would be no pollution control equipment. There would be physical construction and regulated air contaminants would be emitted by this source. Mr. M. Baghernejad is the assigned Division person.

(4) A Casting Finishing Operation (Division identification number 86-0053-04/44915) at the same address. This proposed operation of the iron casting process would be made-up of a shaker, rotoblast (carbonshot) surface finisher and associated equipment which would be used to remove the casting from the mold, collect any sand, and finish the casting surface. A settling chamber and baghouse would be used for pollution control. There would be physical construction and regulated air contaminants would be emitted by this source. Mr. M. Baghernejad is the assigned Division person.

The second applicant is Studsvik Processing Facility, LLC with a mailing address of 132 Harbison Boulevard, Suite 302B, Columbia, SC 29212. They seek to obtain an air contaminant permit (Division identification number 86-0054-01/44923) to construct a proposed Volume Reduction Energy Recovery Facility on Carolina Avenue, Erwin, TN 37650. The primary purpose of the proposed facility is to receive radioactively contaminated ion exchange resins and other organic low level radioactive waste material from various generators, volume reduce this material utilizing a thermal destructive distillation and steam reforming processes, recover energy from gaseous process products, package the volume-reduced waste residue, and either ship the waste residue back to the generator or to a licensed low-level waste facility for disposal. The main components of these processes are: thermal distillation vessel, steam reformer vessel, heat recovery unit, and off-gas control system. Waste residues from the distillation vessel are transferred to a carbon removal (steam reformer) step and then to a compaction and/or pelletizing system and then packaged in high integrity containers or other suitable packages for shipment or disposal. A demister/ and regulated air contaminants would be emitted by this source. Mr. R. Thompson is the assigned Division person.

THE ERWIN RECORD, MAY 22, 1996, Page 3

Johnson City

ON CITY ENVIRONME



TENNESSEE DEPARTMENT OF ENVIRONMENT & CONSERVATION DIVISION OF AIR POLLUTION CONTROL 9TH FLOOR, L & C ANNEX 401 CHURCH STREET NASHVILLE, TN 37243-1531 SEP 1 3 1995

September 6, 1996

Mr. M. P. Carson Chief Operating Officer Studsvik Processing Facility, LLC 132 Harbison Blvd., Suite 302B Columbia, SC 29212

Re: (86-0054)-01. 44923

Dear Mr. Carson:

On April 25, 1996, we received your applications for construction of a volume reduction energy recovery operation at the above referenced facility.

The Tennessee Air Pollution Control Board has adopted regulations which exempt a portion of the equipment which you indicated from permitting requirements. Therefore, no permits will be necessary for the equipment listed below:

Equipment

Applicable Rules

1200-3-9-.04(4)(j) or (k) 1200-3-9-.04(5)(f)42.

1200-3-9-.04(5)(g)4. 1200-3-9-.04(5)(g)10. 1200-3-9-.04(5)(g)13.

All equipment listed below
 Internal combustion engine used only for

- emergency replacement or standby service
- 3) Diesel fuel tank of 40,000 gallons or less
- 4) Storage tanks of less than 10,000 gallons
- 5) Process tanks of less than 3,000 gallons which emit less than 0.5 tons per year

This interpretation is based upon the information contained in your applications dated April 24, 1996. All applicable air pollution regulations must still be met by your facility.

If you have any questions about this matter, please contact Randy Thompson at (615) 532-6825.

Sincerely,

SOU BRT

David G. Carson Chief, New Source Permitting Program

DGC/GRT APC-71

cc: Johnson City Field Office

THE ERWIN RECORD, AUGUST 13, 1997

'Best spot in the world': Studsvik breaks ground

Officials from Studsvik were in Erwin Thursday to break ground for their new environmental restoration facility. The Swedish-based company is building a new multi-million facility which will initially employ some 35 people.

"Erwin is the best spot in the world!" said Töive Kivikas, President and CEO of the company.

He said his company looked at different countries for the new facility, settled on' the United States, investigated several areas and narrowed it to Tennessee. "We then narrowed it to Erwin, a most attractive community and very similar to our environment in Sweden."

Studsvik is in the business of treating low level waste, reducing its volume, enhancing its isolation from the environment and shipping it off-site for disposal at a licensed facility.

The low level waste to be treated at Studsvik in Erwin will come from commercial utilities across the United States and will be shipped after treatment to the Barnwell site in South Carolina.

Studsvik provides products and services to secure low production costs, high safety and low environmental impact for various energy and industrial plants. Operations are international, and areas of expertise include waste reduction and decontamination, safety and ecology, and instrumentation. Studsvik's core business is providing support services to the nuclear market.

"Our company is extremely pleased with the warm reception we've had here in Erwin," said President Marty Carson. "The project has received state and government approval so we are moving right on target for our slated completion within the next 24 months."

On hand for the ceremony were State Representative Zane

Please turn to GROUND on page 4

1

FRWIN RELORD AUL. 13 1997

Continued from page 1

- GROUND -

Whitson, Unicol County Executive Paul Monk, and Erwin Mayor Garland Evely. They joined Studsvik Swedish officials. Kivikas and Hakan Johansson in moving the first bit of carth. .

A team comprised of Duke Engineering & Services, Inc., a subsidiary of Duke Energy, and Metric Construction, Inc., a subsidiary of J.A. Jones, Inc. will be designing and constructing the facility.

Studavik is leasing the land for the facility from Nuclear Fuel Services. It will be located adjacent to NFS. THE ERWIN RELORD, AUG: 13, 1997



Calling Erwin "the best spot in the world;" Studsvik company officials held a groundbreaking ceremony Thursday. The company, which is headquartered in Sweden, will employ 35 people and will resemble the artist's sketch shown above.



Studsvik company officials and local government officials participated in last Thursday's groundbreaking at the plant site. Pictured from left to right are: Marty Carson, president of Studsvik Inc.; Mayor Garland Evely; County Executive Paul Mank; Toive Kivikas, president and chairman of Studsvik AB; Rep. Zone Whitson; and Håkan Johansson, vice president of Vattenfall AB.

THE ERWIN RELORD, NOV. 19, 1997

Page 6, THE ERWIN RECORD, Wednesday, November 19, 1997

Unicoi County native named to position at Studsvik plant

Mike Tester, a certified health physicist with 24 years experience in the nuclear industry, has been named the Safety Director and Radiation Safety Officer of Studsvik Processing Facility. LLC in Erwin.

In his new position he ensures that all activities of the facility are conducted in a safe manner. Tester ensures that availability of adequate safety personnel, training, equipment and resources as necessary to accomplish the objectives of the radiation protection program.

He also reviews and approves all radiation safety operating procedures and training programs. In addition he maintains the environmental protection program in compliance with applicable licenses, permits and regulations. A native of Unicol County, Tester was educated at East Tennessee State University and has participated in advanced studies at the University of Lowell and the University of Michigan. He was certified by the American Board of Health Physics in 1990 in the comprehensive practice of radiation safety.

Tester is a member of the national and local chapters of the Health Physics Society.

He most recently was employed by Nuclear Fuel Services, Inc. at Fernald Environmental Management Corp. in Cincinnati, as senior manager in the Safety and Health Division. Prior to that he worked at NFS' Erwin facility in various safety enpacities since 1973.



MIKE TESTER

THE ERWIN RELORD, SEPTEMBER 30, 1998, P. 1

Plant dedication an international affair

Officials say plant state-of-the-art

by Mark A, Slevens

Pledging themselves as dedicated members of the Unicol County community, Studsvik officials — along with a host of international guests including the Swedish ambassador to the United Nations held a ribbon-cutting ceremony Sept. 24 in Erwin for their new nuclear waste processing facility.

The company's Erwin facility is described as a state-of-the-art plant which will treat low-level radioactive waste with a system called THOR, for Thermal Organic Reduction, designed and patented by the Swedishbased company.

"Although international in operation, Studsvik believes only local commitment in operation brings commercial success," said Marty Carson, president of Studsvik Inc. "We are and will remain committed to safety, community and regulatory compliance."

The plant, under construction for about a year, is expected to begin processing in December with about 28 skilled employees. It will operate under a lease agreement with Nuclear Fuel Services Inc., which is located adjacent to the Studsvik plant. Officials said the plant will provide as many as 170 further job opportunities through support services across the Northeast Tennessee region.

Carsten Olsson, chief executive officer of Studsvik AB, told the dozens in attendance at the inauguration ceremony that the Erwin plant and its use of the THOR processing technique is the " crown jewel" in *Studsvik's new international operations.*

By finding ways to use nuclear waste, Olsson said Studsvik is committed to being a world leader in safe, environmentally friendly Auclear production.

Sweden has a long tradition working with environmental issues and

Please see PLANT, Page 8



Ambassador Rolf Ekeus said the new state-ofthe-art plant is a step toward utilizing nuclear power in a safe and productive manner. THE ERWIN RELOAD, SEPT. 30, 1998 1

its industries are in the forefront with regard to protecting the environment." Olsson said. "It's therefore quite natural for Studsvik to erect its first plant with this new process here in the U.S., where interests with environmental issues are as high or even higher than in Sweden and where the United States has the world's biggest nuclear industry."

Continued from Page 1

PLAN

Olsson said the company's commitment will extend beyond its current operations at its 15 plants.

He said he foresces an expansion in the United States and throughout the world where "they have similar needs and similar wishes to take care of their nuclear waste." The THOR

technology, Olsson said, is "the best technology for the safe and effective treatment of ionexchange resin wastes from commercial nuclear power reactors."

Rolf Ekcus. Sweden's ambassador to the United Nations and the former leader of the U.S.led inspection team in Iraq. praised Studsvik for its innovative technology to help solve one of the nuclear industry's biggest problems — how to deal with its waste.

"The, awareness of (the waste problem) ... was late in the United States and in my home country of Sweden," Ekeus said. "We probably overlooked the magnitude of the problem, but it

is definitely a life-and-death issue for the industry. If you cannot cope with the waste, I don't see any future for the industry, but if you can deal with it I think it is a major, major insurance for all our energy problems in the future.

"As we understand this processing facility ... It is quite exciting.

"The success of this venture here will be a very important contribution to their overall efforts to work towards safe energy and safe electricity production. And with that, I wish the most success to this venture and congratulate both the State of Tennessee and the community of Erwin and, of course, Studsvik and its American collaborators for this tremendous achievement we see here today."

Goran Forssberg, the mayor of the Swedish city of Nykoping, was also a special guest speaker at the ceremony, but the speakers were not limited to Studsvik and Swedish dignitaries.

State Rep. Zane Whitson told those in altendance, "This is a great occasion, a great day for Unicol County, for Tennessee and for the United States."

"The nuclear age entered some me ago in our world, and we are really pleased to have such a stateof-the-art environmental company in Tennessee and particularly in Unicol County," Whitson said.

"This facility will make our world a safer place.

"The nuclear age is here to stay.

Nuclear energy is here to stay, so companies like this are here to protect us and take care of our lives in the nuclear age."

During the ceremony, Carson also pledged a long-term financial

commitment to support a science and technology classroom at the new Unicol County High School.

Following the ceremony, those attenting toured the facility and were invited to a barbecue lunch.



Staff Photos by Charles Edwards Local and Swedish dignitaries cut the ribbon dedicating the new Studsvik processing facility in Erwin last week. The facility will begin operations in December.

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TENNESSEE AIR POLLUTION CONTROL BOARD DEPARTMENT OF ENVIRONMENT AND CONSERVATION NASHVILLE, TENNESSEE 37243-1531

Permit to Construct or Modify an Air Contaminant Source Issued	Pursuant to Transfee Al VIEw A
Date Issued: September 10, 1996	Permit Number.
Date Amended: JUN 1 0 1999 [AMENDMENT]	944923P JUN 1 4 1999
Date Expires: September 1, 1999	VSON VSON CITY ENVIRONME FIELD OFFICE
Issued To: Studsvik Processing Facility, LLC	Installation Address: Carolina Avenue Erwin
Installation Description:	Emission Source Reference No.
Thermal Distillation, Steam Reformation, Heat Recovery with Demister, Scrubber, and HEPA Filter controls	-01

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

CONDITIONS:

1. The application that was utilized in the preparation of this permit is date April 24, 1996 (with update dated May 23, 1996) and signed by M. P. Carson, Chie Operating Officer for the permitted facility. If this person terminates his/he employment or is reassigned different duties such that he/she is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. ALI representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

(conditions continued on next page)

TECHNICAL SECRETARY

hRT

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

POST AT INSTALLATION ADDRESS

CN-0754 (Rev. 9-92)

RDA-1298

2.

The stated design input capacity for this source is 2,890 pounds per hour (excludinwater) on a daily average basis. An updated construction permit must be obtained before exceeding this capacity. The Technical Secretary may require the permitted to prove compliance with this rate.

- 3. Particulate matter (TSP) emitted from this source shall not exceed 0.02 grain per dry standard cubic foot of stack gases (5.38 pounds per hour).
- 4. Quantities of sulfur dioxide (SO_2) , carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x) , fluorides (HF), and chlorides (HCl) emitted from this source shall not exceed the following:

The above emission limitations are established pursuant to Rules 1200-3-14-.03(5) and 1200-3-7-.07(2) of the Tennessee Air Pollution Control Regulations and the information contained in the approved application.

- 5. Visible emissions from the stack(s) shall not exceed twenty percent (20%) or greater opacity as determined by EPA Method 9, as published in the Federal Register, Volume 39, Number 219 on November 12, 1974. (6 minute average)
- 6. The exhaust gases from the ventilation system shall be discharged unobstructed vertically upwards to the ambient air from a stack with an exit diameter of 25.0 inches not less than 80.0 feet above ground level.
- 7. This source shall not operate without use of the air pollution control devices.
- 8. Routine maintenance, as required to maintain specified emission limits, shall be performed on the air pollution control devices. Maintenance records shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than two years.
- 9. Progress reports must be filed annually for construction projects extending over a one year duration. As a minimum, these reports must specify the percentage of the project completed and give an estimated completion date. The first progress report will be due one year after this permit is issued and every year thereafter until construction is completed.
- 10. This permit shall not preclude any requirements promulgated by the Division of Radiological Health, the Division of Solid Waste Management, or the Division of Water Pollution Control.
- 11. The issuance of this permit does not exempt the permittee from any requirements of the Environmental Protection Agency pertaining to the emissions from the operation ° of this new source.
- 12. This permit shall serve as a temporary operating permit from initial start-up to the receipt of a standard operating permit (regardless of the expiration date), provided the operating permit is applied for within thirty (30) days of initial start-up and the conditions of this permit and any applicable emission standards are met.

(conditions continued on next page)

JUN 10 1999

13.

The permittee shall certify the start-up date of the air contaminant sourc regulated by this permit by submitting

A COPY OF ALL PAGES OF THIS PERMIT,

with the information required in A) and B) of this condition completed, to th Technical Secretary's representatives listed below:

- A) DATE OF START-UP: / / / _____ / ____ / _____
- B) Anticipated operating rate: percent of maximum rated capacity

For the purpose of complying with this condition, "start-up" of the air contaminant source shall be the date of the setting in operation of the source for the production of product for sale or use as raw materials or steam or heat production.

The undersigned represents that he/she has the full authority to represent and binc the permittee in environmental permitting affairs. The undersigned further represents that the above provided information is true to the best of his/her knowledge and belief.

Signature			Date
Signer's name	(type or print)	Title	Phone (with area code)
			·

Note: This certification is <u>not</u> an application for an operating permit. At a minimum, the appropriate application form(s) must be submitted requesting an operating permit. The application must be submitted in accordance with the requirements of this permit.

The completed certification shall be delivered to Compliance Validation Program and the Field Office at the addresses listed below no later than 30 days after the air contaminant source is started-up.

Compliance Validation Program Division of Air Pollution Control 9th Floor, L & C Annex 401 Church Street Nashville, TN 37243-1531

Johnson City Environmental Assistance Center Division of Air Pollution Control 2305 Silverdale Road Johnson City, TN 37601-2162

(end of conditions)

This permit was amended on this date in accordance with the permittee request dated May 28, 1999 to extend the expiration date from June 1, 1999 to September 1, 1999.

Emission Summary

Permit Number: 944923 P

ource Status: New Modification Expansion Relocation

Permit Status: New Renewal

SD NSPS NESHAPs

Previous Permit Number: Construction_

_____ Operating

		Pounds/Hou	<u>ج</u>	Tons/Year			Date of	*.	Applicable Standard	
187 	Actual	Potential	Allowable	Actual	Potential	Allowable	Net Change	Data		1200-3-
TSP	0,005	0.49	5.38	0.02	2.1	23.6		9-6-96	2	704(1)
SO ₂	0,44	8.8	8.8	1.94	38,5	38.5		١т	2	1403(5)
CO	2.8-			12.3	36.8	36.8		·	-2.	- 707.(2)
VOC	0,48	1.4	1.4	2.1	6.1	6.1		1.j	2	11
NOx	3.46	6.9	6.9	15.2	30,2	30,2		1)	2	L)
HF	0.003	0.12	0.12	0.01	0.5	0.5	•	71	2	١,
HCI	0.06	1.6	1.6	0.27	7.0	7.0		r,	2	۱,
							-			•

-ce of data

Emissions from company estimates

ERMITTING PROGRAM: R. Thompson

DATE: <u>9-6-96</u>

About Studsvik Strategic Business Areas

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Press releases Studsvik's Erwin Facility in Commercial Operation

- The Studvik Processing Facility completed testing with non-radioactive resins in June
- The first radioactive ion-exchange resins were processed in July
- Facility availability is being increased to achieve overall processing targets
- Stable price trend
- Next development stage started

Studsvik's THORsm (THermal ORganic Process) Process Facility in Erwin, Tennessee, USA, inaugurated in September 1998, was taken into commercial operation in July. The facility is Studsvik AB's largest investment since the construction of the R2 reactor, located at Studsvik outside Nyköping in the late fifties. So far, the investment has amounted to just over USD 35 million.

The facility is unique on the US market and processes a special type of low-level waste - ion-exchange resins. The resins are used in nuclear power plant coolant treatment systems. The resins contain a significant quantity of organic matter which is separated from the non-organic matter through pyrolysis/steam reforming, i.e. a process whereby heat and steam in a controlled environment cause the organic matter to vaporize. Through the THORsm Process, the original weight and volume of the waste can be reduced by over 95 per cent. The nuclear power plants are interested in the process since final disposal capacity for low level radioactive waste including ion-exchange resins is limited and, therefore, costly.

During the facility startup program conducted over the first half of this year, approximately 3000 cubic feet of non-radioactive ion-exchange resins have been processed on a trial basis. The Erwin facility commenced processing radioactive resins on July 19, which means that the plant, from the standpoint of safety and operation, must now be treated as a nuclear facility. The first major customer order for just over 6,000 cubic feet has been received and processing will commence the last week of August.

"This is an important development in Studsvik's evolution and it is highly satisfying that the Erwin facility is now operating on a commercial basis," says Carsten Olsson, Chief Executive Officer of Studsvik AB.

"We have had a positive reaction from the US. We know that our method is superior to those of our competitors and this bodes well for future demand," concludes Carsten Olsson.

As the facility is now being taken into commercial operation, the next objective is to develop a similar facility for processing the very large quantities of mixed waste stored at the US Department of Energy's DOE) various facilities.

For further information, contact:



RECEIVED

OCT 1 3 1999

INTAL

STATE OF TENNESSEE UNIT OF ENVIRONMENT AND CONSERVATION 9TH FLOOR L & C ANNEX 401 CHURCH STREET NASHVILLE, TENNESSEE 37243-1531

OPERATING PERMIT

RENEWAL OF PERMIT # 944923P

ISSUED: OCT 0 8 1999 EXPIRES: NOVEMBER 1, 2008 NEW PERMIT #051789P

Mr. Maurice P. Carson, President Studsvik Processing Facility, LLC 1217 Carolina Avenue Erwin, TN 37650

Dear Mr. Carson:

This constitutes renewal of your temporary operating permit number 944923P. The new operating permit number, and the issue and expiration date of this renewal are indicated above. The application that was utilized in preparation of this permit was signed and dated July 29, 1999.

The previous permit with issue number 944923P should be retained and posted or filed with this renewal at the installation address. Please remember to apply for an operating permit renewal at least 60 (sixty) days prior to the expiration of this renewal.

If you have potential to emit equal to or above the major source threshold levels of 100 tons per year of any regulated pollutant, or 10 tons per year of any hazardous air pollutant (HAP), or 25 tons per year of any combination of hazardous air pollutants, you must file a Title V (major source) operating permit application within 120 days of discovery of the fact. These terms are defined in Attachments 1 and 2.

If you have any questions concerning this letter please contact Greg Forte or Tupili Reddy at (615)-532-0554.

Thank you for your cooperation.

Sincerely,

Tracy & Carter

Technical Secretary Tennessee Air Pollution Control Board

cc: Johnson city EAC



Enclosures

NRC: Event Notification Report for May 5 2000	General Information or Other	Event Number: 36970
	REP ORG: TENNESSEE DIV OF RAD HEALTH LICENSEE: STUDSVICK PROCESSING FACILITY, LLC CITY: ERWIN REGION: 2 COUNTY: STATE: LICENSE#: R-S1001 AGREEMENT: Y DOCKET: 1	INOTIFICATION DATE: 05/04/2000 INOTIFICATION TIME: 09:45[EDT] IEVENT DATE: 04/30/2000 IEVENT TIME: 12:00[EDT] ILAST UPDATE DATE: 05/04/2000 I+
- Ar	INRC NOTIFIED BY: DEBRA SHULTS ING OPS OFFICER: JOHN MacKINNON EMERGENCY CLASS: IO CFR SECTION: INAGR AGREEMENT STATE	
	<pre>/ SUDU SQUARE FOUT AREA CONTAMINATED WITH AN ESTI / PRIMARILY COBALT-60. / / / / On 05/01/2000, the licensee called to report a / processing building. A 5000 square foot area / with an estimated 0.49 millicuries of mixed fis</pre>	MATED 0.49 MILLICURIES OF
	<pre>(primary Co-60) when the event occurred on 04/3 revealed 30,000 dpm with a maximum small area s centimeter. There was no release of radioactiv environment. There were two minor personnel co involving an individual's shoes and one involvi Both were easily decontaminated and released. equipment. Decontamination had already begun w does not pose a risk to public health and safet 1200-2-5-141 (2)(c)1 i, ii, and iii. It requir greater than 24 hours, 0.49 millicuries is grea ALI for Co-60, and access was restricted to all half-lives to decay.</pre>	0/00. Gross maslin smears near of 6,600 dpm/100 square e material to the ntamination incidents: one ng an individual's hair. There was no damage to hen reported. This event y but is reportable under ed restricted access for ter than 5 times the lowest ow isotopes with less than 24
	[General Information or Other	Event Number: 38018
NRC: Event Notification Report for May 22, 2001	[REP ORG: TENNESSEE DIV OF RAD HEALTH [LICENSEE: STUDSVICK PROCESSING FACILITY [CITY: ERWIN REGION: 2 [COUNTY: STATE: TN [LICENSE#: R-86011 AGREEMENT: Y [DOCKET:	NOTIFICATION DATE: 05/21/2001 NOTIFICATION TIME: 12:30[EDT] EVENT DATE: 05/18/2001 EVENT TIME: 16:30[EDT] LAST UPDATE DATE: 05/21/2001 FFRSON ORGANIZATION LEONARD WERT R2 JOHN HIICREY NMSS
·	NRC NOTIFIED BY: FREEMAN/SHULTS(by fox) HQ OPS OFFICER: CHAUNCEY GOULD	F -
· ·	EMERGENCY CLASS: N/A 10 CFR SECTION:	
	This licensee is authorized for the receipt, post storage, handling and shipment of radioactive wa operations at the facility, a spill of approxima occurred from one of the process vessels. The facility evacuated. It is estimated that 29 mil mixed fission products were released during the released into a controlled area. There were no Negative pressure was maintained during the even down after the release as was the thermal system During the investigation. five individuals were confirmed by masal swipes. Invivo counting of th conducted on Wednesday, May 23 at Oak Ridge Nata Temperatures in the area have now decreased enou and make a physical evaluation. Video cameras of believed at this time that the vessel was overput investigation and root cause analysis will be per	session, processing, iste resing. During routine itely four cubic feet vessel was shut down and the flicuries of activation and spill. The material was environmental releases. it. The HVAC system was shut i to the process vessel. slightly contaminated as less individuals will be ional Laboratory. agh for personnel to enter recorded the event and it is ressurized. A complete erformed by the licensee to

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PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE PNO-II-01-018A

This preliminary notification constitutes EARLY notice of events of possible safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by Region II staff (Atlanta, Georgia) on this date.

Facility	Licensee Emergency Classification	1
Studsvik Processing Facility	Notification of Unusual Event	
	Alert	
Erwin, Tennessee	Site Area Emergency	
Dockets/License: TN-R-86011	General Emergency	
	X Not Applicable	

SUBJECT: UPDATE OF SITE CONTAMINATION EVENT

On May 21, 2001, the NRC Operations Center was notified by the State of Tennessee Division of Radiological Health (DRH) that a spill of approximately 29 millicuries of activation and mixed fission products had occurred at the licensee's facility on May 18, 2001. The licensee was authorized for the receipt, possession, processing, storage, handling and shipment of radioactive waste resins under a Tennessee Agreement State license. The licensee completed their review and evaluation of the event and provided a written report to DRH on June 14, 2001.

In summary, the contamination was contained within the vault at the 85' and 95' elevations of the facility. After the initial response to the event, decontamination efforts began. On May 24, 2001, the decontamination was completed. Five minor personnel contamination events occurred which were related to the event. Bioassays of the individuals included nasal swabs, whole body counts and urinalyses, resulting in a maximum calculated committed effective dose equivalent (CEDE) of 21.4 millirem (compared to the occupational limit of 5,000 millirem). No contamination from this event was measured outside the facility.

The event occurred due to a small pinhole leak in a non-utilized nozzle on the bottom of the primary process vessel. Root cause analysis by the licensee determined that the leak was caused by the fluidization nozzles associated with the affected vessel becoming plugged, eventually eroding through the vessel at the non-utilized nozzle. The licensee repaired the damage and reinspected the entire vessel before placing it back into service.

The licensee took other corrective actions to prevent recurrence including installation of remote monitors, catch containments, and additional modifications and computer control measures were installed to mitigate future fluidization gas nozzle/distributor plugging.

The plant resumed operations on June 6, 2001, after completion of all recovery and repair operations.

This information presented herein has been discussed with the State and is current as of 10:30 a.m., Wednesday, June 27, 2001.

CONTACT: Jay L. Henson 404-562-4731

Bryan A. Parker 404-562-4728

ML011800109 2001-06-27

1page

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE PNO-II-01-018

This preliminary notification constitutes EARLY notice of events of possible safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by Region II staff (Atlanta, Georgia) on this date.

Facility	Licensee Emergency Classification				
Studsvick Processing Facility	Notification of Unusual Event				
	Alert				
Erwin, Tennessee	Site Area Emergency				
Dockets/License: TN-R-86011	General Emergency				
	X Not Applicable				

Subject: REPORT OF SITE CONTAMINATION

On May 21, 2001, the NRC Operations Center was notified by the State of Tennessee Division of Radiological Health (DRH) that a spill had occurred at the licensee's facility on May 18, 2001. The licensee was authorized for the receipt, possession, processing, storage, handling and shipment of radioactive waste resins under a Tennessee Agreement State license. During routine operations at the facility, approximately four cubic feet of waste material was spilled from one of the process vessels, reportedly due to overpressurization of the vessel. The vessel was shut down and the facility evacuated. It was estimated that 29 millicuries of activation and mixed fission products were released during the spill. The material was released into a controlled area. There were no environmental releases. The building remained at a negative pressure relative to the environment during the event. The HVAC system was shut down after the spill, as was the thermal system to the process vessel.

During the initial response and investigation of the event, five individuals (license employees) were slightly contaminated as confirmed by nasal swipes. In-vivo counting of these individuals was planned for Wednesday, May 23, 2001, at Oak Ridge National Laboratory. Temperatures in the area have now decreased enough for personnel to enter and make a thorough physical evaluation. Video cameras recorded the event. A complete investigation and root cause analysis will be performed by the licensee to determine the cause of the event. On May 22, 2001, the Tennessee DRH issued a press release and dispatched an inspector to the site to investigate the event and the licensee's response.

Region II received initial notification of this occurrence by the NRC Headquarters Operations Center. This information presented herein has been discussed with the State and is current as of 10:30 a.m. on May 22, 2001.

CONTACT: Jay L. Henson 404-562-4731

Bryan A. Parker 404-562-4728



ML012950235 2001-05-22 1page

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IR and Press Career

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Production stoppage at Studsvik's Erwin facility

2001-05-28 00:00

On Friday <u>12 May there was a minor leakage</u> in one of the process systems at Studsvik's facility in Erwin, USA. All the safety systems at the facility functioned as planned when this occurred. No-one was harmed as a result of the leakage and there was no radioactive release to the environment.

The facility will be shut down for about four weeks for repairs before production can be resumed. During this period other maintenance work that was planned for later will also be carried out.

The Erwin facility is designed to use volume reduction to enable safer and more economical final disposal of radioactive ion exchange resins from the American nuclear power industry. The facility is based on unique technology developed by Studsvik and is the only one of its kind in the world.

The incident has been reported to the American regulatory agency, the US Nuclear Regulatory Commission, NRC.

For further information please contact: Carsten Olsson, President and Chief Executive Officer of Studsvik AB, tel 0155-22 10 20 or mobile 0709-677 020 Thomas Backteman, Senior Vice President for Communications and Investor Relations of Studsvik AB 0155-22 10 66 or mobile 0709-677 066

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Studsvik Presenting Annual Accounts Data Earlier 2007-01-17 17:15

The Board of Directors of Studsvik AB has decided to bring forward the publication of the main features of the next year-end press release for 2006. The measure is due to an unplanned production stoppage in the Group's waste treatment facility in Erwin which has had a negative impact on earnings.

There was an unplanned production stoppage in the Group's waste treatment facility in Erwin in October with financial consequences in November and December. The stoppage has affected operating profit negatively by about SEK 12 million.

In response to this the Board of Directors of Studsvik AB has decided to publish a summary of the yearend financial statements for 2006, despite the fact that they have not been adopted or audited.

The preliminary 2006 operating profit for the Group is about SEK 71 million. The Board of Directors made the following statement concerning the outlook for 2006 in the third quarter interim report:

"The assessment of the outlook for 2006 made in the interim report for the second quarter 2006 is unchanged. Accordingly, the overall assessment is that the operating profit for the Group for 2006 will be somewhat lower than for 2005. Financial expenses are expected to increase and, therefore, profit before tax is expected to be lower than the previous year. (Comparative figures for 2005 refer to the Group including discontinued operations.)

SEK thousands	Jan-Dec 2006		Jan-Dec 2005
		Continuing	Including discontinued
		operations	operations
Net sales for	1,219.0	1,088.3	1,116.5
the Group			
Operating profit	71.0	78.8	92.4
Profit before	56.0	76.2	89.8
tax			

The stoppage at the end of October was caused by a filter breakdown, which enforced a two-week closedown of the facility. To start with, the damage was assessed as limited. However, an unforeseen consequence of the stoppage was a negative effect on production in November and December. This meant that margins fell drastically during that period.

The technical faults at the Erwin facility have been dealt with. All costs of the stoppage are charged to 2006.

"Infortunately technical faults occur and we can never fully protect ourselves from them. A rapid review of the facility's control and reporting is now in progress and we are implementing a number of changes

http://www.studsvik.se/index.php?n=ir&s=press&t=detail&lang=en&id=1050786

in co

to prevent similar problems in the future." says Studsvik's CEO Magnus Groth in a comment on the stoppage.

"The rest of Studsvik's operations, including RACE, which was acquired by Studsvik in May, are developing in accordance with our expectations," continues Magnus Groth.

A full year-end press release will be published as announced on 15 February.

For further information please contact:

Magnus Groth, President and Chief Executive Officer, cell phone +46 709 67 70 86 Jerry Ericsson, Chief Financial Officer and Vice President, telephone +46 155 22 10 32, cell phone +46 709 67 70 32.

Facts about Studsvik

17

Studsvik is a leading service supplier to the international nuclear industry. The company has almost a half century's experience of nuclear technology and radiological services. Studsvik addresses a market in strong growth with specialized services in four Strategic Business Areas: Operating Efficiency and Safety, Service and Maintenance, Waste Treatment and Decommissioning. Studsvik has 1,400 employees in 7 countries and the company's shares are listed on the Nordic Stock Exchange, Stockholm, MidCap.

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Date: 2007-03-02 15:00 +/-SEK: -11.00 +/-%: -4.01 Bid: 262.00 Ask: 268.00 Last: 263.00 High: 271.50 Low: 263.00 Volume: 85

ittp://www.studsvik.se/index.nhn?n=ir&s=nress&t=detail&lang-on &:d=1050706

USA

On the North American market, Studsvik is primarily engaged in waste treatment in the USA, where it is the second largest supplier and leader in the treatment of radioactive waste. The business also involves a substantial element of transportation and logistical services, associated with the waste treatment.



Lewis Johnson, head of segment USA.

Business overview

In North America, Studsvik markets its services primarily to the commercial nuclear industry in the USA. It also has customers in research, at state and other institutions in the USA, and nuclear power producers in Canada. Studsvik owns facilities in Memphis and Erwin, both in Tennessee. Sales are dominated by three of Studsvik's key offerings:

- Treatment of radioactive waste.
- Waste management services at customers.
- Transport and logistics.

The logistics business uses a fleet of more than 60 vehicles with the capacity and competence to transport radioactive materials. The Erwin facility processes wet, low- and intermediate-level radioactive waste from operating nuclear power plants utilising Studsvik's patented pyrolysis technology, known as THORSM. The Memphis facility treats other organic waste and metallic waste.

The services of the waste treatment units using Studsvik's THORSM method are marketed to the federal market in the USA by THOR Treatment Technologies (TTT), in which Studsvik and Washington Group each have a 50 per cent interest.

Studsvik's software business also has important functions in the USA, which are reported in the section on Global Services.

Comments on developments

The business in Erwin made further good progress with high capacity utilisation and healthy margins, despite some operating disturbances at the beginning the year. Upgrading of the facility at the end of 2006, together with sales campaigns, were among the factors enabling the business at Erwin to report its best full-year result ever. The business carried on at Memphis in waste treatment and logistics noted low profitability. Persistent stiff competition meant that prices were still depressed and that higher costs had to be incurred on defending the company's market position.

The income was generated fairly evenly by Erwin and Memphis, of which the latter includes the logistics and transport lines of business.

The intense competition has highlighted the fact that the customer can choose between treating waste or storing it untreated.

Year-end order books were well filled as far as the Erwin business is concerned, but unsatisfactory in the case of Memphis.

THOR Treatment Technologies developed according to plan with a positive cash flow. In the fourth quarter, TTT received an order, worth MUSD 7.5 from the US Department of Energy. The contract extends over 22 months during which TTT will demonstrate THOR's ability to treat high-level radioactive waste. TTT's result is stated in accordance with the equity method and is expected to make a positive contribution to the Studsvik Group's result once the accumulated losses have been worked off.

Business developments in 2007

The business is characterised by a concentration of resources in response to the stiff competition on the market. The organisation has been developed and strengthened, marketing drives and ventures were carried out, as were some investments in product development in order to raise productivity and the value of the customer offering. A new management team was appointed at the beginning of the year to put the business in the right shape to face the competition. Lewis Johnson was appointed president and he then appointed a new management

SEC ERWIN - nept por



group including in a new CFO and new unit **# Erwin** managers.

Memphis

The Memphis facility is mainly engaged in the treatment of only dry, metallic radioactive waste. Technical developments have enabled the facility to treat two reactor vessel heads from the Calvert Cliffs nuclear power plant and one from the nuclear power plant at St Lucie, from which a pressure tank was also treated. This is the first time ever that such components have been treated in the USA.

Apart from the application of Studsvik's proprietary technology, systematic measures have already been going on relating to the transfer of technology from other industries that can minimise the volumes of waste the customer has to send to final storage. A local rail siding has been installed, which will provide the facility with a direct link to the rail network. Studsvik now employs 60 trucks in its logistical operations, which primarily serve the needs of Studsvik's own facilities. Its sophisticated specialist expertise in the transportation of hazardous materials is also made available as an independent service to the nuclear industry.

The Erwin facility treats wet radioactive waste from the commercial nuclear power industry. Important key components were replaced in connection with the shutdown at the end of 2006, maintenance measures were carried out and several technical improvements were made. The measures have improved the facility's efficiency and margins, ensured its operating reliability, and minimised the risk of outages.

The unit had a healthy level of capacity utilisation and a firm order situation last year. A new technique for spray drying raised productivity and opened new scope for the treatment of new types of waste at the facility.

A co-operation agreement was signed in September with Waste Control Specialists

Key figures

	2007	2006
Net sales, MSEK	427.7	364.3
Share of Group sales, %	32.5	29.9
Operating profit, MSEK	6.3	11.4
Operating margin, %	1.5	3.1
Fixed capital expenditure, MSEK	21.4	288.8
Average no. of employees	234	199

Share of Group's net sales 2007



bit sales







(WCS). Provided the necessary licences can be obtained this will open up an entirely new market for the storage of Class B and Class C waste. According to the agreement, Studsvik will offer waste treatment and stabilisation and WCS will provide storage for Class B/C waste at its repository in Texas.

Threats and opportunities

Studsvik is technical leader in the treatment of radioactive waste and has enjoyed considerable commercial success for many years by stabilising and reducing the volume of the customers' radioactive waste. At present radioactive waste is being sent for storage without any measures in contrast to treating it, which would result in better overall longterm economy, minimise the impact of the business on the environment and improve safety. In the short term this represents a serious commercial threat. Studsvik must therefore, by continuing with its technical development and marketing activities, become even better at demonstrating the superiority of the treatment option in terms of economic benefit as well as environmental sustainability.

The intention of the power sector to expand its nuclear power production, not least, means that the industry needs to adopt a sustainability perspective, for example by telling the public that it takes responsibility for its impact on the environment.

The closure of the Barnwell final repository will make it even harder than in the past to store intermediate-level radioactive waste, which means there is a risk that reactor owners will have to store untreated waste at their own facilities. However, it may turn out that Studsvik's agreement with WCS will mean that a third option becomes feasible, by which Studsvik can offer customers a storage solution at WCS for waste that has been treated by Studsvik. Provide the business gets all the necessary licences, this will be an important opportunity for the future.

The agreement will also open up opportunities to do business with those companies that have so far stored their waste at Barnwell, but which are not at present customers of Studsvik's. Finally, the agreement will also provide new business openings for the logistics business.



New technology changes attitudes towards large components in the USA Studsvik has processed two large reactor vessel heads from the Calvert Cliffs nuclear power plant. This is the first time in the history of the USA that components of this size have been treated. In less than 100 working days, Studsvik's team reduced the volume of the two immense components and the accompanying scrap metal by no less than 50 per cent. The measure will facilitate waste storage and reduce the customer's costs. The project began in 2006 by separating one of the vessel heads during the first of two planned shutdowns. The vessel head was then stood on its end pending the arrival of a vehicle to remove it. Studsvik dismantled the ancillary components and fittings, and filled ten containers with miscellaneous metal scrap.

In May 2007, Studsvik's team returned to dismantle the second vessel head, which resulted in another 25 well-filled containers. Then both vessel heads were transported, mainly by sea. The shipment from Calvert Cliffs to the terminal at Memphis took three weeks. Once in Memphis the enormous vessel heads were driven the final stage on Studsvik's specially designed truck-trailers for heavy goods.

Nuclear Fuel Services

Nuclear Fuel Services



May 2002

In late May and early June, 2002, Nuclear Fuel Services, Inc. contracted with SRA to perform radiological survey of the 5-acre site that will be the location of the BLEU Complex. This facility produce blended low-enriched uranium (BLEU) from surplus highly-enriched uranium for use Brown's Ferry Plant. The survey utilized a large complement of 14 radiation detectors mounted o_{N} 4-wheel drive truck. The detectors included spectrometers, position-sensitive beta detectors q_{-} several instruments to measure various components of the background. The contaminants of concern included twelve nuclides derived from uranium at arbitrary enrichments, thorium, Tc-99, and trans uranic nuclides. One of the significant challenges of this survey was to account for the highly variable exposure rates from the adjoining Studsvik Processing Facility (SPF).

Contact:

1 of 1

Emily Scheueman, Nuclear Fuel Services, (423) 743-9141 x1294



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Studsvik negotiates co-operation in the DOE market 2002-05-22 17:03

Studsvik AB and a major American company are in the final phase of negotiating a co-operation to utilize Studsvik's THOR technology on waste materials which are in the possession of the U.S. Government including U.S. Department of Energy (DOE).

Studsvik is already, through it's Erwin facility, established in the U.S. market for treatment of radioactive waste from commercial nuclear power plants.

For further information please contact: Hans-Bertil Håkansson, President and Chief Executive Officer, phone +46 155 22 10 26 or +46 709 67 70 26

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2007-02-15 13:0 Studsvik - Year-I Report Jan-Dec

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Studsvik Acquires American Company RACE 2006-04-18 07:36

Manghis

Studsvik has signed an agreement to acquire all shares in RACE Holdings LLC, operating in the field of radioactive waste management in the USA. The acquisition will almost double Studsvik's sales in the Business Area Waste Treatment and <u>give Studsvik an extra foothold</u> in the American market for radioactive waste.

"The American market is highly interesting for Studsvik, both in terms of size and because of positive developments that create good business opportunities. The acquisition of RACE puts Studsvik in a very good position to grow, both in the commercial market and in the federal market for treatment of so called legacy waste", comments Studsvik's CEO Magnus Groth.

Invitation to Press and Analyst Conference today, Tuesday April 18, 2006

On account of Studsvik's acquisition of the American company RACE, Studsvik is holding a press and analyst conference today Tuesday April 18, 11.30 a.m. at IVA Konferenscenter, Grev Turegatan 16 Stockholm, Wenströmrummet.

Preregistration on tel. +46 (0)155 - 22 16 42 or e-mail eva-lena.lindgren@studsvik.se

For further information about the acquisition, please see the attached file.

For further information, please contact: Magnus Groth, tel: +46 (0)155 22 10 86 Mobile: +46-(0)709 67 70 86

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IR and Press Financial Targets **Events** Press

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Thomas Backteman, Senior Vice President, Communications and Investor Relations, Studsvik AB,

+46-155-22 10 66 or +46-70-559 10 66

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Date: 2007-03-02 14:43 +/-SEK: -11.00 +/-%: -4.01 Bid: 263.00 Ask: 268.00 Last: 263.00 High: 271.50 Low: 263.00 Volume:

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STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF AIR POLLUTION CONTROL 14th Floor L & C Tower, 401 Church Street, Nashville, TN 37243-0438

June 30, 2006

CERTIFIED MAIL: 7005 2570 0001 2277 427 RETURN RECEIPT REQUESTED

PLEASE SEE REVERSE SIDE FOR PERMIT UNITS

George M. Hill, Manager Studsvik Processing Facility, LLC 151 T. C. Runion Road Erwin, TN 37650

RE: 86-0054

PAYMENT OF ANNUAL EMISSIONS FEE

Dear Mr. Hill:

The annual emissions fee is based on a source's allowable emissions as defined in Subparagraph (2)(d) of the Division of Air Pollution Control's Chapter 1200-3-26, Administrative Fees Schedule. You may contact us at the address above for a copy of the rule. The appropriate annual emissions fee for minor sources in operation on or after July 1, 1993, shall be calculated at an emission fee rate of \$12.50 per ton of allowable emissions of regulated pollutants.

This amount due must be received no later than November 1, 2006 to avoid penalty and interest. Please make your check payable to the State of Tennessee, Treasurer, and mail your payment in the envelope provided. Please include your company name and reference number (RE: 86-0054) or the yellow copy of this letter with your payment to the address shown above. Your annual emissions fee, based on the enclosed Fee Emissions By Plant, has been calculated on 105.9 tons per year of regulated pollutants, and the annual emissions fee due is \$1,323.75. See calculation below:

[ADJUSTED EMISSIONS = TOTAL EMISSIONS - (CO + EXEMPT EMISSIONS)] [ANNUAL EMISSIONS FEE = RATE X ADJUSTED EMISSIONS (4,000 ton cap/pollutant)] (Fee is based on allowable emissions as shown below.)

TONS PER YEAR (TPY) ALLOWABLE EMISSIONS

								TPY
PART	VOC	SO2	NOX	CO	MISC	HAPS	EXEMPT	TOTALS
23.6	6.1	38.5	30.2	36.8	0.0	7.5	0.0	142.7

The formula to calculate the fee per 1200-3-26-.02(6)(e) is as follows:

142.7 TPY - (36.8 CO + 0.0 EXEMPT) = 105.9 TPY X 12.50 = \$1,323.75

New sources with construction permit expiration dates prior to this bill due date may be included in this billing on the assumption that operation will commence prior to that date. If you feel that your fee assessment is incorrect for this or any other reason, or if you would like to discuss lowering your fee by lowering your allowable emissions, an informal meeting can be arranged. PLEASE NOTE! that this meeting must be requested in writing at least 90 DAYS PRIOR TO November 1, 2006, as per 1200-3-26-.02(3) General Provisions (d). After the terms are reached or the corrections are made, a new assessment or agreement letter will be mailed.

If you have any questions regarding your annual emissions fee, please contact Janna Barton of our staff at (615) 532-0553.

Sincerely,

Janna Barton

Barry R. Stephens, P.E. Technical Secretary Tennessee Air Pollution Control Board



c: Johnson City Field Office ENCLOSURES


RECEIVEL November 17, 2006

Air Pollution Construction Air Permit Application for a Minor Source



AIR POLLUTION CONSTRUCTION PERMIT APPLICATION For LOW-LEVEL RADIOACTIVE WASTE INCINERATOR

WITH HIGH EFFICENCY WET SCRUBBER AND WASTE WATER TREATMENT SYSTEMS

Prepared For

STUDSVIK , Inc. 151 T.C. RUNNION ROAD ERWIN, TENNESSEE 37650

Prepared By

GROVE SCIENTIFIC & ENGINEERING COMPANY 6140 EDGEWATER DRIVE SUITE F ORLANDO, FLORIDA 32810 (407) 298-2282

Project #332400

AUGUST 2006

www.grovescientific.com

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LIST OF ATTACHMENTS

\$ Attachment 1	Permit Application General Information form APC-20
\$ Attachment 2	Incinerator Source Description form APC-25
\$ Attachment 3	Emission Point Description for APC 22
\$ Attachment A	"Incinerator Design Specifications"
\$ Attachment B	"Incinerator Drawing and Equipment General Arrangement"
\$ Attachment C	"Scrubber & Evaporator Drawings and Process Flow Diagram"
\$ Attachment D	"Scrubber Specifications"
\$ Attachment E	"Site Map and Facility Layout"
\$ Attachment F	"Recent Test Results from Similar Scrubber"

SECTION 1.0 Facility Description and Controls

1.1 SERVICE DESCRIPTION

SPF provides waste processing services to radioactive waste generators. This material is typically shipped by truck in large cargo containers.

1.2 BUILDINGS

The SPF facility is located at 151 T. C. Runnion Rd. Erwin, Tennessee. The processing building is approximately 35,000 square feet. A 6,000 square foot storage building is adjacent to the facility. A property sketch is enclosed with this application.

1.3 SECURITY & FIRE PROTECTION

The SPF facility is surrounded by a security fence, surveillance cameras both outside and inside the facility and is protected by a centrally monitored fire system. The SPF is monitored 24-hours per day, 7 days per week with SPF personnel. A fire station is located less than 1/4 mile from the facility on T. C. Runnion Rd.

1.4 MEDICAL ASSISTANCE

In addition to the fire station mentioned above, there is a hospital located less than 2 miles from the SPF.

1.5 DOSE LIMITS TO THE GENERAL PUBLIC

SRPAR 1200-2-5-.60, restricts the Total Effective Dose Equivalent (TEDE) to individual members of the general public from our licensed operations to 100 mrem/year. However, SPF is allowed an annual limit of 500 mrem/yr at the boundary of the facility restricted area. This allowance is based upon the assumption of a maximum occupancy factor of 20 %. In addition, the radiation dose in any unrestricted area cannot exceed 2 mrem in any 1 hour.

To measure the Deep Dose Equivalent (DDE) component of the TEDE the perimeter of the restricted area is monitored with OSL's (Optically Stimulated Luminescent) to ensure that the annual limit is met. These OSL's are normally read monthly. Dose rate surveys of the perimeter are also conducted as needed to ensure that the dose rates in the unrestricted areas adjacent to the perimeter remain below 2 mrem/hour. Appendix E depicts the SPF facility showing environmental TLD locations.

The Committed Effective Dose Equivalent (CEDE) component of the TEDE is continuously monitored by sampling the facilities air effluents. These samples are collected and analyzed weekly.

SECTION 2.0 ENVIRONMENTAL PROTECTION

2.1 INTRODUCTION

Environmental contamination surveys consist of determining the amount of contamination that may be leaching into the environment by acquiring soil samples from various areas around the facility. Locations demonstrating contamination levels greater than five picocuries per gram (>5 pCi/g) above natural background will be remediated. This sampling is performed annually.

2.2 POSTINGS

Areas of the facility are posted in accordance with Table 4.1 to alert personnel to the presence of external radiation, radioactive contamination, and/or radioactive materials. Other postings may be used in addition to those in the table.

Radiological postings shall display the standard radiation symbol of three-bladed design using the colors magenta, purple, or black on a yellow background.

2.3 RADIOLOGICALLY CONTROLLED AREA PROHIBITIONS

To prevent the accidental ingestion or inhalation of radioactive contaminants, eating, drinking, chewing gum or tobacco, application of cosmetics, and smoking are prohibited within the radiologically controlled area.

2.4 HIGH RADIATION AREA ACCESS CONTROL

High radiation areas (HRA) shall be locked, except when access to the area is required. If access to the area is required, the radiation safety staff will review the intended work scope and area surveys to make recommendations on limiting exposure before granting access.

Personnel requiring HRA access will be required to wear an electronic pocket dosimeter or pocket ion chamber in addition to their OSL.

Area	Criteria	Posting
Radiation Area	Radiation levels (mRem/h) \geq 5 to <100 @ 30 cm	"Caution – Radiation Area"
	from the source or from any surface that the	
	radiation penetrates.	
High Radiation	Radiation levels (mRem/h) ≥ 100 @ 30 cm	"Caution - High Radiation
Area	from the source or from any surface that the	Area"
•	radiation penetrates.	
Contaminated Area	Greater than any value in Chapter 11 table.	"Caution – Contaminated
		Area"
Radioactive	10 times the quantity specified in SRPAR	"Caution – Radioactive
Material	Schedule RHS 8-31.	Materials"
Airborne	Exceed DAC's specified in SRPAR Schedule	"Caution – Airborne
Radioactive	RHS 8-30 or individual present in area without	Radioactivity Area"
Material	respiratory protective equipment could exceed,	
	during the hours an individual is present in a	
	week, an intake of 0.6% of the ALI or 12 DAC-	
	hours	

Table 2-1Summary of Posting Requirements

SECTION 3.0 PROPOSED INCINERATOR AND SCRUBBER

3.1 BACKGROUND AND GENERAL SPECIFICATIONS

Studsvik, Inc. is proposing to install a small radiological waste incinerator at their Erwin facility (SPF – Studsvik Processing Facility). The incinerator will process low level radioactive waste composed of paper, plastic, wood, animal carcasses, waste EDTA and lubrication oil. The proposed incinerator is a Texas Incinerator Co., Inc. Custom Model C-200 with a maximum waste charging rate of 2.4 MMBTU/hr. Detailed design criteria (Attachment A) and drawings (Attachment B) are attached to this application. The primary chamber has been oversized to provide a design heat release of 12,400 BTU/cf with complete waste burn-down and a secondary chamber residence time in excess of 1 second at 1850 degrees F. The secondary chamber will be equipped with a thermocouple and chart recorder to continuously measure and record the exit temperature of the secondary chamber. The purpose of the incinerator is to reduce the volume of the radiological waste.

The radiological waste incinerator is designed to incinerate primarily radioactive waste including, pathological waste (animal carcasses), contaminated wood, paper, plastic, waste EDTA and lubricants (oil). The incinerator is designed for the following waste inputs; maximum design rate of 29 lbs/hr animals, 160 lbs/hr oil, and 10 lbs/hr of wood with a total heat input of 2.4 MMBTU/hr of waste and fuel. The fuel value of the oil is estimated by the incinerator manufacturer to range from 18,500 to 150,000 BTU/lb and should result in the incinerator self sustaining combustion in the primary chamber with the occasional use of natural gas. The primary chamber is designed for a total heat release of 12,400 BTU/cf with a chamber volume of 190 cf. The secondary chamber is designed for a total gas residence time of 1.48 seconds at 1850 degree F and has a chamber volume of 146 CF.

3.2 ENVITECH SCRUBBER

The exhaust gases from the incinerator will be controlled by an Envitech Model FC2B Flux Force Condensing Incinerator Gas Cleaning System (a high efficiency wet scrubber and acid gas neutralizer). The scrubber water will be evaporated in an Envitech Model EC 100 scrubber water evaporator system rated at 100 GPH. This configuration will result in a zero discharge pollution control system. Drawings (Attachment C) and specifications (Attachment D) are enclosed. The solids from the scrubber and the residuals and ash from the incinerator will be collected, properly packaged for shipping and disposal to an approved radiological waste disposal facility.

The scrubber is designed with final filtration systems equipped as follows; one (1) side access, three stage filter housing to clean 2,200 CFM at 130° F. The housing will not be bag in / bag out construction. The housing will be manufactured by Flanders / CSC (or equivalent) and will be one filter high by two filters wide. There will be tracks for 2" deep 25-30% ASHRAE prefilters, 12" deep 95% ASHRAE intermediate filters and high capacity HEPA filters. The housing will have doors for each filtration stage and will be constructed of 304 stainless steel. There will be a weather cap for outside installation and (2) mounted magnahelic gauges. The prefilters will be Camfil Farr type 30/30, the intermediate filters will be Camfil Farr type RF-200 and the HEPA filter will be Camfil Farr type 1561.

This configuration of scrubber, final filtration system and evaporator act as a closed looped system for near zero discharge of radioisotopes. The intermediate filters and HEPA filters are designed to collect residual airborne radioactive particulates from the scrubber and evaporator and act as a final polishing system.

Emissions from the Envitech scrubber exceed the requirements for the Medical Waste NESHAP. Emission summaries from recently tested units are enclosed in Attachment E. We are proposing to use the secondary chamber temperature as the primary incinerator exhaust monitor, and the scrubber pH, water and caustic flow rates and activated carbon usage rate as the primary scrubber data record keeping method.

3.3 REGULATORY RULE APPLICABILITY ANALYSIS

We are proposing to use the emission limits from 40 CFR Part 60 Subpart Ec for small (less than 200 lbs/hr) medical waste incinerators. The following emission limits are allowed and corrected to 7% O2; Particulate matter = 0.03 gr/dscf; carbon monoxide = 40 ppm; dioxins/furans = 2.3 ng/dscm TEQ; HCl = 15 ppm or 99% reduction; SO2 = 55 ppm; NOx = 250 ppmv; lead = 0.52 gr/1000 dscf or 70% reduction; cadmium = 0.07 gr/1000 dscf or 65% reduction; and mercury = 0.24 gr/1000 dscf or 85% reduction.

The radioisotope emission limits are detailed in the NESHAPS requirements of 40 CFR. SPF will request an amendment to their Radioactive Materials License No. R-86011-K06, concurrent with this application or seek a new license for this system. We have assumed that the State's Division of Radiological Health will oversee the radiation safety approval and the Health Department will oversee the non-radiation safety regulatory approval. However, we are prepared to answer any questions on the radiologic aspects of the incinerator posed by the Department. Radioactive contaminant monitoring equipment will be proposed to the State by SPF and may change based on the State's response.

The proposed incinerator was originally permitted by Shelby County air permitting section in accordance with 40 CFR Part 60, Subpart Ec, "Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced After June 20, 1996". The reason we applied this NSPS to this small LLRWI was for several reasons;

- 1. The incinerator would process animal carcasses and pathological tissues.
- 40 CFR Part 60, Subpart CCCC does not apply and references Subpart Ec for the pathological waste.
- 3. A separate Rule under 40 CFR parts 60 or 63 or TDEC does not exist for LLRWI.
- 4. Subpart Ec is well defined and understood by the regulatory agency for compliance purposes.

3.3.1 SUMMARY OF RULE REVIEW

The following rules in the current permit may still apply:

- 40 CFR 60 subpart Ec: (Medical Waste Incinerators NSPS-Federal Air Standards)
 - o 40 CFR 60.52c
 - o 40 CFR 60.54c
 - o 40 CFR 60.55c
 - o 40 CFR 60.56c
 - o 40 CFR 60.57c

- o 40 CFR 60.58c
- o 40 CFR 60.58c(c)
- Exemption from 40 CFR 63 subpart EEE (Hazardous Waste Incinerators NESHAP)
- 40 CFR 268 (land ban restrictions)
- 40 CFR 261 (hazardous waste disposal)
- 49 CFR 100-177 (transportation of hazardous waste)
- 49 CFR 172.101 (hazardous waste table)
- 10 CFR 20.2006 (manifests for shipping LLRAW)
- NUREG-0722 (radiation regulations)
- TDEC Chapter 1200-2-5 (radiation dose limits)

The following rules in the current permit will no longer apply:

- City of Memphis Code Section 16-91.1, Reference 1200-3-25-.06
- City of Memphis Code Section 16-84
- City of Memphis Code Section 16-85, Reference 1200-3-10
- City of Memphis Code Section 16-87, Reference 1200-3-25-.09
- City of Memphis Code Section 16-87, Reference 1200-3-25-.10

After performing searches through 40 CFR handbooks and google.com, it was found that no new Federal air pollution rules apply at this time to LLRWI.

The State of Tennessee does not require a P.E. signature on the construction permit application for a minor source.

3.3.2 DISCUSSION OF RULE REVIEW

This incinerator was permitted in Memphis in a similar manner to a medical waste incinerator. Specifically, we negotiated with the City of Memphis to apply 40 CFR part 60, Subpart Ec; the NSPS for medical waste incinerators. The reasons for this strategy was as follows:

- 1. There are no federal air rules in 40 CFR for LLRWI,
- 2. Animals and other radioactive pathological wastes were to be incinerated in this LLRWI,
- 3. Subpart Ec is well understood by the regulators and provides reasonable assurance that the LLRWI will be well controlled and monitored, and
- 4. The equipment was designed to meet these requirements.

The City of Memphis has several medical waste incinerators to regulate so this was a comfortable area for them. We propose the same strategy for the SPF location.

The incinerator was exempt from 40 CFR Part 63 Subpart EEE NESHAP for hazardous waste combustors since no "hazardous waste" per 40 CFR Part 261 was being combusted. In the construction permit application we provided a list of all waste that will be incinerated.

The list of waste proposed in the previous permit is as follows:

- Paper
- Plastic
- Wood
- Animal carcasses and tissue
- Waste EDTA
- Lubricants

The City of Memphis codes will no longer apply. We researched Unicoi County and there is no local environmental permitting agency for air pollution sources in the County. Permits will be applied for through TDEC.

STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF AIR POLLUTION CONTROL



9th Floor, L & C Annex 401 Church Street Nashville, TN 37243-1531 Telephone: (615) 532-0554 FAX: (615) 532-1

NOV 2 2 2006

NOT TO BE USED FOR TITLE V APPLICATIONS

PERMIT APPLICATION

APC 20

PLEASE TYPE OR PRINT AND SUBMIT DESCRIPTION FORMS.	IN DUPLICATE F	OR EACH EMIS	SION SC	DURCE. ATTACH APPROPRIATE SOURCE
1. ORGANIZATION'S LEGAL NAME Studsvik, Inc.			/ / / FOR	APC COMPANYPOINT NO.
2. MAILING ADDRESS (ST/RD/P.O. BOX) 151 T.C. Runnion Rd.		/// APC	APC LOG/PERMIT NO.	
CITY Erwin	STATE TN	ZIP CODE 37650		PHONE WITH AREA CODE 423-735-6300
3. PRINCIPAL TECHNICAL CONTACT Jeffrey A. Deeds, Director, SPF Regulatory Compliance				PHONE WITH AREA CODE 423-735-6300
4. SITE ADDRESS (ST/RD/HWY) 151 T.C. Runnion Rd			;	COUNTY NAME Unicoi
CITY OR DISTANCE TO NEAREST TOW Erwin, TN	ZIP CODE 37650		PHONE WITH AREA CODE 423-735-6300	
5. EMISSION SOURCE NO. (NUMBER WHICH UNIQUELY IDENTIFIES THIS SOURCE)		PERMIT RENEW YES ()	VAL NO (x)	
001				

6. BRIEF DESCRIPTION OF EMISSION SOURCE

The owners of Studsvik. Processing Facility, LLC has purchased Radiological Assistance, Consulting & Engineering (RACE), LLC of Memphis, TN who owns a low-level radioactive waste incinerator (LLRWI) permitted by Shelby County, TN under construction permit 00928-001C. The LLRWI is equipped with a high efficiency wet scrubber and waste water treatment system (evaporator) for near zero discharge of radioisotopes. The unit was constructed but has never been started at the Memphis location. Studsvik is requesting a permit to relocate this incinerator, scrubber and evaporator to their Erwin, TN facility.

A detailed source description is attached to this application.

7.	TYPE	OF	PERMIT	REQUE	STED

CONSTRUCTION	STARTING DATE	COMPLETION DATE	LAST PERMIT NUMBER	EMISSION SOURCE REFERENCE NUMBER
(X)	December 2006	December 2008	none	001
OPERATING	DATE CONSTRU- CTION STARTED	DATE COMPLETED	LAST PERMIT NUMBER	EMISSION SOURCE REFERENCE NUMBER
LOCATION TRANSFER	TRANSFER DATE	N	LAST PERMIT NUMBER	EMISSION SOURCE REFERENCE NUMBER
(X)	December 2006 (pro	posed)	00928-011C (Shelby Co)	001
ADDRESS OF LAS	T LOCATION			

R.A.C.E., LLC 2550 Channel Ave, Memphis Tennessee, 38113

8. DESCRIBE CHANGES THAT HAVE BEEN MADE TO THIS EQUIPMENT OR OPERATION SINCE THE LAST CONSTRUCTION OR OPERATING PERMIT APPLICATION.

None, the unit was constructed on President's Island in Memphis, TN in accordance with the plans and specifications approved by Shelby County.

9. SIGNATURE (APPLICATION MUST BE SIGNED BI	EFORE IT WILL BE PROCESSED)	DATE 11/2006
10. SIGNER'S NAME (TYPE OR PRINT) Maurice P. Carson	TITLE President	PHONE WITH AREA CODE 423-735-6300

TABLE OF POLLUTION REDUCTION DEVICE OR METHOD CODES (ALPHABETICAL LISTING)

bte: FOR CYCLONES, SETTLING CHAMBERS, WET SCRUBBERS, AND ELECTROSTATIC PRECIPITATORS. THE EFFICIENCY RANGES

HIGH: 95-99+%. MEDIUM: 80-95%. AND LOW: LESS THAN 80%. IF THE SYSTEM HAS SEVERAL PIECES OF CONNECTED CONTROL EQUIPMENT, INDICATE THE SEQUENCE, FOR EXAMPLE: 008'010.97%.

IF NONE OF THE BELOW CODES FIT, USE 999 AS A CODE FOR OTHER AND SPECIFY IN THE COMMENTS.

NO EQUIPMENT	000
ACTIVATED CARBON ADSORPTION)48
AFTERBURNER-DIRECT FLAME)21
AFTERBURNER-DIRECT FLAME WITH HEAT EXCHANGER)22
AFTERBURNER-CATALYTIC)19
AFTERBURNERCATALYTIC WITH HEAT EXCHANGER	120
ALKALIZED ALUMINA	140
CATALYTIC OXIDATION-FLUE GAS DESULFURIZATION	139
CYCLONEHIGH EFFICIENCY0	07
CYCLONEMEDIUM EFFICIENCY	08
CYCLONELOW EFFICIENCY0	09
DUST SUPPRESSION BY CHEMICAL STABILIZERS	
OR WETTING AGENTS0	62
ELECTROSTATIC PRECIPITATOR-HIGH EFFICIENCY	10
ELECTROSTATIC PRECIPITATOR-MEDIUM EFFICIENCY	11
ELECTROSTATIC PRECIPITATOR-LOW EFFICIENCY	12
FABRIC FILTER-HIGH TEMPERATURE	16
FABRIC FILTER-MEDIUM TEMPERATURE	17
FABRIC FILTER-LOW TEMPERATURE	18
FABRIC FILTER-METAL SCREENS (COTTON GINS))9))
	23
GAS ADSORPTION COLUMN-PACKED	50
AS ADSUKPTION COLUMN-TRAY TYPE)]
S SCRUBBER (GENERAL: NOT CLASSIFIED)	13

LIMESTONE INJECTIONDRY	041
LIMESTONE INJECTION-WET	042
LIQUID FILTRATION SYSTEM	049
MIST ELIMINATOR-HIGH VELOCITY	014
MIST ELIMINATOR-LOW VELOCITY	015
PROCESS CHANGE	046
PROCESS ENCLOSED	054
PROCESS GAS RECOVERY	060
SETTLING CHAMBER-HIGH EFFICIENCY	004
SETTLING CHAMBERMEDIUM EFFICIENCY	005
SETTLING CHAMBERLOW EFFICIENCY	006
SPRAY TOWER (GASEOUS CONTROL ONLY)	052
SULFURIC ACID PLANT-CONTACT PROCESS	043
SULFURIC ACID PLANTDOUBLE CONTACT PROCESS	044
SULFUR PLANT	045
VAPOR RECOVERY SYSTEM (INCLUDING CONDENSERS,	
HOODING AND OTHER ENCLOSURES)	047
VENTURI SCRUBBER (GASEOUS CONTROL ONLY)	053
WET SCRUBBER-HIGH EFFICIENCY	001
WET SCRUBBER-MEDIUM EFFICIENCY	002
WET SCRUBBERLOW EFFICIENCY	003
WET SUPPRESSION BY WATER SPRAYS	061

TABLE OF EMISSION ESTIMATION METHOD CODES

NOT APPLICABLE EMISSIONS ARE KNOWN TO BE ZERO	0
EMISSIONS BASED ON SOURCE TESTING	1
EMISSIONS BASED ON MATERIAL BALANCE USING ENGINEERING EXPERTISE AND KNOWLEDGE OF PROCESS	2
EMISSIONS CALCULATED USING EMISSION FACTORS FROM EPA PUBLICATION NO. AP-42 COMPILATION OF	
AIR POLLUTANT EMISSIONS FACTORS	3.
JUDGEMENT	4
EMISSIONS CALCULATED USING A SPECIAL EMISSION FACTOR DIFFERING FROM THAT IN AP-42	5
OTHER (SPECIFY IN COMMENTS)	6

STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF AIR POLLUTION CONTROL

TO BE USED FOR TITLE V APPLICATIONS



9th Floor, L & C Annex 401 Church Street Nashville, TN 37243-1531 Telephone:(615) 532-0554 FAX: (615) 532-06

2

INCINERATOR SOURCE DESCRIPTION

APC 25

PLEASE TYPE OR PRINT, SUBMIT IN DUPLICATE, AND ATTACH TO THE PERMIT APPLICATION.

1. ORGANIZATION NAM Studsvik, Inc.	E	÷					/ F	OR	APC COM	IPANY	- POINT NUMBER	
2. EMISSION SOURCE NU 001	U MBER (AS ON	N PERMIT	APPLICAT	ION)	5	IC CODE	/	/ / \PC	APC PERM	MIT / L	OG NUMBER	
3. SOURCE LOCATION:	CATION: LATITUDE 36.128487			LONGITUDE 82.435615			UTM VERTICAL 3998.95 km N		UTM HORIZONTAL 17-370.81 km E			
4. TYPE OF WASTE BURN (USE CODE FROM TABLE C	NED ON BACK)		CHA	ARGING	RATE (P	OUNDS/H	OUR)		TONS BUI	RNED	PER YEAR	
6			AVERAGE 200			DESIGN 400			1752 maximum			
5. INCINERATOR MANUL Texas Incinerator Company,	FACTURER Inc.				M C	IODEL NU -200	JMBE	R	DATE INS location. I	TALLE	D Not yet installed at this d at present location 2003	
6. INCINERATOR TYPE:	SINGLE CHAMBER		MULTI-CHAMBER primary & secondary		ER R dary L	REFRACTORY LINED Castible			AUXILIARY BURNERS Primary and secondary burners			
7. NORMAL OPERATION:	HOURS / DAY 24		DAYS / WEEK 7		W 52	WEEKS / YEAR 52			DAYS / YEAR 365			
8. PERCENT ANNUAL THROUGHPUT:	DEC FEB. 25	MARCH - MAY 25			JUNE - AUGUST 25			SEPTEMBER - NOVEMBER 25				
9. BURNER DATA:	BURNI	ER CAPAC	TTY (BTU/HOUR)						AIR FLOW (CFM)			
	PRIMARY SEC 1 mmbtu/hr N 1 mr			ONDARY/AFTERBUR			OVERFIRE		UNDERFIRE 5900 ACFM @ 1850 F total air volume			
	DOES UNIT I	HAVE CO	NTROLLED	OR STA	ARVED A	'R?	YES	s xx	NO			
10. AUXILIARY FUEL DATA:	PRIMARY Natural gas	FUEL TY	PE (SPECIF	FY)	STANDE none	Y FUEL	TYPE ((SPEC	IFY)			
FUEL	ANNUAL USAGE	HOURLY USAG		Y USAGE % SULF CONTE		FUR % ASH B ENT CONTENT C		BTU OF	BTU VALUE FOR APC USE ON OF FUEL (SCC CODE)		FOR APC USE ONLY (SCC CODE)	
NATURAL GAS	10 ⁶ CU FT ~1000 Max =2000	DESIGN AVG. CU FT CU FT 4160 225		r		1 / /	11	B	TU/CU FT 1,000			
#2 FUEL OIL	10 ³ GAL	GAL	GAL			11	1.1					
LIQUID PROPANE	10 ³ GAL	GAL	AL GAL			11	/ /	BTU/GAL 85,000				
OTHER (SPECIFY TYPE & UNITS)		<u>.</u>								<u>`</u>		
11. STACK OR EMISSION POINT DATA: 001	HEIGHT ABO GRADE (FT) 79	VE C	DIAMETER	(FT)	ТЕМРЕ 120	RATURE	(°F)	DIST PRO 151	FANCE TO I	NEARI E (FT)	EST	
DATA AT EXIT CONDITIONS	FLOW (ACTU. 1452	AL FT ³ /MI	N)	VELO 14	CITY (FT/	SEC)		MOI 6.7	STURE CON	NTENT	· (%)	
DATA AT STANDARD CONDITIONS	FLOW RATE	(DRY STA	NDARD CL	JBIC FE	ET PER M	INUTE)		L				

APC 25

.

12. AIR CONTAMINANTS	EMISSION	CONCENTRATION		AVERAGE EMISSIONS	EMISSIONS EST METHOD		CONTROL DEVICES	CONTRO	
	AVERAGE			(TON/YEAR)	(SEE N	OTE I)	(NOTE I)	(%)	
PARTICULATES (SEE NOTE 2)		0.18		GR/DSCF @ % oxygen	0.79	6		001, 021, 048	99
SULFUR DIOXIDE		0.38	55 1	PPM @ 7% oxygen	1.66	6		001, 021, 048	95
CARBON MONOXIDE		0.12		PPM @ 7% oxygen	0.53	6		001, 021, 048	95
ORGANIC COMPOUNDS		Neg	7	Neg PPM	Neg	6		001, 021, 048	99
NITROGEN OXIDES		1.25	250	PPM @ 7% oxygen	5.48	6	··········	none	0
FLUORIDES	· ·	Na	Na PPM						
OTHER (SPECIFY) Matala D/F		See spreadsheet				6		001, 021, 048	99
13. SCRUBBER	MANUFACTUR	ER & MODEL NU	MBER	WATER FLO	W (GALLONS / N	(INUTE)	SCRUE	BBER PRESSUR	E DROP (INC
DATA:	Envitech Model	FC2B high efficier	ncy	Approximatel	ly 4-5		OF WA 43	TER)	
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STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF AIR POLLUTION CONTROL



9th Floor, L & C Annex 401 Church Street Nashville, TN 37243-1531 Telephone:(615)532-0554 FAX: (615)532-061

NOT TO BE USED FOR TITLE V APPLICATIONS

EMISSION POINT DESCRIPTION

APC 22

PLEASE TYPE OR PRINT	AND SUBN	MIT IN DUPLI	ICATE FOR EACH S	FACK OR EMISSIC	N POINT.		leve -	
ATTACH TO THE PERM	T AFFLICA	110IN.					ANV POINT NO	
1. URGANIZATION NAM	E					APC COM	ANY POINT NO.	
Studsvik, Inc.					FOR		•	
2 EMISSION SOURCE NO) (FROM APP	PLICATION)	FLOW DIAGRAM P	OINT NUMBER		APC SEOU	ENCE NO.	
001		2.0)	001	0			5.021.01	
					APC			
3. LOCATION:	LATITUDE		LONGITUDE		UTM HORI	UTM HORIZONTAL		
	36.128487		82.435615	l	17-370.81 k	m East		
<u> </u>	L			·				
4. BRIEF EMISSION POIN	T DESCRIPT	FION (ATTACH	I A SKETCH IF APPRO	PRIATE):		DISTANCE	TO NEAREST	
Discharge stack from scrubb	er is fiberglass	s reinforced pla	stic. Detailed specifical	tions and drawings ar	e attached to this	PROPERTY	' LINE (FT)	
application.				4		151 4		
			· .			151 to west		
COMPLETE LINES 6 AND 6	IE DIFFEDEN	TEDOMTHAT	ON THE DROCESS OR		UDCE DESCRIPT			
CONFLETE LINES 5 AND 0	L UOUDGO		DAVERUEDU	L WEEK OVE AD		DAVORT	D	
5. NORMAL	HOURS/DA	Ŷ	DAYS/WEEK	WEEK/YEAR		DAYS/YEA	к	
OPERATION:	24			52		303		
→								
6 PERCENT ANNUAL	DEC -FEB		MARCH-MAY	IUNE-AUG		SEPT -NOV		
THROUGHPUT:	25		25	25		25	•	
->	1		1. T.					
7. STACK OR EMISSION	HEIGHT AE	BOVE	DIAMETER	TEMPERATURE	% OF TIME	DIRECTION	OF EXIT	
POINT DATA: GRADE (FT)			(FT)	(°F)	OVER 125°F	(UP, DOWN	OR	
	_	5				HORIZONT	AL) up	
→.	79		2	120 -	negligible			
DATA AT EXIT	FLOW (ACT	'UAL	VELOCITY	MOISTURE		MOISTURE		
CONDITIONS:	FT ³ /MIN.)		(FT/SEC)		(PERCENT)	•		
	1452		14	na		6.7 (estimate	(D)	
DATA AT STANDARD	FLOW (DPV	V STD	VELOCITY	MOISTUDE		MOISTUDE		
CONDITIONS:	FT ³ /MIN) 1236		(FT/SEC)	(GRAINS/FT ³)		(PERCENT)		
Combinens.			13.7	na		6.7 (estimate	d)	
\rightarrow							-,	
8. AIR CONTAMINANTS	- •	AC	TUAL EMISSIONS	<u> </u>	[T	
	EMISSIONS	(LBS/HR)	CONCENTRATION	AVG. EMISSIONS	EMISSIONS*	CONTROL	CONTROL	
	AVERAGE	MAXIMUM		(TONS/YR)	EST.	DEVICES*	EFFICIENCY%	
PARTICULATES			0.03 gr/dscf @ 7%			001.021.		
		0.18	oxygen	0.79	6	048	99	
SULFUR			55 ppm@ 7%			001, 021,		
DIOXIDE		0.38	oxygen	1.66	6	048	95	
CARBON			40 ppm @ 7%			001, 021,		
MONOXIDE		0.12	oxygen	0.53	6	048	95	
ORGANIC					-	001, 021,		
COMPOUNDS		Negligible	negligible	negligible	6	048	99	
OVIDES		1.25	250 ppm(a) /%	. = 40		001, 021,		
ELUOPIDES		1.25	oxygen	5.48	<u> </u>	048	<u> </u>	
FLOOMDES		Na		•		1	· ·	
OTHER(SPECIFY)		See				001, 021.		
metals		attached	5 m.		6	048	99	
OTHER(SPECIFY)						001, 021,		
D/F					6	048	99	

aissions were calculated by using the allowable limits as the emission factor

CN-0742 (Rev. 9/92)

٠.

APC 22

9. CHECK TYPES OF MONITORING AND RECORDING INSTRUMENTS THAT ARE ATTACHED: OPACITY MONITOR (), SO2 MONITOR (), NOX MONITOR (), OTHER (SPECIFY IN COMMENTS) (x)

10. COMMENTS

Atudsvik is proposing to install a small radiological waste incinerator at their Erwin, TN facility. The incinerator will process low level radioactive waste composed of paper, plastic, wood, animal carcasses, and lubrication oil. The proposed incinerator is a Texas Incinerator Co., Inc. Custom Model C-200 with a maximum charging rate of 2.4 MMBTU/hr. Detailed design criteria (Attachment A) and drawings (Attachment B) are attached to this application. The primary chamber has been oversized to provide a design heat release of 12,400 BTU/cf with complete waste burn-down and a secondary chamber residence time in excess of 1 second at 1850 degrees F. The secondary chamber will be equipped with a thermocouple and chart recorder to continuously measure and record the exit temperature of the secondary chamber. The purpose of the incinerator is to reduce the volume of the radiological waste.

The exhaust gases from the incinerator will be controlled by a Envitech Model FC2B Flux Force Condensing Incinerator Gas Cleaning System (a high efficiency wet scrubber and acid gas neutralizer). The scrubber water will be evaporated in an Envitech Model EC 100 scrubber water evaporator system rated at 100 GPH. The scrubber consists of acid neutralization, carbon injection and final HEPA filtration. This configuration will result in a near-zero discharge pollution control system. Drawings (Attachment C) and specifications (Attachment D) are enclosed. The solids from the scrubber and the residuals and ash from the incinerator will be collected, properly packaged for shipping and disposal to an approved radiological waste disposal facility.

Emissions from the Envitech scrubber exceed the requirements for the Medical Waste NESHAP. Emission summarizes from recently tested units are enclosed in Attachment F. We are proposing to use the secondary chamber temperature as the primary incinerator exhaust monitor, and the scrubber pH, water and caustic flow ites and activated carbon usage rate as the primary scrubber data record keeping method. Ambient air samples at the property lines will be sampled and analyzed for monitoring radiation emitted from the system. Emissions are calculated in the attached spreadsheet and based on 8760 hrs/yr.

We are proposing to use the emission limits from 40 CFR Part 60 Subpart Ec for small (less than 200 lbs/hr) medical waste incinerators. The following emission limits are allowed per the rule and are corrected to 7% O2; Particulate matter = 0.03 gr/dscf; carbon monoxide = 40 ppm; dioxins/furans = 2.3 ng/dscm TEQ; HCl = 15 ppm or 99% reduction; SO2 = 55 ppm; NOx = 250 ppmv; lead = 0.52 gr/1000 dscf or 70% reduction; cadmium = 0.07 gr/1000 dscf or 65% reduction; and mercury = 0.24 gr/1000 dscf or 85% reduction.

The radioisotope emission limits are detailed in the State of Tennessee's "Standards for Protection Against Radiation", schedule RHS 8-30, Table II, Column 1. Studsvik will request an amendment to their Radioactive Materials License, concurrent with this application. We have assumed that the State's Division of Radiological Health will oversee the radiation safety approval and the TDEC will oversee the non-radiation regulatory approval. However, we are prepared to answer any questions on the radiological aspects of the incinerator posed by the Department. Radioactive contaminant monitoring equipment will be proposed to the State by Studsvik and may change based on the State's response.

11. ISIGNATURE DATE

REFER TO THE BACK OF THE PERMIT APPLICATION FORM FOR ESTIMATION METHOD AND CONTROL DEVICE CODES. EXIT GAS PARTICULATE CONCENTRATION UNITS: PROCESS — GRAINS/DRY STANDARD FT3 (70°F); WOOD FIRED BOILERS — GRAINS/DRY STANDARD FT3 (70°F); ALL OTHER BOILERS — LBS/MILLION BTU HEAT INPUT.

*** EXIT GAS SULFUR DIOXIDE CONCENTRATIONS UNITS: PROCESS — PPM BY VOLUME, DRY BASES; BOILERS — LBS/MILLION BTU HEAT INPUT.

GAS FLOW RA	TE						N2 CO2
1236	DSCFM	% 02 DRY=	12.89				H2O
2102	DSCMH	% MOISTURE= ASSUMED	6.70				
	LIMIT	VALUE AT				TPY AT	ł
POLLUTANT	7%02, DRY	12.9% O2, DRY	UNITS	DENSITY @ STP, LB/SCF	POLLUTANT FLOW RATE, LB/HR	8760 HR/YR	
PM	0.05	0.029	GR/DSCF	N/A	0.30	1.34	1
co	40	23.0	PPM	0.0717	0.12	0.54	
DIOXIN/FURAN	2.3	1.3	NG/DSCM	N/A	6.13E-09	2.68E-08	
HCI	100	57.6	PPM	0.0896	0.38	1.68	
SO2	55	31.7	PPM	0.164	0.38	1.69	
NOX (NO2)	250	143.9	PPMV	0.118	1.26	5.51	
LEAD	0.52	0.299	GR/DSCF	N/A	3.17	13.89	
CADMIUM	0.07	0.040	GR/DSCF	N/A	0.43	1.87	1
MERCURY	0.24	0.138	GR/DSCF	N/A	1.46	6.41	1

LB/HR LB/CF CF/HR 794 0.0819 9694.75 4429 0.0717 61771.27 421 0.1127 3735.581 249 0.0461 5401.302 80602.9 %O2= 12.03 %O2 DRY= 12.89

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Studvik Incinerator Timeline (Selected News articles)

- Feb. 2, 2007 Plant seeks radioactive incinerator, Johnson City Press
- Feb. 3, 2007 3 Mayors to meet on incinerator proposal, Johnson City Press
- Feb. 6, 2007 3 mayors question Studsvik's plans, The Erwin Record
- Feb. 6, 2007 Anti-incinerator petition circulates, Johnson City Press
- Feb. 7, 2007 Studsvik's incinerator plan must be stopped, Johnson City Press
- Feb 7, 2007 Studsvik puts incinerator plan temporarily on hold, Johnson City Press
- Feb. 8, 2007 Letter to Editor, Sign petition today, Johnson City Press
- Feb. 8, 2007 Studsvik officials say unit necessary, Johnson City Press
- Feb. 11, 2007 Erwin's BMA joins incinerator debate, Johnson City Press
- Feb. 11, 2007 Opinion/Commentary Cartoon, "It's just a little incinerator" Studsvik, Inc. Radioactive Incinerator, Johnson City Press
- Feb. 13, 2007 Town wants more information on incinerator
 Incinerator Controversy, Studsvik answers questions from mayors, public, Letters to Editor, "No to Incinerator" and "Thanks for speaking up" w/Cartoon "Morning George, Morning Bob"
 EDB director praises Studsvik, doesn't endorse plan
 Editorial, "We, the public, should take notice"
 Classifieds: PUBLIC NOTICE Town Meeting
 The Erwin Record
- Feb. 13, 2007 Building official to advise Studsvik, Johnson City Press
- Feb. 13, 2007 County officials, Studsvik execs discuss incinerator issue; construction put on hold, Valley Beautiful Beacon
- Feb. 15, 2007 State extends incinerator comment period, Johnson City Press
- Feb. 16, 2007 Studsvik scraps incinerator, Public opposition prompts company decision, Johnson City Press
- Feb. 17, 2007 Public meeting about incinerator canceled, Johnson City Press
- Feb. 20, 2007 Studsvik backs off plans for incinerator, The Erwin Record
- Feb. 20, 2007 Viewpoint: Dancing around the facts won't keep us informed, The Erwin Record

JOHNSON (ITY PRESS, Feb. 2, 2007 PAGES IA+5A



Plant seeks radioactive incinerator

Erwin company says \$2 million project would reduce amount of contaminated material shipped out for disposal.

By Jim Wozniak Erwin Bureau Chief woznjak@johnsoncitypress.com

ERWIN — An industry herewants to install a radioactive waste incinerator at its processing facility, a project the company said will not harm the public or the environment and will, generate 15 "high-paying" jobs

Studsvik, Inc., which employs 82 people and processes radioactive waste at 151 T.C. Runnion Road, is seeking a permit from the Tennessee Division of Air Pollution, Control. Company President Mike Hill said in a statement that the incinerator would treat items such as laboratory smocks and gloves "that are slightly contaminated with lowlevel radioactivity." The project

Studsvik Inc. is seeking a permit from the state.

Jim Wozniak/Johnson City Press

will cost the company more than \$2 million

In its application to the state, Studsvik said the "small" incinerator would process waste consisting of things such as papers, plastic, wood, animal carcasses and lubrication oil

"This process will greatly reduce the amount of contaminated waste materials that Studsvik currently ships for longterm disposal," Hill said. "Studsvik will also offer the treatment process to its customers. None of the materials processed at the Studsvik facility in Erwin are disposed of within the state of

See PLANT, Page 5A

JUHNSON (ITY PRESS. Feb. 2, 2007, Page 5A

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Continued from Page 1A

Tennessee.'

A 30-day comment period expired Jan 12, and the state is drafting a permit, said Vera T. Davis, environmental field office manager for the state Department of Environment and Conservation in Johnson City. She said the state is reviewing the public's comments and will submit the draft to the Johnson City office for review in two or three weeks.

County Mayor Greg Lynch is not necessarily opposed to Studsvik's plan but said he thinks the state should hold an informational meeting. Studsvik would not do anything that would put its employees at risk, so the community can assume the project will be safe, he said. But Lynch said Studsvik should explain the details

"This is pretty important," he said "Everybody knows what an incinerator does. It burns up stuff, and everybody knows that an incinerator puts out a byproduct; which would be smoke or vapors containing stuff. As far as the best interests of the people of Unicoi County, we need to find out exactly what's going on with this."

Lynch said he has talked to two people in the nuclear industry about the incinerator and said one of them was "moderately, concerned." But another person with whom he talked said if the incinerator is not run correctly, it might release more than the legal amount of contaminants. Hill said the community should

not be concerned. "The control system for the

incinerator virtually eliminates pollution of any type so that we are confident that the new system will have no negative impact on our employees, the public or the environment;" he said. "Proven evaluation of the unit shows that air emissions will be half of 1 percent of federal and state limits."

According to the application, exhaust gases will be controlled by a "high-efficiency" wet scrubber and acid gas neutralizer. Water used in the scrubber will be evaporated.

Studsvik said it would seek an amendment to its, radioactive materials license at the same time as this application "or seek a new license for this system."

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JOHNSON (ITY PRESS', Feb. 3, 2007 FRONT PAGE + PAGE 8

3 mayors to meet on incinerator proposal

Saturdav

February 3, 2007

Planned radioactive waste device draws concerns from Erwinarea residents.

By Jim Wozniak Erwin Bureau Chief Iwozniak@johnsoncitypress.com

ERWIN — As concern in the community "surfaces" about the proposal of a local plant to install/ a "radioactive" wasteincinerator, the mayors of the three governments in Unicol County plan to meet next week to discuss it among themselves and with the company.

Erwin Mayor Brushy Lewis, County Mayor Greg Lynch and Unicoi Mayor Johnny Lynch have heard concerns from residents about Studsvik Inc.'s request for a permit from the state. They said Studsvik officials never mentioned the idea of an incinerator when they talked to them recently, and Lewis

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Page 8A, Johnson City Press.

Mayors

4 Continued from Page 1A

said he has problems with the proposal.

"The information he (President Mike Hill) gave wasn't anything about an incinerator," Lewis said of their meeting about six weeks ago. "It was about a piece of equipment that was going to help them some on eliminating some of their residue that they accumulate out there at the plant. I didn't know there was an incinerator because incinerators work pretty good, but then when they malfunction, they really do malfunction."

Fill said Thursday that Studsvik would incinerate materials, such as laboratory smocks and gloves "that are slightly contaminated." The company's application to the state says it would incinerate paper, plastic, wood, animal carcasses and lubrication oil, The document said exhaust gases will be controlled by a "high-efficiency" wet scrubber and acid gas neutralizer.

The 30-day comment period has ended, and the state is drafting a permit for Studsvik

Hill could not be reached for comment Friday, but he said in a news release Thursday that the incinerator would cause no risk to the public or environment. The mayors will ask Hill to hold public meetings to detail

what Studsvik has in mind. Because the plant is near houses, officials do not want those residents to fear contamination, Lewis said. Greg Lynch said Studsvik called him Friday to say the company would be happy to meet with him, but he wants all of the mayors to take part.

"I'm not against it, I just want "If we give up jobs and the community to be comfortable from industries, so be a with it," he said. "If they can't be said. "I'd rather be alive."

comfortable with it, then we may have to make other arrangements." Lewis said he has received about 12 calls from people who are concerned about the project and said Town Hall has received about 20.

Sam Pinkerton, of Erwin, does not think the public has been well-served because public notice was limited to a legal notice in the Erwin Record, a weekly newspaper. He said these types of projects tend to start out small and then mushroom. Pinkerton said Studsvik eventually might ship in items from outside the community and wonders whether the scrubbers will be effective all of the time.

Pinkerton also thinks the incinerator might, have a negative effect on efforts to promote tourism, in Unicol County Pinkerton and his wife, Chris Tipton, also fear dwindling property values "We want a healthy place to live and retire," Pinkerton said "We don't need to worry whether their scrubber emits some kind of heavy metals."

Tipton said her No 1 concern about the incinerator is its possible effect on health. She cited a New England Journal of Medicine study that concluded air quality in the United States, needed to improve She said heavy metals in the air particularly affect women's health-

Studsvik said the incinerator will cost the company more than \$2 million and generate more tax dollars for the county and more business for local companies, but Tipton said there is something more important at stake. "If we give up jobs and goodies from industries, so be it," she



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Tuesday. February 6. 2007. Erwin. TN 37650

Inserts Include Counons & American

3 mayors nuestion Studsvik's plans

Company says radioactive incinerator will bring \$2 million investment, jobs

By JERRY HILLIARD ASSOCIATE EDITOR

Exactly.what's in the works at the Studsvik Inc. plant in Erwin remained unclear Monday to the three mayors in Unicol County. But Johnny Lynch, mayor of the town of Unicoi, said: "In response to the public outcry. I think we need to do something to contaminated with low-level radioactivity. find out." Erwin Mayor Brushy Lewis have planned a

meeting for 4 p.m. Tuesday in the court house's first-floor conference room. They will sit down with Mike Hill, president of the Studsvik processing facility in Erwin, who on Monday described the local uproar as surprising. The three men will discuss the firm's application for a license to install an incinerator to process materials A legal notice submitted by the Tennes He Unicol County Mayor Greg Lynch and see Division of Air Pollution Control ap-Please see STUDSVIK, Page 10-A

STUDSVIK Continued from Page 1-A peared in the Dec. 12, 2006, issue of The Erwin Record. It gave the public 30 days to respond to a request from Studsvik "to obtain an air contaminant permit for construction of a Low-Level Radioactive Waste Incinerator."

"This proposed operation," the ad continued, "would consist of the LLRWI with a high efficiency wet scrubber and wastewater treatment system (evaporator). There would be physical construction.

"Regulated air contaminants are expected to be emitted by this source. Particulate matter, sulfur dioxide, carbon monoxide, volatile organic compounds, and heavy metals emissions would be controlled by the wet scrubber."

Hill met individually with the three mayors in December to tell them about growth plans, but none of them can recall his making any mention of the word "incinerator."

Hill said he didnit publicize plans for the incinerator becauses it seemed to be "such an inconsequential part of what we do." "I didn't anticipate this being a true concern to the public," he said. "The mayors I spoke with didn't seem to perceive that it was, either." The Studsvik president said the discussions with the mayors did not get into technical aspects of the project; instead focusing mainly on the mayors' questions about safety, public health and the creation of tobs.

"We don't even call this an "Incinerator," Hill said. "We use its proper name, which is a thermal processing unit." And that's the term Hill said he used in talking with the mayors. Lewis said his understanding after the discussion was that the company simply would be expanding and installing new equipment.

"Nothing was said about an incinerator," he said. "Under normal conditions, an incinerator might be safe, according to state regulations. But I believe that anytime you have emissions going out of stacks, it's dangerous to the public." Greg Lynch said that after word began to spread about an incinerator, "People sort of got on me for not knowing what was happening. If anything was mentioned about a radioactive incinerator in my meeting with Mike Hill, I guess I didn't hear it."

Accompanying the county mayor on the December visit with Hill was Ed Herndon, the local emergency management director. Herndon agreed that the word incinerator 'wasn't used with us."

If it had been, Herndon said, "We would have asked more questions. In the past, incinerators in other places have caused some problems," included were leaks of hazardous materials into the air or onto the ground. However, Herndon said, "If used properly, this can benefit the public and be a safe and economical process for disposing of radio-

"We're typically considered to be the 'good guy' - the environmental arm of this industry. We've been a very good neighbor for eight years." - Mike Hill

active waste. But I think everyone needs to be informed on what's happening out there." The deadline for public comment has passed, and the state reportedly is in the process of drawing up a permit for the incinerator. "However, I think the De-

partment of Environment and Conservation might be willing to call a hearing for informational purposes." Herndon said

He emphasized the fact that Studsvik deals with material "that's barely radioactive when it comes in" - not weapons-grade material As a result, it is not regulated the same way as the Nuclear Fuel Services Inc. plant in Erwin. According to Herndon, the state of Tennessee allows certain levels of emissions "in practically everything."

In a news release issued last week, Hill explained that installation of the in-cinerator would create about 15 high-paying jobs at the plant. It also would represent a \$2 million in-"The control system for the incinerator virtually eliminates pollution of any type," Hill said in the re-lease, "so we are confident that the new system will have no negative impact on our employees, the public or the environment. Proven evaluation of the unit shows that air emissions will be half of one percent of federal and state limits." On Monday, Hill said the waste incinerator would be used initially to process "slightly contaminated" materials from the plant such as clothing, mops and rags. "Should the equipment prove to be as stable and efficient as intended," he said, "it may be possible to process some of the waste from (our plant in) Memphis, as well. In a year or two, Hill said, the company would like to be able to offer the process to its "commercial nuclear clients," meaning nuclear power plants.

He said that even if the power plants were served, no more waste would be coming into the community than is currently the case. "We are serious about operating our plant in a safe and environmentally responsible manner," Hill added. "The new process will actually reduce the volume of waste generated by our own plant and help other companies do the same." Maurice Carson, president of Studsvik Inc., explained that 90 percent of the local processing facility is owned by Studsvik Inc.

The remaining 10 percent is owned by Nuclear Fuel Services Inc. of Erwin. Carson said the firm takes in low-level radioactive waste from nuclear power plants, processes it thermally to reduce its volume, and turns it into a more stable form. The material is then hauled by truck to dis posal sites in South Carolina and Utah.

The Erwin Record, Feb 6, 2007, Page 10A

The waste mars trans-ported is much better suited for protection from the biosphere, "Carson said It is shipped from the plant in high-intensity containers. The Studsvik officials said the thermal process now being used here handles 600 times the amount of radioactivity that would be handled by the incinerator Frankly, I'm surprised. Hill said of the negative response that has devel-oped in the county toward. We're typically considered to be the good guy - the environmental arm of this industry. Mdustry We've been a very good, neighbor for eight years, and we want to be for 80 more. We would never do anything that would endan-ger either our employees or the community Hill said the plant is a "zero liquid release facility," meaning that no liquids are present that could be accidentally released into the ground. He added that gaseous releases are predominantly nonradioactive, and that the small portion that is radio-active is about 1/10,000th of what federal regulations

set as the maximum. Hill pointed out that Studvik's parent company in Sweden has operated a much larger waste incinerator for 15-20 years and has had no problems with leaks.

One fear expressed by the three mayors is that installation of the incinerator would mean that the amount of dangerous material being brought into the county would increase dramatically. "If they would be bring-ing in more waste from other places, I'm definitely against it." Johnny Lynch said Monday. "But I don't know if that's what they're planning to do planning to do Lynch first heard from concerned citizens who sus-pected Studsvik was plan-ning to store a larger quantity of radioactive waste atthe Erwin facility. "Then," he said, "I started getting calls about an incinerator "I don't like what I've heard, and I want an expla-nation from the company After all, the wind blows straight up the valley from Erwin to Unicol: On Monday, local resi-dents Sam Pinkerton and Chris Tipton began circu-lating a petition opposing Studsvik's plans. By late afternoon, they already had collected more than 75 names. Tipton said she and other opponents of the incinera-tor will be at Erwin Town Hall from 4:30 to 8 p.m. Thursday to answer questions and gather more signatures for the petition.

THE ERWIN RECORD, FEB. 6, 2007

PAGE 1- A

Community opposition helped block similar project in Memphis

By JERRY HILLIARD Associate Editor

A groundswell of opposition followed by city ouncil action in 2005 blocked construction of a for the local plant. nuclear-waste incinerator, The Memphis facil: ly industrial area near at aplant in Memphis, that ity was owned in 2005 working class residences since has been purchased by RACE Holdings LLC, in South Memphis by Studsvik Inc.

Studsvik Processing Fa- The West Tennessee op-cility LLC in Erwin con- eration now is known as firmed Monday that the Studsvik/RACE incinerator once planned Two years ago, RACE for Memphis is the same applied for a permit to one that is being proposed build the incinerator on

by Studsvik Inc. which was acquired by Mike Hill, president of Studsvik in April 2006

Presidents Island, a main-

Joan Carr, assistant Please see BLOCK, Page 10-A

PAGE 10-A

BLOCK

Continued from Page 1-A public information officer for the Memphis and Shelby County Health Department, explained that the application process re-quired that plans be submitted to the de-partment's pollution-control section.

The plans for the incinerator were found by the health department to meet all legal requirements

Because radiological waste was involved; approval was also sought and received from the radiology division of the Tennessee Department of Environment and Conservation, which issued a license

At that point, opposition from residents and environmental groups grew, and the Memphis City Council stepped in According to Carr, the council turned to an obscure law requiring a special waste permit to build something such as the incinerator on Presidents Island. It eventually ordered a three year moratorium on RACE's plans, after which the company would be allowed to reapply for a permit.

Hill said the moratorium actually stemmed from legal negotiations with the company that went beyond the issue of an incinerator – for which permits already had been approved – and included plant expansion

No local approval is needed for construction of the incinerator, Hill said, but company officials hope they will have support of the community.

He said 15 new jobs would be created by installation of the incinerator, which would be in operation around the clock seven days a week.

Hill pointed out that the company has a "very high" safety record in Unicol County since going into operation in 1999, and no. radioactivity-related injuries.

He said the Tennessee Department of Radiological Health makes surprise visits to the plant at least annually, spending a week or more "digging through whatever" and conducting interviews. The company itself has a number of safety committees.



JOHNSON (174 PRESS Tuesday February 6, 2007

PAGE 1

Anti-incinerator petition circulates About 100 have signed on so far against Studsvik plan

By Jim Wozniak

Erwin Bureau Chief jwozniak@johnsoncitypress.com

ERWIN — Opponents of a plan to put a radioactive waste incinerator at an industry in town secured more than 100 signatures, including a Nuclear Regulatory Commission employee, in the first day a petition was circulated, a leader in the movement said Monday.

Studsvik Inc. seeks a permit from the state to install the incinerator at its processing facility, 151 T.C. Runnion Road. The public comment period has ended, and the state is drafting a permit that, if granted, would be used to burn laboratory smocks and gloves, paper, plastic, wood, animal carcasses and lubrication oil.

The company contends the public should not worry about the project. President Mike Hill said Monday that Studsvik operates at one ten thousandth of the federal limit on radioactive emissions. What Studsvik intends to burn in the incinerator would be one six hundredth as radioactive, he said. Hill said he is surprised the public has such a negative impression about incinerators.

Many in the community do view the picture as rosy or simply want more information about what has been proposed. Among the more than 100 names on the petition were union employees of Nuclear Fuel Services, said Sam Pinkerton, who helped circulate petitions. Union President Debra

See **PETITION**, Page 8A



Pam Wilson signs a petition opposing a proposal from Studsvik Inc. to build a radioactive waste incinerator at its plant in Erwin as Chris Tipton looks on. JOHNSON CITY PRESS Feb. 6, 2007, PAGE 8

Page 8A, Johnson City Press Petition

Continued from Page/1A

Greene'said the members were concerned about the effect the incinerator might have on the community. Another signer was Stephen Burris, an NRC employee who is senior resident inspector for the federal agency at NFS' Eiving less than a mile from Studsvik, he said he signed it as a citizen because he wants to know more about what the company plans to burn and from what communities the state will allow the industry to bring in waste. "A better informed person can

"A better informed person can make a better decision," Burris said "I'm not really opposed to the philosophy of the incinerator."

That is a far cry from the views of Chris Tipton, who vehemently opposes what Studsvik has in mind. She said she feels threatened by the incinerator and believes the company has been deceptive in its handling of the project.

Erwin Mayor Brushy Lewis, Unicoi County Mayor Greg Lynch and Unicoi Mayor Johnny Lynch plan to meet today at 4 pm at the courthouse to discuss the subject, and Hill said he hopes to get an invitation. The mayors said they never were told about the incinerator when Hill talked to them about the project Hill said the meeting was general and concerned company expansion, but he said he told the mayors that Studsvik intended to add an extra thermal processing line, which meant incineration.

the petition and in the community is that Radiological Assistance, Consulting and Engineering, now a subsidiary of Studsvik Inc., tried to put an incinerator in Memphis but did not succeed in the end. It's the same, type of incinerator that Studsvik proposes to use in Erwin, but Hill said there is no correlation to the situation on the west end of the state. Bob Rogers, manager of pollution control in the Memphis/Shelby County Health Department; said his office. granted a permit for the incinerator. But opponents discovered another, unrelated permit was necessary and a settlement led to RACE obtaining that permit but either forgoing or not receiving the incinerator permit. Hill said his plant, which is a sister company to RACE, is better suited to operate the incinerator.

. One of the concerns raised in

When the petitions are finished being circulated, they will be submitted to the state, Tipton said. She said she already has been in contact with state Rep. David Hawk, R-Greeneville, and she will be at Town Hall from 4:30-8 p.m. Thursday so people can sign the petition or ask questions.



Wednesday, February 7, 2007

Johnson City Press, Page 5A

Studsvik's incinerator plan must be stopped

Studsvik Inc. has dealt the citizens of Erwin and Unicoi County a low, deceiving blow. Their recent decision to build an incinerator for shipped in radioactive waste without competent notification to officials or the public has left them with no credibility in this community. The mayor of the county, along with the mayors of Erwin and Unicoi did not know about Studsvik's plans for an incinerator.

There were no reports to the press by the Economic Development Board or from our state representatives. The entire plan points to intentional deception.

Studsvik attempted to build an incinerator in Memphis, but the Health Department and Memphis City Council denied their request citing health concerns and property values. No wonder Studsvik is trying to sneak into our community an incinerator that no one else wants. Why would anyone here be in support of an incinerator that would put more pollutants in our air, water and soil?

Studsvik already has emissions that I would have to question, especially since trust in their community relations has been violated. The possibility of accidents or terrorism turns all of this into a nightmare There will be protest petitions circulated and meetings. I cannot emphasize enough how important your support is against this critical development.

For the sake or our community, lets pull together and speak out. For information about the petition, call Chris Tipton by Saturday at 735-0272.

JOHNSON CITY PRESS PAGE 1 Wednesday

February 7, 2007

From left, Mayors Brushy Lewis, Johnny Lynch and Greg Lynch discuss

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the incinerator plan with Marty Carson and Mike Hill of Studsvik Inc.



Studsvik puts incinerator plan temporarily on hold

Permit application to continue; officials aim to address questions on plan.

By JIM WOZNIAK Erwin Bureau Chief jwozniak@johnsoncitypress.com

ERWIN — Facing vehement opposition in the community; Studsvik Inc. said Tuesday that it has put on hold its plan to install a radioactive waste incinerator here until it can address concerns and questions people have raised.

There is no timetable when the company would lift the project from the shelf, but Studsvik representatives said they plan to spend about the next week compiling the concerns. In addition to the views the company already has heard, President Mike Hill said Studsvik would work with the three mayors in Unicoi County and other community leaders to get a feel for what is on the community's mind.

"Depending on the nature of the questions and our ability to respond in a prompt and thorough fashion, that will pretty much drive the term here for how long we keep the project on hold," Hill said after a 1 1/2-hour meeting with the mayors that was opened to the public. He said the company probably would answer people with a letter or in person.

Hill's boss, Marty Carson, said the company has not put on hold its permit application with the state Department of Environment and Conservation's Divison of Air Pollution Control because it does not want to disrupt that process.

But the application for a companion radioactive materials license that Studsvik staff have compiled will not be submitted to the state during this interim period, he said. He said the state would have to grant that license before the company could install the incinerator.

"There really isn't a change in sentiment, but it's more an issue of what's the right thing to do;" Hill said "It's become apparent to us that there are questions here in the community that can be properly answered, and so we have elected to put the project on hold in order to be able to address some more of these questions and concerns of the community." He said the company preferred to

See INCINERATOR, Page 7A

Johnson City Press Feb: 7, 2007, Page 7A

Incinerator

Continued from Page 1A

respond to people's concerns in a one-on-one session or through small groups but not in a large setting. Unicoi County Mayor Greg Lynch, Erwin Mayor Brushy Lewis and Unicoi Mayor Johnny Lynch want a community meeting, but Hill said the state is more geared to organize such an event.

Carson said Studsvik did not try to sneak the project through but said it probably did not prop-

erly prepare the community for the incinerator plan. "In hindsight, would we have done it differently?" Carson asked. "Yeah, I think we would have. I don't know how we would have reacted, but we would have done it differently. I think "We would at least have been aware." Erwin resident Chris Tipton said Tuesday that more than 250 people had signed a petition since it had started being circulated Monday in opposition to the incinerator. Hill 'said no one had contacted him to express feelings

《小学》(1.9·2011年) against the project but he said people have called him to support what Studsvik has in mind and its presence in the community. County Commission Chairman Doug Bowman said Tuesday that he supports Studsvik's plan. Having performed some work as a contractor for the company, he believes it is a "good corporate citizen." He said Unicol County needs to be industry friendly and thinks government regulators will ensure everything is running properly. Commissioner Gene Wilson onn seolar vista it is de l'était

spoke out against Studsvik's proposal, and Commissioner Mitzi Bowen signed the petition, saying she does not believe the incinerator would be good for the community. Lewis said he does not back the project and thinks the town's aldermen have the same view. Johnny Lynch said no one has called in favor of the incinerator. "If I had my druthers, I would rather that you didn't pursue this," he said. "I just don't have a good feeling about it." **Opinion/Editorial**

Thursday, February 8, 2007

Sign petition today

Page 6A, Johnson City Press

If the radioactive waste incinerator being proposed for Unicoi County is permitted; it would be an injustice for all cit-

izens in our community and surrounding area. Are we to believe that management did not realize our citizens would not want pollutants, such as radioactivity, heavy metals and who knows what else in our air This facility, not even regulated by the National Regulatory Commission, is inspected once annually by the state. Studsvik assumed we would sit back and let them do what they wanted to our "Valley Beautiful:" Our local agent of the NRC has serious concerns regarding this project. At a meeting with the three mayors of governments in Unicoi County on Tuesday evening, it was brought out that Studsvik agreed to put this project on hold temporarily, but wanted to have "one-on-one" meetings instead of large community meetings so they can use the divide and conquer approach to water down community opposition. We cannot permit this to happen.

Please come to Erwin Town Hall today from 4:30-8 p.m. to sign the petition in protest of the incinerator. SAM PINKERTON

Erwin
Johnson City Press



Studsvik officials say unit necessary

Plant officials give more details about incinerator.

By Jim WozNIAK Erwin Bureau Chief jwozniak@johnsoncitypress.com

ERWIN — Although an industry here on Tuesday temporarily cooled its plan to build a radioactive waste incinerator at its plant, company officials gave elected officials and the public a clearer idea of their plans when the project reignites.

But Studsvik Presidents Marty Carson and Mike Hill also faced pointed questions from Erwin Mayor Brushy Lewis about the safety of company employees and the effect the operations there have had on nearby Nuclear Fuel Services. The questions surfaced during a meeting Unicoi County's three mayors had with the company that also was attended by about 20 elected officials and residents.

Studsvik has applied for a permit from the Tennessee Department of Environment and Conservation's Air Pollution Control division to build the incinerator, which would burn items such as laboratory coats and smocks, paper, plastic, wood, animal carcasses and lubrication oil. Hill said the incinerator would be small and occupy the equivalent of about half of one seating area in the large courtroom in the courthouse. "We need it here to improve our business and give us a more secure footing to where we can keep this company in operation for many years to come," Hill said of the incinerator "Cosis continue to increase, disposal capacity continues to decline, and this is the safest way to dispose of this type of material."

About 250 people had signed a petition opposing the incinerator as of Tuesday. Chris Tipton, who was helping circulate the petition, said people in Washington and Carter counties called Wednesday to oppose the incinerator, and County Mayor Greg Lynch, who shares that view, said the feedback he was getting continued to be more negative than positive.

See UNIT. Page 3B

Hill said the Erwin plant, which mostly accepts radioactive waste from commercial users, not the government or the medical community, wants to use the unit mostly to process its internal waste.

"This waste is very lightly contaminated, if contaminated at all," Hill said. "And we generate a fair amount of that — 50 pounds to 100 pounds of this material a day — which is composed predominantly of our laboratory smocks and protective clothing."

According to Hill, the cost to dispose that material has become expensive and the places available to which it can be sent have decreased. That led Studsvik to turn to the incinerator to reduce the amount of radioactive material and save money. He said shipments could drop to one one hundredth what they are today.

'If there's reserve capacity in the unit, I would desire to process a limited quantity of this lowactivity waste for the commercial nuclear industry We have looked at opening this operation up to our commercial clients'

> - Mike Hill, Studsvik president

Lewis wondered whether Studsvik would bring in waste from all over the country to Erwin, and Hill said it is possible

a "limited quantity" of items could come here.

"If there's reserve capacity in the unit, I would desire to process a limited quantity of this low-activity waste for the commercial nuclear industry," Hill said. "We have looked at opening

this operation up to our commercial clients. There's tremendous interest in doing so, but we're very landlocked. One or more of the mayors here has voiced their desire that Studsvik not expand its current boundaries."

Lewis said he has learned from a Nuclear Regulatory Commission employee that emissions from Studsvik have sometimes caused alarms to sound at NFS. Hill said NFS, which is a minority owner of the Erwin Studsvik plant, has never told him that such events have taken place or expressed concern.

The mayor said he also has heard that some employees have become overexposed in the plant and been forced to "sit out" until a new counting period starts.

Hill said the federal limit for ionizing radiation exposure for occupational workers in the United States is 5 rem a year, which he called conservative. He said Studsvik has set a internal limit of 3-3.5 rem per year, and if an employee does not properly manage his exposure, that person can be moved to an administrative job or possibly fired.

"The key point in all of this is we have never laid an employee off as a result of approaching this administrative limit," Hill said. "We spend many, many thousands of dollars educating them and, in many cases, many years. Typically, we're counseling them on a daily basis."



LOCAL/UPSTATE

Sunday, February 11, 2007

Erwin's BMA joins incinerator debate device would process items such as laboraitem but said he felt that regulators and item but said he felt that regulators and

Erwin Bureau Chief Jwozniak@johnsoncitypress.com

ERWIN — The town's Board of Mayor and Aldermen is entering the debate about an industry's plans to install a radioactive waste incinerator as plans begin to take shape for a public meeting the state tentatively will hold. later this month on the project. At its meeting Monday at 6:30 p.m., the BMA will consider a possible way it might be able to stop the incinerator project at Studsvik Inc.'s processing facility, 151 T.C. Runion Road: through its zoning code: Mayor Brushy Lewis said Building Inspector Brian Hensley will detail a section of the code that enables him to deny a building permit if a project is reasonably deemed to be harmful. "He would like to have the authority to do this, and I'm going to recommend that we give (it to him)," Lewis said. "We're going to do everything we can to stop this due to the hazard that it could cause to the community. Studsvik has applied for a permit from the Tennessee Department of Environment and Conservation's Division of Air Pollution Control to install a small incinerator. The

device would process items such as laboratory coats and smocks, paper, plastic, wood, animal carcasses and lubrication oil. The state is drafting the permit, which would be sent to the department's Johnson City office for review.

The company also needs a companion radioactive materials license, but it has elected not to submit that application until it responds to questions and concerns from the community.

The project has created an outcry in Unicoi County and opposition from its three mayors, and a petition against the incinerator is circulating within the community. Studsvik President Mike Hill said last week that the only comments directed to him prior to a meeting at the courthouse Tuesday had been positive.

Among Lewis' concerns are the proximity of churches, Love Chapel Elementary School, Erwin Health Care Center and residential homes to Studsvik.

"We just feel like it is something the community doesn't need," Lewis said. "We want to try to help our businesses, but we just feel like that this is something we really don't need."

Hill said he had not heard about the agenda

item but said he felt that regulators and experts on incinerators should decide whether the one proposed for the plant here is safe. He said it is "somewhat dangerous from an economic development perspective" for someone who is not an expert in that field to make such a determination.

Meanwhile, County Mayor Greg, Lynch said state representatives are tentatively set to come to Unicoi County High School on Feb. 22 for a meeting on the incinerator. He said comments made at the meeting would not be considered "on the record" because the official public comment period expired Jan. 12.

Many people were unaware of the public notice about the project and 30-day comment period. Lynch said he, Lewis and the Unicoi Mayor, Johnny Lynch, have written the state asking that time frame to be extended.

State Rep. David Hawk, R-Greeneville, said he believes it would be wise for the state to grant the request.

Greg Lynch said he hopes the meeting will have an impact on the state's decision about granting the initial permit. Hill is aware of the meeting but said he will-not-know until Monday whether Studsvik will participate





BY BRYAN STEVENS STAFF WRITER

Town of Erwin Building Inspector Brian Hensley announced Monday evening that approving Studsvik's planned incinerator would be contingent on information the company provides.

Hensley addressed the Board of Mayor and Aldermen, informing members that due to a number of phone calls and intense media attention he felt he should provide an update.

"I haven't been directly contacted by a Studsvik representative and informed of their plans." Hensley said, "so I'm currently writing a letter to Studsvik to outline the information that I will need in order for a building/use permit for a M-1 Industrial District."

Hensley spoke during the BMA meeting in which the board's agenda listed the item as a report / on a potential zoning ordinance violation at Studsvik.

Hensley told the board that his understanding of the incinerator project has led him to believe "the



Mike Hill and Marty Carson, center and right, listen as the county's mayors look in during a meeting.

installation of this equipment ing/zoning department would could affect the current acceptable use of the property.' Hensley said the town's build-

need to approve any change to the current acceptable use of Studsvik's property at 151 T.C.

Runnion Road: "Once the proper plans and specifications have been submit-Please see INSPECTOR, Page 9-A



By JERRY HILLIARD Associate Editor

Reacting to a request from Unicol County's three mayors. the Tennessee Division of Air Pollution Control announced Monday that it was scheduling a town meeting on the proposal by Studvik Inc. to install a radioactive-waste incinerator . The division, part of the Tennessee Department of Environment and Conservation, also extended a public-comment period on the company's application for a state permit. In a legal notice published on Page 2-C in today's issue of The Erwin Record, the state agency explains that Studsvik is seeking an air-contaminant. permit for the low-level radio Please see STATE. Page 8-A

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active waste incinerator at its Erwin plant

The town meeting is planned for 6:30 p.m. Thursday, Feb 22. In the Unicol County High School auditorium. Written comments from the public will be accepted for 10 days after the meeting

"This proposed source," the notice says: "consists of the LLRWI with

a high efficiency wet scrubber and wastewater treatment system (evaporator). There will be physical construction.

"Regulated air contaminants are expected to be emitted by this source. A wet scrubber will control emissions." Anyone wishing to express concerns or make comments in writing may send them to Barry R. Stephens, Director, Division of Air Pollution Control,

Ninth Floor, L&C Annex, 401 Church St., Nashville, TN 37243-1531. Erwin Mayor Brushy Lewis said her expects the agenda of the town meeting to open with statements by representatives from the state and Studvik, if it accepts an invitation to participate.

After the mayors make comments and ask questions; members of the audience will be allowed to do the same. THE ERWIN RELORD Feb. 13, 2007, Page 9A

Continued from Page 1-A ted, I can determine if this is an acceptable use for this zoning district." Hensley explained.

The board heard the report but made no comment.

After the meeting adjourned; City Recorder Randy Trivette told The Erwin Record the town would not normally make such a request regarding land use from a company.

"It's in the paper, on the radio," he said. "We're be-ing bombarded with phone calls.

Trivette also referred to a petition being circulated City Press that also sug-against the Studsvik proj-ect. content of the board might try to deny a permit to Studs-

"We did this as a cour-esy," Trivette said. "We're tesv." just taking the proper steps and ensuring we treat, everyone the same.

Trivette said Hensley felt It necessary to address the board because no Studsvik personnel, had contacted him regarding the proposed incinerator.

Mayor Brushy Lewis said after the meeting that he had fielded personally more than 100 phone calls re-garding the Studsvik project.

Prior to Monday's meet ing, Lewis said in a different interview with The Erwin Record that the Board of Mayor and Aldermen would receive a recommendation from Hensley that Studsvik be denied a construction permit.

That, however, did not occur when Hensley spoke Monday night.

 Contacted after the meeting which he did attend. Studsvik President Mike Hill said Hensley's statement to the board seemed "reasonable and consistent with his job requirements." Hill explained he attended the meeting because of a story in Sunday's Johnson

"We did this as a courtesy. We're just taking the proper steps and ensuring we treat everyonethe same." City Recorder **Randy Trivette**

vik for its incinerator.

Mayor Brushy Lewis told the Press that he was going to do "everything we can to stop this due to the hazard that it could cause to the

community" He also said Hensley "would like the authority" to stop the project, and the mayor said he would like to see that the building inspector was given that authority

Hill said he attended the meeting to "answer any questions.

"I am quite comfortable answering any questions they may have," he said

Noting that his company does everything in a step-wise fashion after consultation with engineers. Hill noted there was a good rea-son Studsvik had not vet asked for a building/use permit.

There's no reason to request a permit if we could not receive a license for said operation," Hill said. A public meeting will be held Feb. 22 at Unicoi County High School for the public to ask additional questions about Studsvik's plans to install a radioactive waste incinerator.



By Lesley Hughes Staff Writer

On Tuesday, Feb. 6, Studsvik officials told the mayors of Unicol County's three municipalities – and about 20 members of the general public – that it will put on hold plans to install an incinerator at its Erwin facility.

The announcement came as a surprise. The meeting was called after Unicol County Mayor Greg Lynch: town of Unicol Mayor Johnny/Lynch, and town of Erwin Mayor Brushy Lewis questioned the expansion plans of the Erwin nuclear company.

Following several days of questions from the mayors and some members of the community. Studsvik officials agreed to meet with the mayors and explain their position. The meeting was originally scheduled for the conference room in the Unicol County Courthouse, but the meeting was moved upstairs to the large courtroom to make room for the public and media

The state of Tennessee published a public notice in the Dec. 12 issue of The Erwin Record concerning Studsvik's plans. The pub-lic had a 30-day period to respond with questions or concerns The public notice was not placed by Studsvik. It was placed – as public no-tices from the state are – by the governing body: in this case, the Tennessee, Department and Environmentand Conservation Some members of the public = in-cluding the three mayors - said they didn't read the public notice, which was published on Page 2-C on the newspaper's main Classified page, which is where state public notices are generally placed.



Erwin residents' David Stepp, left photo, and Christine Tipton asked questions of Studsvik officials last week.

The mayors also complained that when Studsvik President Mike Hill met with them several weeks ago he only said the plant had plans to expand but

never mentioned the word. "incinerator:"

In Tuesday's meeting. Hill and his Studsvik boss. Marty Carson, outlined the company's plans and of-fered assurances that the incinerator would be safe. and even said Studsvik has a reputation as an environmentally friendly company Carson said the company which is headquartered in Sweden and has oper-ated the Erwin facility for the past eight years will actually be helping the en-vironment by reducing the amount of radioactive waste deposited in landfills. Carson and Hill took questions from the mayors as well as the general pub-lic. About half way through the meeting, Carson handed. Greg Lynch a press release that announced Studsvik's plans to put the project on

hold.

"Our, policy, is and has always, been to be open to public comment, and we do hope to be able to reassure everyone living in Erwin and the surrounding area that this is a positive investment for the area with economic and environmental benefits for the U.S. and local population," Hillis quoted in the press release. The release went on to say that Studsvik will "place

the incinerator project on hold in order to provide an opportunity to more fully address questions and concerns, regarding the proj-

ect." "I am confident that once people know the facts about our proposal any fears they may have will be alleviated." Hill said in the release. But even after Greg Lynch amounced that the project was on hold, mayors Brushy Lewis and Johnny Lynch both said they have no intentions of supporting the project. Several members of the audience also said they will not support Studsyk's plans no matter how much information is provided.

The ERWIN RECORD, 13 Feb 07, Puge 9A

Petition opposing incinerator growing

By Lesley Hughes Staff Writer

Nearly 200 individuals signed a petition opposing the addition of an incinerator at Studsvik only a day after 250 signatures were collected by residents against the expansion.

Christine Tipton and her husband, Sam Pinkerton, of Erwin organized a meeting at Erwin Town Hall on Thursday to allow citizens to sign the petition and speak to each other about the proposed incinerator for Studsvik.

Two days before, Studsvik President Mike Hill met with mayors of the three governments in Unicol County to answer questions and discuss concerns about the expansion which could bring 15 high-paying jobs to the community.

In reaction to Tuesday's meeting with Studsvik and the mayors, Tipton was pleased that issues were addressed to

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Hill and his boss, Marty Carson.

"I think the meeting went really well," she said. "I think Studsvik understands that there is definitely opposition in this community."

Tipton hopes to collect thousands of signatures before turning the petition into the Tennessee Department of Environment and Conservation.

The deadline to turn the documents in is Feb. 20. A meeting will be held by TDEC on Feb. 22 at 6:30 p.m. in the Unicol County High School Auditorium.

Besides signatures being collected, donations were also accepted to pay for yard signs opposing the plant expansion. Copies of the petition are in several places around town, including the Unicoi County Courthouse in the county mayor's office and register of deed's office, Erwin Town Hall and Unicoi Town Hall

For more information about the petition, call Tipton at 735-0272.

Erwin resident Christine Tipton, who had already started circulating a peti-tion to stop the project, stood and told Hill that she is "very much against this." "People are mad here." Tipton said. "People don't want this incinerator. We've had just about enough here. There's a lot of fear about what can happen. This is one step too much for this community Hill reminded Tipton that Studsvik and Nuclear Fuel Services, which owns about 10 percent of Studsvik, would be some of Unicol County's largest employers. Studsvik alone employs

about 80 people. Tipton responded that because the nuclear industry employs so many people in Unicoi County that many people are afraid to speak out against the proposal for fear of losing jobs or someone in their family will lose their job

"We simply don't want this," Tipton said. "We are under stress. We don't want Studsvik. We don't want you here. We don't want an incinerator here David Stepp asked about the relationship between NFS and Studsvik's expansion. Stepp said NFS was building a storage facility and asked if Studsvik had plans of using the NFS site to store materials before they are incinerated "We have no intention of using NFS storage for any of our waste;" Carson said. "That is absolutely not go-ing to happen." Other citizens addressing Hill and Carson asked ques-tions about NFS, to which both replied that they do not work for NFS and could not answer questions about the company

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THE ERWIN RECORD, Feb. 13, 2007



No to incinerator

To the editor, Radioactive waste incinerator. The words that were not mentioned to three very capable and competent mayors by Studsvik President/Mike Hill

Hill said he didn't publicly plan for the new incinerator because it seemed to be "such an inconsequential part of what we do." Look up the meaning of the word inconsequential. It is not logical with the words radioactive waste incinerator. Nor is it common sense.

Radioactive waste incinerator are very consequential words to a lot of people. Our mayors would have remembered them. If this incinerator is so safe, why doesn't Memphis want it?

If this is so safe, I'm sure Mr. Hill can find other towns and locations for such an "inconsequential part of what they do." Memphis doesn't want it, why would Erwin?

We absolutely do not want other people's radioactive and nuclear waste, nor radioactive waste incinerator. Mr. Hill, haven't you

heard you take your garbage out - not bring it home with you? Not in our town and not in our backyard.

John and Wanda Sue Kelley, Erwin



Thanks for speaking up To the editor, I would like to thank so

many concerned citizens who have signed the petition against the building of a radioactive incinerator at Studsvik.

I need as many signatures as we can get by Feb. 20, so that I will have them before a TDEC meeting.

You can still sign the opposition petition at Erwin and Unicol town halls and in Mayor Greg Lynch's office in the courthouse. You can call me at 735-0272 or Kathy Thornberry at 743-3323 for assistance. In Greeneville, petitions are at the Greeneville, Public Library or you can call Valerie, Wall at 639-8338. The more signatures we have the stronger our voice is against this assault on our community. We cannot stand by and let Studsvik make us into a "test site" for its incinerator in the U.S.A.

As stated in the Greeneville Sun. Studsvik had a press release on Jan. 17 about a technical failure in Erwin in October 2006. In the release, Studsvik stated, "Unfortunately, technical faults occur, and we can never fully protect ourselves from them:"

Residents and workers in this community have assumed enough risk to their health and property. Studsvik needs to take its incinerator somewhere else! Call and send your comments to TDEC's office in Johnson City to elected officials, to elected representatives and to Gov. Bredesen. Again, thanks for standing up for our community and a big thank you to the elected officials who have spoken out in opposition to a radioactive incinerator in the midst of our people. Come to the TDEC meeting on the 22nd. The time and location will be announced in the newspaper. **Chris'Tipton**, **Erwin**



THE ERWIN RECORD, Tuesday, February 13, 2007, Page 9-A

By MARK A. STEVENS PUBLISHER

The executive director of the Economic Development Board of Unicol County and the Town of Erwin Inc. praised Studsvik for being a "good supporter of the community

Doris Hensley stopped short, however, of offering an endorsement of Studsvik's planned incinerator, which company officials said amounts to a \$2 million improvement at its Erwin facility. Studsvik officials also say the incinerator could add as many as 15 "high-paying jobs" to the county's workforce Hensley said it was not up to her to offer an opinion on Studs-

vik's plans, but she said the board Could take a stand. "I don't think we do have a posi-tion at this point." she said "We haven't met as a board to discuss it. I can't say that I know enough about the nuclear industry to comment on it.

Hensley said she expected the EDB's executive board to meet by the end of the month. "It would be up to the chairman if he wanted to put it on the agen-da." she said. "Of course anyone on the board can discuss it. Randy Trivette, who serves as city recorder for the town of Erwin, is the EDB's chairman Studsvik President Mike Hill is also a member of the EDB, and Hensley said Hill could ask the

board to take a position on the controversial issue

"Tm sure he could ask," she said "Whether the board would take a position, I can't say." Hensley said the EDB would take into account the expansion and number of jobs the plan would create.

'I think one of the things that the Economic Development Board is conscious of is the need to create new jobs in the county and support local industries, however we want to protect the flavor of our county and conservation of our county," she said: "At this point, I really know enough about the nuclear industry just to be dangerous.

"I think the best thing to do is

let the people who are professionals decide what is safe and what isn't safe. The people at Studsvik are good citizens and employ-ees a lot of people in our county. and I would hope and think that Studsvik wouldn't do anything that would be detrimental to our county

Personally, Hensley said she simply wants more information. "I think that, speaking for me, anything that I'm not familiar with scares me," she said, "but that's not to say that there is anything here to scare me

"I think that Studsvik has been a good supporter of the county and a good corporate citizen that has helped tremendously, even with our school system and charitable

organizations. Studsvik has been a good asset to Unicol County." Hensley also praised Studsvik for opening a local corporate headquarters in the old rescue. squad building.

"In fact that was a public building not generating tax dollars." she said, "and the county and the city collects tax dollars on it. I know they were really cramped for office space and using outdoor. trailers.

According to the assessor of property's office; Studsvik paid more than \$75,000 in property tax last year for its plant facility on Runnion Road and its corporate headquarters in downtown Erwin.



e, the public, should take notice

How easy it is to become complacent.

Do we really need any more evidence of that than the clamor that has erupted in recent days over Studsvik siplans to install an incinerator at its Erwin facility?

The state of Tennessee placed a public notice in the classifieds of The Erwin Record on Dec. 12 and offered citizens a 30-day publiccomment period, but many folks including the mayors of our three municipalities - said they didn't see the advertisement. (It was published on Page 2-C, the newspaper's main Classified page, the usual location for the state's public notices.)

The thing about a public notice is that the state government says it will give notice, but it's up to the public to, well, take notice. We can't really complain about that After all, we're taught as chil-

dren that we must be responsible for our actions - or, sometimes, our inaction: It's a lesson that we adults best remember - especially here in Unicoi County.

If we want to be responsible citizens, we must take note of what hap-

pens around us, especially when the government offers us that rare opportunity to make our voice heard.

The ad concerning Studsvik's proposed incinerator is not the first notice in recent months to be placed by the state of Tennessee for public consumption concerning a local industry. On Oct. 3, the Tennessee Air Pollution Control Division - the very



same government then

agency that placed the Studsvik noday review plan for Morrill's "dip-coating operation." lt's easy – and, perhaps, down-right stupid – to not pay close at-

notices - even if the government does publish them in small print and in legal-speak. We want to assume that the state or federal agency oversee ing the quality of our water and air will do the proper testing and too. But only an informed popu- if that means reading the small lace can ever be sure of that - if print.

The fact of the matter is our county relies heavily on big industice - offered a 45 stry - two companies in the ballbearing business, myriad plastics companies; a tire plant, just to name a few. Of course, there are the two major nuclear companies. too - Studsvik and Nuclear Fuel Services

With that much heavy industention to these try in our midst, newspaper reporters, mayors and all citizens should do a better job in paying attention to those public notices. Not all public notices will bring about such an outcry as has Studsvik's planned incinerator. But if the state and/or federal monitoring. We want to assume government is going to make an that the companies who will be effort to inform us and by golly. pumping materials into our air ask our opinion, we should be and streams will be responsible, willing to pay attention - even



PUBLIC NOTICE **Town Meeting** The Tennessee Division of Air Pollution Control (TDAPC) has received requests for construction of air contaminant sources as noted below. The proposed construction is subject to part 1200-3-9: 01(I)(h) of the Tennessee Air Pollution Control Regulations which requires a public notification and 30-day public comment period: Interested parties may express their comments and concerns in writing to Mr. Barry R. Stephens, Director', Division of Air Pollution Control, 9th Floor, L&C Annex, 401 Church Street, Nashville, Tennessee 37243-1531 Questions concerning a source may be addressed to the assigned Division personnel at the same may be addressed to the assigned Division personnel at the same address or, by calling 615-532:0554. A town meeting is scheduled for February 22:2007 at the Unicol County High School (700 South Monawk Street) in Erwin, Ten-nessee. The meeting will start at 6:30 EST in the auditorium, The Jechnical Secretary has agreed to reopen the comment period and take relative Comments if submitted within ten (10) days after the date of the town meeting. and take relative comments if submitted within ten (10) days after the date of the town meeting: Individuals with disabilities who wish to participate should contact the tennessee Department of Environment and Conserva-tion to discuss any auxiliary aids or services needed(to)facilitate such participation. Such contact may,be in person by writing, telephone, or other means, and should be made no less than ten days prior to the end of the public comment period to allow time to provide such aid or services. Contact the Tennessee Depart-ment of Environment and Conservation ADA Coordinator 12th Floor, 401f Church Street, Nashville-TN 97243; 1-866-253-5827 Hearing impaired callers may use the Tennessee Relay Service. Hearing impaired callers may use the Tennessee Relay Service, 1-(800)-848-0298 The applicant is <u>Studsvik: Inc.</u> with a mailing address of 1<u>51</u> T.C. Runnion Road, Erwin, TN 37650. This company seeks to obtain an air contaminant permit (Division identification number 86-0077-01/60501) for a low-level radioactive waste incinerator. (<u>ILLRWI</u>) located at <u>151 T.C. Runnion Road: Erwin: TN 37650</u> This proposed source consists of the LLRWI with a high efficiency wet scrubber and wastewater treatment system (evaporator) There will be physical construction. Regulated air contaminants are expected to be emitted by this source. A wet scrubber will control expected to be emitted by this code. A signed Division person emissions. Mr. Doug Warden is the assigned Division person. 1x2-13

Tuesday, February 13, 2007

Building official to advise Studsvik on conditions for incinerator permit

Company has applied to state for permit to install radioactive waste unit.

By Jim WozNiak Erwin Bureau Chief Mozniak@jóhnsoncitypress.com

ERWIN — The town's building inspector told the Board of Mayor and Aldermen Monday that hewould write Studsvik a letter telling company officials what they will need to provide before he can issue them a building permit for their proposed radioactive waste incinerator. "Currently, it's my under-standing that installation of this piece of equipment could affect the current acceptable use of the property, which requires approval from the building and zoning department," Inspector Brian Hensley said "Once these plans and specifications have been submitted to me, I can determine if this is acceptable for the current zoning district use." Hensley said no one from Studsvik has contacted him about the company's plans for the incinerator Because of the media attention and phone calls town officials have received on the proposed project, he said he wanted the BMA to know what steps he was taking to ensure Studsvik would comply with the town's zoning ordinance. Should Hensley decide not to grant a building permit, Studsvik can ask the Board of Zoning Appeals to review the matter, Town Recorder Randy Trivette

said. Studsvik has applied for a permit from the state Department of Environment and Conservation's Division of Air Pollution Control to install an incinerator It would process items such as laboratory coats and smocks, paper, plastic, wood, animal carcasses and lubrication oil



Brian Hensley, building inspector for the town of Erwin, updates the Board of Mayor and Aldermen on the Studsvik building permit issue as Studsvik President Mike Hill, far right, looks on Monday.

The company also needs a radioactive materials license, but it has decided not to submit that application until it has a chance to answer question and concerns in the community. The proposed project has received intense opposition in the community, but Studsvik President Mike)Hillssaid he has received a lot of positive feedback. Hill was not entirely clear what Hensley was conveying but said afterward that Studsvik would be willing to respond to any questions the town might have about zoning issues

"The operations that we're contemplating are consistent with existing operations and, heretofore, there have been no questions regarding the zoning at this facihty," he said "We will be meeting with the building inspector and let him know that we are eager to get his list of questions. And we'll respond promptly."

He said this is the first time he has heard of in which a building permit has not been sought but a city has said in advance that it has questions. But he reiterated his stance from last week that it "could be dangerous for economic development" for someone who is not an expert in incinerators to make decisions about its

use.

Trivette said the town normally would not take this approach but said the media attention and petitions in the community are the

reasons for the letter. He called the letter a "courtesy."

Last week, Mayor Brushy Lewis said Hensley wanted the authority to deny a permit if a project is reasonably deemed to be harmful. But Lewis said he was mistaken, thinking the process was farther along. He was under the impression Studsvik was about to submit a letter asking for a building permit because it had not put on hold one of its state applications: The state also is preparing to have a public meeting on the incinerator on Feb. 22, and Hill said Studsvik is still considering participating. He wants a moderator at the meeting to be sure the meeting will be organized and said he has asked a "well-known city official" who has been neu-tral to serve in that capacity. He declined to name the person.



TUESDAY, FEBRUARY 13, 2007 VOL. 2 № 45

County officials, Studsvik execs discuss incinerator issue; construction put on hold

BY: BETTY B. CHANDLER & **DUSTIN STREET**

There will be no incinerator constructed at Erwin's Studsvik facility for the time being. That decision came during the course of an informal meeting held among Studsvik executives and the three mayors of Unicoi County.

Once Studsvik President MikeHillandU.S.Operations Overseer Marty Carson realized that the community was virtually unaware of plans for the facility to construct a radioactive waste incinerator, it was decided to halt the Mayor Johnny Lynch, and process of bringing such a Hill and Carson, quickly



Erwin Mayor Don "Brushy" Lewis

device into the area until citizens could be made fully aware of the situation and be given reliable information about Studsvik's plans.

What began as an informal meeting among Erwin Mayor Don Lewis, County Mayor Greg Lynch, Unicoi



Greg Lynch

Unicol Mayor Johnny Lynch

became an informal question-and-answer session and a commitment from the industry to put plans for construction and operation of a radioactive waste incinerator in Erwin on hold.

The issue of an incinerator to be built at the Studsvik facility in Erwin first came to light after a public notice

Mike Hill, president over the Studsvik facility in Erwin. which appeared in another local paper was called to the attention of local officials. Several Unicoi County



DUSTIN STREET/THE REACC citizens were on hand at the informal gathering to voice

See STUDSVIK page A6

STUDSVIK

Continued from A1

opposition to the proposed installation of the incinerator.

Unicoi County Mayor Greg Lynch continued throughout the session to ask the crowd to be civil and considerate.

"This is not THE community meeting," he said, further emphasizing the informal nature of the session. "(But) we're here to try to work this out."

Generally, the mayor's request was honored throughout the meeting "We are all concerned about this," he said of the county. Erwin Mayor Don Lewis, a retired supervisor from Nuclear Fuel Services, asked the Studsvik representatives questions concerning exactly what the incinerator would be used for and where the radioactive refuse would be coming from.

Lewis also brought up the fact that a similar request to build an identical device at a facility in Memphis, Tennessee that was later acquired by Studsvik, had been put on hold for approximately three years due to concerns that mirrored those in Unicol County.

Unicoi Mayor Johnny Lynch admitted honestly that he did not have the expertise in the field of nuclear waste to accurately assess the situation, and he asked that the group be given access to additional information concerning the construction and operation of an incinerator.

Hill told citizens that Studsvik is an international operation. A new incinerator in Unicoi County could mean that additional "low grade" radioactive waste and other waste could be shipped to Erwin for disposal.

Mayor Lewis noted, however, that Erwin's plant was not fortunate enough to locate in a rural, relatively uninhabited area. He said that the Studsvik plant's proximity to at least three county schools, a river, and an active community is simply not an ideal location for such treatment of waste.

"Studsvik and Nuclear Fuel Services are in a neighborhood in our town," Lewis said. We don't need to make these people – or the workers face any more risk than they already do." In comments prior to the meeting, Lewis had voiced further concerns about property values in the area.

"These people who live near Studsvik and NFS have seen their property values drop to nothing," Lewis added. "I know NFS has bought up a lot of property surrounding the plant, but the property

owners who are still there have seen their property values drop greatly."

The most compelling comments from those attending the meeting came from current and former NFS employees, who had either once or still do work in the industry. These individuals certainly proved to have at least some knowledge of the issues concerning radioactive emissions and controls.

Harmful emissions were another concern brought up by citizens attending the meeting. One member of the audience who addressed the group asked about the emissions that would be coming out of the Studsvik facility and how much material the plant would be processing annually.

Carson said they were not allowed to disclose the information requested in the individual's second query. To his first, President Mike Hill said that a "limited amount" would be processed.

Other benefits of having the incinerator at Studsvik (as outlined by President Hill) include not having to transport the waste to alternate sites as well as the fact that the device is so wellmade.

According to Hill, the incinerator will have a topof-the-line scrubber system as well as filters made of non-combustible material to prevent radioactive particles from escaping the incinerator.

The size of the incinerator is roughly the size of the seating section on one side of the Unicoi County courthouse's larger courtroom.

There were several heated concerns that NFS and Studsvik might be working together for mutual waste storage and disposal.

However, Hill and Carson quashed these ideas and said that they could not comment on the day-to-day operation of NFS - rather, their concerns and knowledge lies in matters dealing exclusively with Studsvik, Inc.

Following the Tuesday evening meeting, officials of Nuclear Fuel Services stressed that NFS has never shipped any of its waste to Studsvik, nor has it stored any of its materials with Studsvik.

Hill said he and representatives of Studsvik would be happy to meet with small groups or individuals for question and answer sessions.

Studsvik's Erwin facility has been in operation in the community now for about eight years. The company employs 82 local citizens from the county, as well as approximately 200 people

BEACON

⁴ TUESDAY, FEBRUARY 13, 2007



incinerator comment

State extends

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Comments may be submitted for 10 days after public hearing.

By Jim WozNIAK Erwin Bureau Chief Jwozniak@johnsoncitypress.com

ERWIN — Agreeing to a request from the three mayors in Unicoi County, the state is giving the public another chance to submit written comments about a plan by a industry here to install a radioactive waste incinerator.

The state Department of Environment and Conservation's Division of Air.

Pollution Control initially provided apublic comment period from Dec. 12 until Jan: 11, but many people never saw the notice in a legal advertisement in the Erwin Record, a weekly paper here. That caused County Mayor Greg Lynch, Erwin Mayor Brushy Lewis and Unicoi Mayor Greg Lynch to ask the state to extend the comment period. In a new notice placed in this week's Record, the state said it would allow comments to be submitted in the 10 days after the division will hold a public meeting at Unicoi County High School about Studsvik Inc.'s plans to install the incinerator. That meeting is scheduled for Feb. 22 Studsvik, 151 T.C. Runion Road, wants a permit to process items such as laboratory coats and smocks, paper, plastic, wood, animal carcasses and lubrication oil. The proposal has spawned a petition opposing the incinerator, and the mayors do not support it. The company said it has received supportive comments. One of Studsvik's permit applications has been put on hold, but another, which is the subject of the comment extension, is still proceeding. "It is important to note that the department can only consider comments that are relative to (division) regulations," Tisha Calabrese-Benton, the department's deputy communications director, said in an e-mail Wednesday. If the application is found to meet the requirements of the regulations, the department is directed, by law, to issue the permit." Lewis and Greg Lynch were pleased with the extra 10 days. "I don't know what kind of effect it will

have, but I think it will give the people a better frame of mind about it — that they, do have time to respond on this thing," Lewis said He hopes Studsvik will withdraw its request for the permit. "Obviously, I feel more comfortable with that than what we had before where we had apparently missed the comment period," Lynch said of the extension. "I really do think that's a more fair way to handle. It could be good also as well for Studsvik for that to happen, I think. The comments will be a two-way street I'm sure Studsvik can answer questions and things like that."

Studsvik President Mike Hill could not be reached for comment Wednesday, but he has said the company is interested in answering people's questions.

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Period

▲ Continued from Page 1B

See PERIOD, Page 5B

Last week: Greg Lynch said the comments made at the upcoming public meeting would not be considered "on the record" because the comment period had expired. Calabrese-Benton said the department would consider any comment at the meeting or in the succeeding 10 days that address the permit in connection with division regulations. On Monday, Hill said Studsvik had not decided whether it would participate, saying it wanted to be sure the meeting would be organized.



JOHNSON (ITT PRESS

Studsvik scraps incinerator Volume 87-Number 186





Public opposition prompts company decision

By Jim Wozniak Erwin Bureau Chief jwozniak@johnsoncitypress.con

ERWIN — Facing intense opposition in the community, Studsvik Inc. has decided not to install a radioactive waste incinerator in its proLabeled a compromise by the com

pany and Erwin officials, the expansion will still lead to the creation of about 15 more jobs and comply with the town's zoning ordinance; the two sides said Thursday. Studsvik

cessing facility here choosing employs 82 people and processes instead to use its present technology, radioactive waste at its plant at 151 to expand its operation. T.C. Runion Road near, Nuclear Fuel. Services.

> The decision, announced Thursday night, was a result of discussions within the company and talks with

> > See INCINERATOR: Page 7A

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Incinerator

Continued from Page 1A

town officials during the last two days, Studsvik President Mike Hill said. He said he had "discussed potential courses of action" with his bosses, who gave him permission to talk to town officials about them.

Mayor Brushy Lewis said Hill had given those ideas to Town Recorder Randy Trivette on Wednesday, and the two Erwin officials discussed them on Thursday morning. Lewis and Trivette met with Hill and fellow Studsvik representatives Marty Carson and Karen Kerns for a couple of hours Thursday afternoon to finalize the details.

Lewis said he was happy with the company's decision to withdraw its, request for permits from the state.

"Studsvik has been one of our community's most important employers, so I appreciate their efforts in going above and beyond the call to find an alternative solution to incineration," he said "I am personally comfortable with the existing Studsvik process. I am pleased that Erwin and Unicoi County can keep Studsvik here and still get the new jobs that will come from their economic expansion."

"I'm very glad that we were able to come to a compromise that was satisfactory to the mayor and should be to the local population," Hill said.

The company was seeking state permits for the incinerator, which would have processed items such as laboratory coats and smocks, paper, plastic, wood, animal carcasses and lubrication oil. The state Department of Environment and Conservation's Division of Air Pollution Control was reviewing one application. Studsvik also needed a radioac tive materials license from the state for the incinerator, but it decided not to submit that request until it could answer questions and concerns in the community. It contended the incinerator would not harm the public or the environment.

Opposition formed swiftly, when Unicoi Countians learned, about the project two weeks ago. More than 250 people signed a petition in the first 24 hours it circulated, and yard signs surfaced Thursday. A Web site in opposition to the incinerator went on line on Tuesday.

Lewis, County Mayor Greg Lynch and Unicoi Mayor Johnny Lynch succeeded in getting a 10day extension of the public comment period on the permit application, and the state agreed to hold a public meeting on Feb. 22 at Unicoi County High School. Lewis said the state probably would cancel that meeting now a

Hill said Studsvik concluded that there was "no way" it could educate the public about the incinerator or sway the public's opinion about it. He said he had asked for people to submit questions about the proposal to him, received only a few inquiries but continued to read unfavorable reviews of the proposal from the public and officials in newspapers.

"It became obvious that the community was nonsupportive of the incinerator, which was understandable," Hill said. "It became apparent that no one wanted to hear the rational facts. With the public, it appeared to be an emotional issue as opposed to a rational issue.

"We have been a good neighbor and a good community partner here for the past eight years, and we want to assure everyone that we will do our best to continue to be good neighbors here in Unicoi County. It was never Studsvik's intent to fracture community relations and opinions."

Lewis said he hopes the situation has been resolved and the community can return to normal. "I want to be good to all of the industries here in the town of Erwin and help them out any way we can, but I want them to be straightforward with us also." Johnson City Press, Page 5A

Saturday, February 17, 2007

BRIEFLY/COMMUNITY

Public meeting about incinerator canceled

ERWIN — A public meeting scheduled for Thursday on Studsvik Inc.'s proposed incinerator at its processing facility, 151 T.C. Runion Road, has been canceled.

Tisha Calabrese-Benton, deputy communications director for the Tennessee Department of Environment, and Conservation, said in an email Friday that the meeting no longer was necessary. Studsvik has decided to withdraw its application for a permit.

From staff reports

THE ERWIN RECORD

Vol. 80, No. 8 . e. 22 Pages . 3 Sections . 50¢ Tuesday, February 20, 2007, Erwin, TN 37650

Studsvik backs off plans for incinerator

A REAL PROPERTY OF A REA

By Lesley Hughes Staff Writer

The proposed installation of a radioactive incinerator at Studsvik's Erwin facility has been stopped, according to company officials

Studsvik President Mike Hill announced a "compromise" Feb. 15 between the company and town of Erwin officials, including Mayor Brushy Lewis, who was adamantly opposed to the incinerator

The compromise calls for the company, to still expand its operation and hire up to 15 additional employees while not using incineration technology that some in the community opposed.

Studsvik officials said the company would voluntarily choose to absorb higher costs to expand the capacity of existing Pyrolysis technology, which has been utilized at the Erwin processing facility for several years.

Pyrolysis is a non-incineration, thermal waste treatment process that exchanges wet waste in the form of ion exchange resins; according to the company's web site.

Opposition to the proposed incinerator began nearly three weeks ago. Citizens and the county's three mayors - Lewis. Unicol Mayor Johnny Lynch and County Mayor Greg Lynch - spoke out against the incinerator expansion, which was expected to cost \$2 million and add if5 high-paying Jobs to Studsvik's rolls - Fears of safety and emissions were expressed by several citizens, and although Hill and Studsvik Inc. President Marty Carson met with the mayors and some citizens to calm the rumors and answer questions, the concerns could not be alleviated.

Please see STUDSVIK, Page 9-A

STUDSVIK

The Tennessee Division of Air Pollution Control had even agreed to re-open the public-comment period for 10 days and had scheduled a town meeting for Feb. 22 to listen to citizens con-cerns. Since then, the state has canceled the meeting in response to. Studsvik's change of plans. "Studsvik has operated an incinerator safely and securely in Sweden for the past 20 years," Hill said, "however we want the community to be comfortable with our operations. We have been a good neighbor and good community part-ner here for eight years, and we want to assure ev-eryone that we will do our best to continue to be good neighbors here in Unicol County "It was never Studsvik's intent to fracture community relations and operations. Lewis was pleased with

"By standing up for what it felt was right, the public ... helped stop the project." – Erwin Mayor Brushy Lewis

the company's decision to not move ahead with the incinerator project. "I really feel good about this." Lewis said Friday. "By standing up for what it jell was right, the public – along with the city building inspector, the BMA and the three mayors – helped stop the project." Adding new jobs without the incinerator expansion was a win-win situation;

according to Lewis. "I am personally comfortable with the existing

Studsvik process he said. The future plans discussed for expanding the current operations without an incinerator would be compliant with current zoning ordinances and regulations. I am pleased that Erwin and Unicoi County can keep Studsvik here and still get the new jobs that will come from their expansion." Johnny Lynch said the news didn't surprise him, because Carson had previously stated that Studsvik would consider halting the project for the sake of comimunity relations.

"He expressed to me that, they didn't want to do anything that the community would be in an uproar about," said the Unicol mayor, "I was happy to hear that they have decided not to go ahead with the incinerator." Town of Erwin City Recorder Randy Trivette, who also serves as chairman of Economic Development

"The incinerator is behind me now. I have got to go back to the drawing board." — Studsvik's Mike Hill

Board of Unicol County and the Town of Erwin Inc., called the Studsvik decision "good news for everyone." "It shows public opinion does matter. Trivette said. "And Studsvik, being the good corporate citizen they are, heard public opinion. I think it satisfies the residents of the town. Studsvik can still expand and increase employment with a win win for both sides." The decision to expand the current Pyrolysis will actually cost Studsvik more

CONTO >

THE ERWIN RECORD, Tuesday, February 20, 2007, Page 9-A

than-installing the incinerator, Hill said.

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"This is more expensive, much more expensive," he said. "The Pyrolysis process is patented - which I helped co-invent - and it's expensive: It is a custom process. Installing the incinera- concerns and questions be tor was projected to cost \$2 directed to him the only met million. Hill said the newplanned expansion will be technical questions about substantially more than

\$2 million. Christine Tipton, a citizen_who organized a petition with more than 1,000 signatures against the in-cinerator, was cautiously optimistic about the announcement. "It is great news, but also it was a lesson in learn- and citizens: ing;" she said; "to stay con- "We are very eager to cerned citizens; and stay in- work with the community;" formed."

Tipton received hundreds of phone calls from citizens against the incinerator and some even against the "compromised" expansion

to the current operations. "Many do not want to have any more radioactive waste expansion," she said. "Some feel pretty shaky about it any way. People here feel unsafe. I would prefer no more expansions Although Hill requested with two citizens who asked

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the inclnerator. One of those people, a former Erwin resident, was very technically versed. Following the discussion, the man offered his support of the incinerator.

Hill added the company is eager to continue working with community leaders he said "The incinerator is behind me now 1 have got to go back to the drawing board to satisfy the needs of the company and the community.

Page 4-A, THE ERWIN RECORD, Tuesday, February 20, 2007

1400



Dancing around the facts won't keep us informed

I am a bluegrass fan. And the last thing I want to do is mix politics with my bluegrass. But on a recent Saturday night at my favorite family bluegrass venue. I found myself mixed up in just that – politics.

The incident began with my signing a petition expressing concerns about the proposed installation of a radioactive waste incinerator at Studsvik Processing Facility LLC in Erwin. I signed the petition being circulated by an audience member, then hit the dance floor to kick up my heels with my husband. I needed my Saturday night bluegrass fix Next thing I knew, a rather able-bodied employee of the bluegrass place was waving the petition in front of me. "Come here," he say l want you to talk to David Davis about this Then he began escorting me to the front of the building where U.S. Rep. Davis was talking with some other folks. On the way, I managed to yell to the circulator of the petition to come with

me! I figured that if I ended up never being heard from again, he should share my fate. But I was in for a surprise: "Look here," my strong-armed escort says to Davis, "see if you can't help these people with this."

The congressman said he would be glad to talk with us and asked us to explain our concerns.

At this point, I basically knew that Studsvik's representative had assured the news media that the proposed incinerator would not have a negative impact on the public and the environment. And I. knew that community opposition to the same incinerator operation proposed for a plant in Memphis had led to the city council blocking its construction because of the public's concerns. I also knew that all three of Unicol County's mayors had expressed opinions to the news media that any threat the incinerator might pose to the environment and human health needed to be investigated. Fortunately, the circulator of the petition at the bluegrass place knew more about the proposed in-cinerator than I did. Davis said he was not familiar with the Studsvik project, but that he was willing to consider citizen concerns regarding perceived danger to the community if based on scientific facts My unplanned talk with our congressman set me thinking about the responsibility each of us has to be knowledgeable about what's going on in the community and the responsibility we have to make our co cerns heard in a reasonable and informed manner. I was also reminded that we need to make sure we preserve our right to cir. culate petitions and make our concerns known to our elected leaders. It is the people's (our) responsibility to see that our leaders represent our best interests. To do this we need to be reasonably informed rather than let ourselves be brain washed by political or, special interests As a community, let's get our facts straight about the incinerator. In today's world of corporate capitalism, business, has a gigantic impact on what gets written into government regulations. Will the gov ernment emission standards protect us? Also, consider that the nuclear waste incinerator proposed for the Memphis facility would have been located near a working-class neighborhood. Would the industry have considered locating the in cinerator near rich folks? Is it unreasonable to at least wonder if this is fallout. from those who think that folks in Appalachia are poor and don't know enough to make a fuss about things? We do know enough to question things. Studsvik now says it won't move forward with the incinerator, but the whole thing reminds me how important it is to be as informed as possible about what's happening in our community

And, by the way, the family bluegrass place guy who insisted that I talk with our congressman is a very nice guy. FOR IMMEDIATE RELEASE: February 16, 2007 CONTACT: Mike Hill Studsvik, Inc. (423) 735-6300

Compromise Reached, Proposed Incinerator in Erwin Will Not Be Built

ERWIN, Tenn.— After several days of community debate and discussion, Studsvik, Inc. has decided to withdraw plans and permit requests for a new low-level incinerator in Erwin, Tennessee. Instead, Studsvik has worked with Town of Erwin Mayor Don Lewis and community leaders to come up with an acceptable solution that allows the company to plan for expansion of its operation and job creation in Unicoi County while not using incineration technology that some in the community opposed.

As a result, Studsvik has voluntarily elected to absorb higher costs in order to expand the capacity of existing Pyrolysis technology which has been utilized at the Erwin Processing Facility for several years.

Regarding the previously proposed incinerator, Hill said "that Studsvik has operated an incinerator safely and securely in Sweden for the past 20 years; however we want the community to be comfortable with our operations. We have been a good neighbor and a good community partner here for the past eight years, and we want to assure everyone that we will do our best to continue to be good neighbors here in Unicoi County. It was never Studsvik's intent to fracture community relations and opinions."

"Studsvik's desire is to expand our operations and support growth and development in Unicoi County. So, we have worked closely with Mayor Don Lewis and other community leaders to reach this compromise." said Hill.

"Studsvik has been one of our community's most important employers, so I appreciate their efforts in going above and beyond the call to find an alternative solution to incineration," said Erwin Mayor Don Lewis, a former nuclear worker. "I am personally comfortable with the existing Studsvik process. The future plans discussed for expanding the current operations without an incinerator would be compliant with current zoning ordinances and regulations. I am pleased that Erwin and Unicoi County can keep Studsvik here, and still get the new jobs that will come from their economic expansion."

Studsvik currently employs 82 people at its Erwin operations.

For further information, please contact:

Mike Hill, President, Studsvik Processing Facility Tel (423) 735-6300

Facts about Studsvik

Studsvik Processing Facility LLC is part of the Studsvik group. Studsvik is a leading service supplier to the international nuclear industry. The company has almost a half century's experience of nuclear technology and radiological services. Studsvik addresses a market in strong growth with specialized services in four Strategic Business Areas: Operating Efficiency and Safety, Service and Maintenance, Waste Treatment and Decommissioning. Studsvik has 1,400 employees in 7 countries and the company's shares are listed on the Stockholm Stock Exchange's O list.

-END-



September 7, 2007

Studsvik signs teaming agreement with Waste Control Specialists LLC (WCS)

Studsvik and WCS has entered into a teaming agreement for the treatment and storage of Class B & C Low-Level Radioactive Waste in the USA.

The teaming agreement includes waste processing and stabilization by Studsvik and storage at the WCS facility in Texas. WCS has applied for the necessary permits to store B & C low-level waste at the Texas facility. Subject to successful completion of the licensing process, revenues related to the agreement are expected at the earliest during the second half of 2008.

For more information please call:

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Lewis Johnsson, president Studsvik Inc., +1 423 735 6300 or cell phone +1 678 549 8958

Facts about Studsvik

Studsvik is a leading service supplier to the international nuclear industry. The company has 60 years experience of nuclear technology and radiological services. Studsvik addresses a market in strong growth with specialized services in four Strategic Business Areas: Waste Treatment, Decommissioning, Operating Efficiency and Service and Maintenance. Studsvik has 1,200 employees in 7 countries and the company's shares are listed on the OMX Nordic Stock Exchange Stockholm AB, MidCap.

Facts about Waste Control Specialists LLC

The WCS facility in Andrews County, Texas is licensed for the processing, storage and disposal of a broad range of hazardous, toxic and certain types of low-level and mixed low-level radioactive waste. WCS is a subsidiary of Valhi, Inc. (NYSE: VHI). Valhi is engaged in the titanium dioxide pigments, component products (security products, furniture components and performance marine components) and waste management industries.

Net Sales

Net sales increased to SEK 320.0 million (273.2). On a like-forlike basis, net sales increased by SEK 35 million. The organic growth, measured in local currency, was 20 per cent, which is well above the Group target of 10 per cent. All segments contribute to the increase. Foreign exchange effects in connection with the translation of foreign subsidiaries' net sales amounted to SEK ~19.1 million.

Sales abroad amounted to 84 (84) per cent of net sales.

Profit

The operating profit for the first quarter amounted to SEK -7.0 million (22.2). Capital gains of SEK 23.3 million were included in the earnings for 2007. This year's earnings are charged with non-recurrent costs referring to the American operations of SEK 12.6 million (0.0), which are commented on below. Adjusted for these non-recurrent items, the operating profit improved to SEK 5.6 million (-1.1).

Foreign exchange effects in connection with the translation of foreign subsidiaries' operating profit amounted to SEK 1.4 million (0.8).

Sweden

Net sales for the first quarter amounted to SEK 30.7 million (29.4). The operating profit for the first quarter amounted to SEK 0.9 million (4.5). The deviation in performance is mainly attributable to the incineration operations, where testing and demonstration of material with a low contribution ratio was carried out, which had a negative impact on profits. A somewhat greater volume of metallic material was treated during the quarter than in the corresponding period of 2007. Parallel treatment of two large components was started during the quarter. Both the incineration operations and treatment of metallic waste have a good volume of orders.

United Kingdom

Net sales for the first guarter amounted to SEK 40.5 million (22.7). About SEK 10 million of the increase is due to the acquisition in August 2007 of Studsvik Alpha Engineering. Organic growth in the United Kingdom thus continued to be high. The operating profit for the first quarter amounted to SEK 2.9 million (0.0). In March Studsvik's associated company, UK Nuclear Waste Management (NWM), signed the contract for operation of the United Kingdom's low-level radioactive waste depository. Studsvik owns 15 per cent of NWM. The contract runs initially for five years with options to extend up to 17 years. The contract is estimated to have an initial value of GBP 125 million. If all options are exercised, the value of the contract can be a maximum of GBP 500 million. The contract includes developing a national strategy for low and medium level waste. It is probable that a significant part of this waste will be treated for volume reduction and stabilization. Studsvik is well-positioned to do this through its presence in the market, combined with the Swedish facilities for treating both metallic and organic waste. During the guarter Studsvik received environmental and nuclear licenses for treatment of metallic waste in the company's Workington facility. A decision has been made to build a treatment plant that is expected to become operative at the end of 2008. Market activity in the UK continues to be high and the order situation is good.

Germany

Net sales for the first quarter amounted to SEK 77.4 million (67.3). The operating profit for the first quarter amounted to SEK 4.7 million (5.9). The segment's increase in net sales is partly related to the consulting operations acquired in the second quarter of 2007 and partly related to manufacture of

JAN-MAR 2008

components to be delivered to the new reactors being built in Finland and France and to decommissioning of reactors in Germany.

The German power industry's service and maintenance outages started as planned on a small scale at the end of the quarter, which implies considerably lower capacity utilization than the previous year, when extensive servicing projects continued throughout the year. The order book included in the consulting operations acquired in 2007 will be derecognized as the contract portfolio is processed, over about two years, which explains more than half of the detenoration in profit compared with last year. The remaining part is mainly related to lower activity in service and maintenance. As the number of reactor outages for maintenance increases during the spring, capacity utilization and profit margin will improve. The order situation is good in the German operations.

USA

Net sales for the first guarter amounted to SEK 103.4 million (92.5). The operating profit for the first quarter amounted to SEK -13.4 million (-6,9). It includes non-recurrent items of SEK -12.6 million (0.0). Behind the business volume increase of more than 10 per cent lies a substantial expansion in operations in Erwin and a falling sales trend in the Memphis-based operations. The Erwin operations are currently benefiting from the fact that the Barnwell medium-level waste depository will close at the end of June. Customers are keen to process as much waste as possible to ensure access to final disposal of the waste. In practice the closure of Barnwell means that most American nuclear power plants will be without a final waste depository for medium-level waste. Through collaboration with Waste Control Specialists in Texas, which started at the end of 2007, Studsvik can offer the American nuclear power industry a competitive storage alternative for medium-level waste when Barnwell closes. Studsvik's market initiative provides good conditions for continued stable and profitable development of the Erwin-based operations.

The main underlying reasons for the weak trend in the Memphis-based operations are stiff competition and downward pressure on prices in the low-level waste processing area, as well as a general downturn in the transport market. Orders have been signed for treatment of a number of large reactor components, which have also been delivered to the facility after the close of the reporting period. The ongoing inflow of low-level waste for treatment is, however, too low for satisfactory profitability with the current organization and structure. It has therefore been decided to adapt the organization and cost structure to the prevailing market conditions. The one-off costs of this are SEK 12.6 million, which is charged to the profit for the quarter. The restructuring measures will create conditions for a return to profitability in the Memphis-based operations.

Global Services

Net sales for the first quarter amounted to SEK 47.2 million (45.1). The operating profit for the first quarter amounted to SEK 4.3 million (2.0). The in-core fuel management codes product area continued to show a positive trend. The materials technology operations are recovering after the weak trend of the second half of 2007. Both operations contributed to the earnings improvement compared with the previous year. The order situation is good in both operations.

Investments

The Group's investments amounted to SEK 20.7 million (25.1). The investments for the period include expansion investments of SEK 13 million, mainly in waste treatment.

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Net sales

Net sales for the second quarter amounted to SEK 370.6 million 345.8) and for the period of January to June, to SEK 690.6 million (619.0). On a like-for-like basis net sales for the period January-June increased by SEK 47 million. The organic growth measured in local currency was 10 per cent for the second quarter and 14 per cent for the period January-June. Foreign exchange effects in connection with the translation of foreign subsidiaries' net sales amounted to SEK –23.0 million for the second quarter and SEK –41.3 million for January-June.

Sales abroad amounted to 84 (85) per cent of net sales.

Profit

The operating profit for the second quarter amounted to SEK 32.1 million (15.8) and for the period of January to June, to SEK 25.1 million (38.0). Non-recurring items are included in the operating profits reported as in the table below.

Period

Q1 2007 Capital gain	SEK +23.3 million
Q2 2007 Costs of discontinued	
acquisition process	SEK 10.5 million
Q1 2008 Restructuring costs, USA	SEK -12.6 million

Adjusted for non-recurring items without regard to foreign exchange rate fluctuations, the operating profit for the second quarter improved by SEK 5.8 million or 22 per cent. Correspondingly, the operating profit for the period January-June improved by SEK 12.5 million or about 50 per cent.

Foreign exchange effects in connection with the translation of foreign subsidiaries' operating profit amounted to SEK -3.2 million for the second quarter and SEK -1.7 million for January-June.



Sweden

Net sales for the second quarter amounted to SEK 40.7 million (34.8) and for the period January-June, to SEK 71.4 million (64.2). The operating profit for the second quarter amounted to SEK 9.6 million (5.5) and for the period January-June, to SEK 10.5 million (10.2).

The operations report a strong second quarter, where capacity utilization was good at all facilities. The incineration facility, which was used for tests and demonstration projects in the first quarter, was utilized to full capacity from the end of April. The facility for treatment of metallic material achieved good capacity utilization, as did the production line for treatment of large components, where steam generators are at present being treated for German and Swedish customers. The order books provide the basis for good capacity utilization in the second half of the year.

United Kingdom

Net sales for the second quarter amounted to SEK 39.2 million (32.9) and for the period January-June, to SEK 79.7 million (S5.6). The operating profit for the second quarter amounted to SEK –1.5 million (0.0) and for January-June, to SEK 1.4 million (2.3). Alpha Engineering, which was acquired in August 2007, contributed net sales of SEK 10 million in the second quarter and SEK 22.5 million in the period January-June.

The weak performance in the second quarter is attributable to both waste treatment and decommissioning. Waste treatment is carried out partly through Studsvik's own local organization at the customers' sites, and partly by preparing waste and shipping it to Sweden for treatment. During the quarter, about 100 tonnes of metallic waste was shipped to Sweden for treatment. Capacity utilization in the local organization was, however, low. In decommissioning, profits were negatively affected by delays in JAN. JUNE 2008

the Sellafield project. There is still a high level of activity in the decommissioning market and several contracts are being negotiated within the framework of the general agreement Studsvik signed with Sellafield two years ago.

On April 1, Studsvik's associated company, UK Nuclear Waste Management (NWM), took over operation of the United Kingdom's low-level radioactive waste repository. Studsvik owns 15 per cent of NWM. The NWM operations have not affected second quarter earnings.

In the latter part of the second quarter construction of the treatment facility for metallic waste in Workington was started. The facility is expected to come into operation at the end of 2008, at an investment cost of SEK 50 million.

Germany

Net sales for the second quarter amounted to SEK 102.0 million (80.1) and for the period January-June, to SEK 179.4 million (147.4). The operating profit for the second quarter amounted to SEK 6.6 million (7.1) and for the period January-June, to SEK 11.3 million (13.0).

The increase in net sales in the second quarter is attributable to the annual reactor refuelling and maintenance outages and manufacture of components. The consulting operations acquired in 2007 contributed net sales of about SEK 5 million in the second quarter and about SEK 10 million in the period January-June. The order book and other intangible assets related to the acquisition will be amortized until the end of 2009. In comparison with 2007 this means increased amortization of about SEK 2.0 million in the first half year.

The order situation is good in the German operations.

USA

Net sales for the second quarter amounted to SEK 121.2 million (135.5) and for the period January-June, to SEK 224.6 million (228.0). The operating profit for the second quarter amounted to SEK 25.5 million (17.7) and for the period January-June, to SEK 12.1 million (10.8). The 2008 figure includes restructuring costs of SEK 12.6 million taken in the first quarter.

The repository for medium-level waste in Barnwell, South Carolina, closed as planned at the end of June. The closure means that the power industry had a very strong incentive to treat all medium-level waste in time to send it to Barnwell for final disposal before the end of June. The inflow of material to Studsvik's treatment facility in Erwin therefore continued to be high in the second quarter and the facility reported very good profitability.

The closure of Barnwell means that most of the American nuclear power industry is without access to final disposal of medium-level waste. Studsvik has taken a market initiative and is offering, in cooperation with Waste Control Specialists (WCS) in Texas, a competitive storage alternative, based on treatment of waste in the Studsvik Erwin facility and storage at the WCS facility in Texas. The market reception was positive and negotiations for contracts are under way with several customers. The necessary licensing and permit processes are proceeding in parallel, and are expected to be completed soon. During the period until customer contracts have been signed and the necessary licensing obtained, the waste volumes at Erwin will fall. The new business model is expected to be in place by the fourth quarter.

The Memphis-based operations have shown weak growth due to tough competition, downward price pressure and a general downturn in the transport market. In the second quarter both operations were restructured, leading to a reduction in the number of transport vehicles and employees. The market outlook is unchanged on the whole and the structural measures will mean a return to profitability.

Net sales



Net sales for the third quarter amounted to SEK 274.2 million (325.1) and for the period of January to September, to SEK 964.8 million (944.1). The fall in sales in the third quarter is attributable to the USA and the Erwin operations, where production closed down as planned in the third quarter. Other operations performed well and, in local currency, mainly better than in the previous year. On a like-for-like basis, organic growth in local currency for the period January-September was about 3 per cent. Sales abroad amounted to 84.3 (86.7) per cent of net sales.

Profit

The operating profit for the third quarter amounted to SEK -4.4 million (8.8) and for the period of January to September, to SEK 20.7 million (46.8). Most segments report a positive earnings trend compared with the previous year. The US operations report a loss, mainly as a consequence of the production stop at the Erwin facility in the third quarter. In comparison with the corresponding period in 2007, the production stop impacted operating profit by SEK 11.5 million.

Non-recurring items are included in the operating profits reported for the period January to September in 2007 and 2008 as in the table below.

Period

Q1 2007	Capital gain	SEK +23,3 million
Q2 2007	Costs of discontinued	
	acquisition process	SEK -10,5 million
Q1 2008	Restructuring costs, USA	SEK –12,6 million

For the period January-September the operating profit, adjusted for non-recurring items, was substantially unchanged, SEK 33.3 million (34.0).

Foreign exchange effects in connection with the translation of foreign subsidiaries' operating profit amounted to SEK 1.0 million for the third quarter and SEK 1.0 million for January-September.

Sweden

Net sales for the third quarter amounted to SEK 38.4 million (27.7) and for the period of January to September, to SEK 109.8 million (91.9). The operating profit for the third quarter amounted to SEK 11.5 million (4.7) and for the period of January to September, to SEK 22.0 million (14.7).

The positive trend of operations also continued in the third quarter. The incineration facility ran at full capacity and capacity utilization was good at the facility for treatment of metallic material as well as the production line for treatment of large components. The order books provide the basis for continued high capacity utilization.

United Kingdom

Net sales for the third quarter amounted to SEK 34.2 million (34.6) and for the period of January to September, to SEK 113.9 million (90.2). The operating profit for the third quarter amounted to SEK 0.6 million (–0.2) and for the period of January to September, to SEK 2.0 million (2.1).

Both Waste Treatment and Decommissioning operations recovered somewhat in the third quarter, but delays in the Sellafield project affected sales and earnings negatively also in the third quarter.

. Market activity in both Waste Treatment and Decommissioning continues to be high and several contracts are being negotiated. Studsvik's associated company, Nuclear Waste Management (NWM), which has been responsible for operation of the United Kingdom's low-level radioactive waste depository since April 1, is developing well.

Construction of the treatment facility for metallic waste in Workington is in progress. The investment will be completed at the end of 2008 and the facility will be brought into operation successively from the turn of the year. The investment cost is about SEK 50 million. JAN- Sep 2008

Net sales for the third quarter amounted to SEK 98.1 million (109.3) and for the period of January to September, to SEK 277.5 million (256.7). The operating profit for the third quarter amounted to SEK 3.1 million (8.3) and for the period of January to September, to SEK 14.4 million (21.3).

Consulting services for nuclear facilities in operation continued to show a positive trend. The number of consulting contracts is rising and consequently the number of consulting hours charged. The pure service and maintenance assignments, carried out at the nuclear power plants' annual refuelling and maintenance outages, vary in scope between years and quarters. Studsvik's share of the market continues to be high, but the number of refuelling and maintenance days was lower in the German power industry in 2008 than in 2007, which affected sales negatively in the third quarter. The component manufacturing operations increased in scope, but did not compensate in terms of sales and earnings for the low activity in the German decommissioning market in the third quarter. The order situation is good in the German operations.

USA

Germany

Net sales for the third quarter amounted to SEK 47.4 million (105.3) and for the period of January to September, to SEK 272.0 million (333.3). The operating profit for the third quarter amounted to SEK -17.3 million (0.1) and for the period of January to September, to SEK -5.2 million (10.8). The profit for 2008 includes restructuring costs for the Memphis-based operations of SEK 12.6 million.

The depository for medium-level waste in Barnwell, South Carolina, closed as planned at the end of June. As an expected result of the closure, deliveries of material to Studsvik's Erwin facility ceased and the facility was then temporarily taken out of operation. In comparison with the corresponding period in 2007, the production stop impacted operating profit by SEK 11.5 million.

During the quarter Studsvik has worked further on its market initiative of offering, in cooperation with Waste Control Specialists (WCS), a competitive storage alternative, based on treatment of waste in the Studsvik Erwin facility and storage at the WCS facility in Texas. The requisite permits and licenses for the new business model were obtained after the close of the reporting period and operations at the Erwin facility will be resumed towards the end of the fourth quarter.

The restructuring of the Memphis-based operations has resulted in a return to profitability in waste treatment and a higher operating profit in the third quarter than in the corresponding period last year. The general fall in profitability in the transport market, with downward price pressure and high fuel costs, continues to apply. Despite vigorous structural measures, the logistics operations reported a loss in the third quarter. However, the loss has been reduced compared with the second quarter.

Global Services

Net sales for the third quarter amounted to SEK 41.6 million (33.3) and for the period of January to September, to SEK 133.6 million (126.1). The operating profit for the third quarter amounted to SEK 3.6 million (2.2) and for the period of January to September, to SEK 7.6 million (5.6).

The materials technology operations developed positively in the third quarter. Sales and operating profit improved compared with the corresponding period in 2007. The order books are healthy and the volume of tenders is high. The extensive preparations for receiving and testing irradiated fuel from the United Kingdom within the framework of the multi-year contract signed with Nexia Solutions/British Energy, are in progress.

Sales in the product area of fuel optimization software recovered after a weak start to the year. The operating profit after three quarters is at the same level as last year. Tendering activity in the software products area is very high. Printed from http://www.texasobserver.org/pi/radiation-immigration-and-secret-love

Radiation, Immigration and Secret Love

Texas Observer Staff January 8, 2010 | Political Intelligence **Dept. of Energy BRINGING THE HEAT**

Waste Control Specialists, a radioactive-waste company owned by major Texas GOP financier Harold Simmons, appears to be defying state regulators by importing canisters of nuclear waste from out of state. So far, the amount is not huge-about 300 cubic feet. But the brazen move appears to be part of WCS's plan to turn Andrews County into the nation's new dumping ground for radioactive waste.

Waste Control already has permission to bury 60 million cubic feet of radioactive waste from Texas, Vermont and federal sources. But the company has said it will seek permission to import and bury radioactive materials from the 36 states that lack a disposal option.

Critics see the current importation of out-of-state waste without permission as a backdoor attempt to speed the process. Once the waste is stored on site, the thinking goes, it's unlikely to ever be sent away.

The handful of environmental and citizen groups aware of the issue are furious with the Texas Commission on Environmental Quality, the agency that regulates radioactive waste. "TCEQ is asleep at the wheel," says Eliza Brown of the SEED Coalition, an environmental nonprofit. "They're failing to enforce their own rules and looking the other way while WCS imports radioactive waste from around the country, and possibly the world."

Beginning in early 2008, TCEQ repeatedly told Waste Control that it needed permission before accepting canisters of Class B and C waste-the "hottest" of so-called low-level radioactive waste-from Studsvik Inc., a Tennessee waste processor. Even if the agency eventually okayed the plan, the waste could be stored for no more than a year, according to agency records.

In 2008, Waste Control agreed to submit safety and security plans as part of a major amendment to its license that would allow the storage. But the company never filed for a license amendment. Last February, Waste Control CEO Rod Baltzer told the Observer that the company had determined that it could already import out-of-state waste and would begin doing so in March or April. TCEQ said it was unaware of any such plans.

Evidently the agency found out. On May 20, TCEQ sent a letter to the company saying it had "not made a determination that acceptance of [the waste] is authorized," and warning that Waste Control "may be subject to enforcement for the receipt" of unauthorized radioactive materials.

On June 2, a Waste Control lawyer wrote to TCEQ that the first shipment from Studsvik would be arriving in a few days. There was no need for regulators to get involved, the letter implied, since the lawyer had conducted his own legal review and concluded that there was "no question" the company could take the waste—and store it "indefinitely."

TCEQ took no action. In mid-July, the Observer asked the agency for an explanation. Nearly a month later, a TCEQ spokesman responded from his personal e-mail account: "The TCEQ subsequently received additional information from the company re: Studsvick [sic] waste. As indicated previously, staff continues to evaluate issues related to receipt and storage of Studsvik waste for compliance with WCS' license."

The agency has not responded to numerous follow-up questions. Waste Control, on the other hand, recently told the Observer that it plans to import up to 1,000 more cubic feet of out-of-state waste in 2010.

-Forrest Wilder

PROPMETARY INFORMATION

EB 21 2008

Studsvik

080208-L

Mr. Charles Arnott

State of Tennessee

Department of Environment and Conservation

Division of Radiological Health

3rd Floor, L&C Annex

401 Church Street

Nashville, Tennessee 37243-1532

Subject:

Tennessee Radioactive Materials License Number R-86011-E17, Dated May 3, 2007.

Studsvik Processing Facility LLC, Erwin, Tennessee Facility

Request for Amendment to License

Dear Mr. Arnott:

In a recent-review of our processing activities we have discovered that our model for attribution of processed waste has not been incorporated into our license. Further, in evaluating the original attribution model we have determined that it does not reflect the best analysis for the processing we perform. The process stream at the Studsvik Processing Facility is made up of a compatible mix of resins (and other like materials) from a number of different generators that are delivered on a just in time basis (this minimizes our on hand inventory, reducing personnel and environmental exposures). The resins are sluiced from their transport containers to one of three resin storage vessels. Similar resin shipments from different utilities are mixed and stored in these tanks prior to processing. This mixture is then introduced into our pyrolysis system. The resultant waste product, Reformed Residue (RR), is then transferred to a High Integrity Container (HIC) for disposal. An additive is introduced to render the RR into a non-dispersible form. This results in a reduced volume and a much more environmentally safe waste form. Because of the characteristics of the RR it would not be ALARA to attempt to remove the percentage of volume attributed to each client as these HICs typically average 50 Rem/hour on contact with a potential to be several 100 Rem/hour. This task would be extremely labor and dose intensive to personnel. < It would also likely impact Restricted Area boundary dose rates adversely.

In a recent analysis of our waste stream in preparation for the upcoming cessation of access to the Barnwell-site we have concluded that an amendment to our license recognizing the changing industry ultimate disposal scenarios. Our current approach is based on processing of waste resins and direct shipment of commingled reformed residue (RR) to disposal at Barnwell or the Clive Utah site.

Studsvik

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After review of this situation, it is our belief that the attribution model that is now most reasonable and appropriate for our facility is the model suggested for incinerators as discussed in the NRC's technical discussion of the waste manifest rule in 1995 (FR Vol. 60, No. 58/ Monday, March 27, 1995 page 15652, third column). In this model the Studsvik Processing Facility would become the generator of the waste feed at the point of mixing (i.e., the point at which it becomes difficult, if not impossible, to determine the original generators identification). All waste from the point of mixing forward would be Studsvik's. Any untransferred materials would still be available for return to the client if deemed necessary or as otherwise determined by Studsvik. An approximate maximum volume of 3,500 ft³ of reformed residue/unprocessed materials would be affected by this change and on site at any one time.



The Studsvik Processing facility provides a valuable service to the nuclear industry due to its proven operating history and volume reduction capabilities. Reducing waste to a more inert form and minimizing radioactive waste volume is both ALARA and good stewardship of the limited

5

Studsvik

low-level radioactive waste disposal space available in the United States. Approval of this approach will enable Studsvik to remain a viable option to the nuclear industry as a provider of waste processing capability and long term disposal solutions.

We trust that the information contained in this request is sufficient to allow your review of the request. If there are additional questions on the information contained herein please contact me directly at (423) 722-1979 and I will gladly provide any additional information that may be required. If this is approved Studsvik would like an effective date of July 1, 2008 for implementation.

Thank you for your time and consideration in this matter.

Sincerely, n/ len

David M. Tenney, Radiation Safety Officer

Studsvik Processing Facility, LLC

cc: Ms Debra Shults. Alternate Commissioner, Southeast Compact

Mad.C. Graves. Licensing Manager

State of Tennessee

Department of Environment and Conservation

Division of Radiological Health

3rd Floor. L&C Annex

401 Church Street

Nashville, Tennessee 37243-1532

Studsvik

HAND DELIVERED

August 18, 2008

Mr. Johnny Graves, Manager Licensing, Registration and Planning Section State of Tennessee Department of Environment and Conservation 3rd Floor, L&C Annex 401 Church Street Nashville, TN 37243

Re: License Amendment Request 080208-L

Dear Mr. Graves:

Studsvik appreciated the time that you and your colleagues spent with us last week. It is our hope that the meeting has crystallized the issues with respect to our amendment request and that this letter will serve to clarify all the issues needed for approval of our amendment. We believe we have addressed all the items for which you requested additional information.

Intent of Amendment

This amendment request is intended to provide a viable mechanism for generators (outside of the Atlantic and Northwest Compacts) of Class B/C low-level radioactive resins to utilize Studsvik's THOR process to volumetrically reduce and stabilize those resins for extended storage and ultimately disposal (when a disposal site becomes available). This amendment request also seeks to employ an attribution model that reflects our process, is consistent with the attribution models of other Tennessee licensees who utilize thermal processes and is faithful to the Interstate Agreement for the Uniform Application of Manifesting Procedures ("Interstate Agreement").

For processing and other operational efficiencies (including ALARA), Studsvik commingles generator waste and feeds it through our THOR process. As a result, it is impossible to separate the end product into distinct batches attributable to specific waste generators. The waste therefore fits within the definition of "residual waste" in the Interstate Agreement and the attribution rule proscribed in Paragraph 3.1 applies to Studsvik.¹

Studsvik's amendment request does not in any way seek any operational or procedural changes. Indeed, Studsvik will continue to process waste in the same manner and with

¹ Paragraph 3.1 states: "Low-level radioactive waste resulting from decontamination or incineration activities shall be deemed to have been generated in the compact region or unaffiliated state in which decontamination or incineration occurs if the waste is residual waste."

Studsvik, Inc.; 5605 Glennidge Dr., Suite 705, Atlanta, GA 30342, Phone: 404-497-4900, Fax: 404-497-4901, www.studsvik.com
Studsvik

Mr. Johnny Graves August 18, 2008 Page 2

the same care as it has for the last decade. This amendment request also does not seek to allow Studsvik to engage in activities which would change the classification of waste that it processes.

Return of Waste

Studsvik presented numerous scenarios that address the possibility of waste being stored at WCS-having to be recovered by Studsvik. All of those scenarios were supported by current technical, regulatory and/or legal authorities. The scenarios are set forth in Exhibit A. Exhibit A contains data and information proprietary to Studsvik and in accordance with the Rules of the Department of Environment and Conservation, Division of Radiological Health, §1200-2-4-.10(2), Studsvik requests that this Exhibit be redacted from the public file. Studsvik believes that it has presented viable alternatives for handling its waste stored at WCS with minimal impact to Tennessee.

Studsvik emphasizes that the scenarios described in Exhibit A are alternatives that Studsvik would seek to implement only in the event that the waste stored at WCS had to be removed from that site by Studsvik. Studsvik considers this a highly unlikely event. Studsvik also notes that a situation in which waste is required to be removed would most likely be the result of an event at WCS in which many other generators face a return of their waste. Accordingly, Studsvik believes, based upon the current lack of disposal options in the United States, that a crisis situation would exist requiring implementation of emergency powers at Federal, State and Compact levels. In this eventuality there is the possibility that other alternatives could emerge.

Financial Assurance

Studsvik will post an irrevocable letter of credit with the State of Texas to assure adequate funds exist to cover removal, packaging, transport and disposal of material stored at WCS. The initial amount of the letter of credit is \$2,382,948. That letter of credit will increase by a like amount with every sixth HIC stored at WCS.

The financial assurance posted by Studsvik to Texas will respond to all scenarios described in Exhibit A where the waste will not return to Tennessee.

Two of the scenarios described in Exhibit A envision the waste stored at WCS returning to Tennessee. The resin reprocessing scenario would require certain plant modifications. Studsvik proposes to provide financial assurance in the form of an irrevocable letter of credit to Tennessee in the amount of \$350,000 to cover the cost of the plant modifications.

Studsvik

Mr. Johnny Graves August 18, 2008 Page 3

The other scenario describes creation of an interim storage facility in Tennessee, similar to the storage facility proposed by WCS in Texas. In the event it is necessary to implement this scenario, Studsvik agrees to provide financial assurance to Tennessee in a manner similar to what it will provide to Texas (namely, for removal, packaging, transport and disposal of Studsvik material stored in Tennessee). Studsvik would further agree to provide financial assurance for decontamination and decommissioning of the storage vaults in an amount to be agreed upon between Studsvik and Tennessee.

Studsvik has explained the urgent commercial need to obtain this amendment approval as soon as possible. Studsvik therefore requests that the amendment be issued as soon as possible with a provision that it will not become fully effective until completion of a financial assurance model acceptable to Tennessee is in place.

Should you have any questions or should you require any additional information, feel free to contact me at 312-343-7808 or at joseph.dicamillo@studsvik.com. Studsvik looks forward to approval of its amendment.

Sincerely. Joseph DiCamillo

General Counsel

cc: Tracy Carter Eddie Nanney Debra Shults J.W. Luna Mike Mobley David Wise David Tenney

TENNESSEE AIR POLLUTION CONTROL BOARD DEPARTMENT OF ENVIRONMENT AND CONSERVATION NASHVILLE, TENNESSEE 37243-1531

OPERATING PERMIT Issued Pursuant to Tennessee Air Quality Act.

Date Issued: SEP 0 8 2008

Installation Description:

Permit Number: 062308P Date Expires: November 1, 2017 Installation Address: Studsvik Processing Facility, LLC 151 T.C. Runnion Rd Erwin Emission Source Reference No. Volume Reduction Energy Recovery Facility including Thermal Distillation, Steam Reformation, Heat Recovery 86-0054-01

with Demister, Scrubber, and HEPA Filter controls The holder of this permit shall comply with the conditions contained in this permit as well as all applicable

provisions of the Tennessee Air Pollution Control Regulations.

CONDITIONS:

1

Issued To:

Forman NFS UP, Fuel Mfg.

The application that was utilized in the preparation of this permit is dated August 19, 2008, and signed by (Mr. David Wise) Vice-President of Operations of the permitted facility. If this person terminates employment or is reassigned different duties and is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

(Conditions continued on next page)

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

POST AT INSTALLATION ADDRESS

RDA-1298

J. C.ik

RECEIVE

SEP 1 5 2008

JOHNSON CITY ENVIRONMENT **ASSISTANCE CENTER**

CN-0754 (Rev. 9-92)

The stated design input capacity for this source is 2,890 pounds per hour (excluding water) on a daily average basis. An updated construction permit must be obtained before exceeding this capacity. The Technical Secretary may require the permittee to prove compliance with this rate.

Particulate matter (TSP) emitted from this source shall not exceed 0.02 grain per dry standard cubic foot of stack gases (5.38 pounds per hour). TAPCR 1200-3-7-.04(1).

Quantities of sulfur dioxide (SO₂), carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO₂), fluorides (HF), and chlorides (HCl) emitted from this source shall not exceed the following:

Pollutant	Emission Rates (Pounds per Hour)					
SO,		8.8				
CO ^T .		8.4				
voc		1.4				
NO.		6.9				
HF		0.12				
HCl		1.6				
		· .				

The above emission limitations are established pursuant to Rules 1200-3-14-.03(5)and 1200-3-7-.07(2) of the Tennessee Air Pollution Control Regulations and the information contained in the approved application.

- Visible emissions from this source shall not exhibit greater than twenty percent (20%) opacity, except for one (1) six-minute period in any one (1) hour period and for no more than four (4) six-minute periods in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average). TAPCR 1200-3-5-.03(6) and TAPCR 1200-3-5-.01(1).
- The exhaust gases from the ventilation system shall be discharged unobstructed vertically upwards to the ambient air from a stack with an exit diameter of 25.0 inches not less than 80.0 feet above ground level.
- 7. This source shall not operate without use of the air pollution control devices.
- 8. Routine maintenance, as required to maintain specified emission limits, shall be performed on the air pollution control devices. Maintenance records shall be recorded in a suitable permanent form and kept available for inspection by the Division. All maintenance activities shall be entered in the log no later than seven (7) days following the start of the maintenance. These records must be retained for a period of not less than two years.
- 9. Progress reports must be filed annually for construction projects extending over a one year duration. As a minimum, these reports must specify the percentage of the project completed and give an estimated completion date. The first progress report will be due one year after this permit is issued and every year thereafter until construction is completed.
- 10. This permit shall not preclude any requirements promulgated by the Division of Radiological Health, the Division of Solid Waste Management, or the Division of Water Pollution Control.
- 11. The issuance of this permit does not exempt the permittee from any requirements of the Environmental Protection Agency pertaining to the emissions from the operation of this new source.
- 12. The permittee shall apply for renewal of this permit not less than sixty (60) days prior to the permit expiration date, pursuant to Division Rule 1200-3-9-.02(3).

(End of conditions)

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CURRENT EMISSIONS REQUIREMENTS AND EMISSION SUMMARY COMPANY NAME: <u>Studsvik Processing Facility. LLC</u>

1. EMISSION SOURCE REFERENCE NUMBER: <u>86-0054-01</u> NONATTAINMENT: ____ ATTAINMENT: ____ 2. LOG <u># 062308P</u>

3A. PERMIT STATUS: NEW ____ RENEWAL _X__ RELOCATION __ 3B. PREVIOUS PERMIT NUMBER: CONSTRUCTION: 944923P_OPERATING: 051789P

4. IDENTIFY IF ONLY A PART OF THE SOURCE IS SUBJECT TO THIS REQUIREMENT	5. POLLUTANT	6. APPLICABLE REQUIREMENT(S): TN AIR POLLUTION CONTROL REGULATIONS, 40 CFR, PERMIT RESTRICTIONS, AIR QUALITY BASED STANDARDS	7. LIMITATION	8. MAX. ACTUAL EMISSIONS		9. MAX. ALLOW. EMISSIONS		
				IN UNITS OF ITEM 7	POUNDS / HOUR	TONS / YEAR	POUNDS /HOUR	TONS / YEAR
TSP	TSP	1200-3-704(1)	5.38 lb/br	5.38	0.005	0.02	5.38	23.6
	SO ₂	1200-3-1403(5)	8.8 lb/hr	8.8	0.44	1.94	8.8	38.5
	CO	1200-3-707(2)			2.8	12.3	. 8.4	36.8
	VOC	1200-3-707(2)			0.48	2.1	1.4	6.1
	NOx	1200-3-707(2)			· 3.46·	15.2	6.9	30.2
Visible Emissions	Opacity	1200-3-501	20, Method 9	•			,	·
			· .					
· · ·	· ·			SOURCE OF DATA FOR EMISSIONS IN ITEM 8: Data was taken from the previous permit (051789P), application dated 8/19/08.				

IF THIS IS NOT A TITLE V SOURCE, IS THIS A DEFERRED SOURCE (SUBJECT TO NSPS OR NESHAPS) OR A SYNTHETIC MINOR SOURCE? IF THE ANSWER IS YES, EXPLAIN:

Engineering Protection Specialist: HLC

Date: <u>9/4/08</u>

Reviewed by: 513

Date: 9.5-08



December 2, 2008

First contract signed with FPL for new U.S. waste model

Studsvik has signed a long term contract with FPL Group for the treatment of medium-level (Class B/C) waste at the facility in Erwin. This is the first contract for waste treatment that has been signed under Studsvik's new model for medium-level waste in the USA.

"The strong interest that we see from customers for this new model has convinced me that we will operate the waste treatment facility in Erwin profitably from 2009 and onwards," says Studsvik's CEO Magnus Groth. "The model offers a solution to a major problem for the American nuclear power industry. Our initiative means that customers now have a competitive and environmentally sound alternative for their medium-level waste."

Contract negotiations according to this model are under way with several customers. Studsvik will re-start the Erwin facility for waste treatment in December when it starts receiving waste from FPL Group under the new contract.

The contract with FPL Group lasts through 2013. FPL Group operates 8 commercial nuclear power reactors, and with annual revenues of more than \$15 billion and a presence in 27 states is one of the largest providers of electricity-related services in the United States.

Studsvik launched its new business model for the treatment of medium-level waste in the USA after obtaining necessary licenses in October. In the model, Studsvik will treat the waste at the Erwin facility in the same way as before and thereafter take responsibility for storage and final disposal, for which a storage agreement has been reached with Waste Control Specialists (WCS) in Texas.

"Our relationship with WCS is essential," states Lewis Johnson, President of Studsvik Inc. "The ability of our two companies to come together to provide this solution for the nuclear industry ensures a continuous waste management path to our customers."

Studsvik has been treating and reducing the volume of medium-level wet waste from the American nuclear power industry, mainly ion exchange resins, since the early 2000s. After treatment, the residual products were previously sent for final disposal to the Barnwell disposal facility in South Carolina. Since July this facility only accepts waste from three of the United States' 50 states, leaving most of the American nuclear power industry without access to final disposal of medium-level waste.



For further information please contact:

Magnus Groth, President and Chief Executive Officer, tel +46 155 22 10 86 or cell +46 709 67 70 86 Lewis Johnson, President of Studsvik Inc., tel + 1 404 497 4911 or cell + 1 678 549 8958

Facts about Studsvik

Studsvik offers a range of advanced technical services to the international nuclear power industry in such areas as waste treatment, decommissioning, engineering & services, and operating efficiency. The company has 60 years experience of nuclear technology and radiological services. Studsvik is a leading supplier on a rapidly expanding market. The business is conducted through five segments: Sweden, United Kingdom, Germany, USA and Global Services. Studsvik has 1 200 employees in 8 countries and the company's shares are listed on NASDAQ OMX Stockholm.

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JOHNSON CITY PRESS, DEC. 22, 2008, PAGE 5A

Studsvik to return to full operation

Erwin nuclear waste treatment company signs contract with Florida group.

By Jim Wozniak Erwin Bureau Chief jwozniak@johnsoncitypress.com

ERWIN — A nuclear waste treatment company here has obtained new contracts that will enable it to return to full production. Studsvik, an international company based in Sweden that has a facility next to Nuclear Fuel Services, has signed a contract with Florida Power and Light Group to treat its waste until 2013. The waste is expected to arrive this month, according to a Studsvik news release.

news release. FPL, Group operates, eight commercial nuclear power reactors and has a presence in 27 states, Studsvik said.

But that contract could not have become effective without a second deal going into place, Studsvik spokesman Darrell Akins said. The company has reached an agreement with Waste Control Specialists in Texas to take the waste once Studsvik has finished with its work with it.

"Our relationship with WCS is essential," Studsvik President Lewis Johnson said in a

statement. "The ability of our two companies to come together to provide this solution for the nuclear industry ensures a continuous waste management path to our customers." The company said it used to send the residual product left after it treated waste to Barnwell, a regional disposal facility for lowlevel radioactive waste. But that facility has limited since July its intake of waste to three states, forcing Studsvik to look elsewhere. That has meant limited treatment work at the Erwin plant in the last five months. Akins said Studsvik was able to treat a small amount of product and ship it to Utah. Otherwise, the plant's workers have focused on equipment maintenance, painting and preparing for its new contracts; he said. The company received the necessary license in October to send the waste to Texas.

"Had they not been able to work out (a contract) in Texas, they would not have been able to sign a contract with FPL," Akins said. The good news from this deal is that Studsvik has a "sizable" contract for the next five years that will prevent cutbacks in employees, he said.

One element of a Studsvik news release on these contracts that concerned local residents was a statement that the company would treatmedium-level waste from FPL. Erwin resident Barbara O'Neal said she and fellow resident Chris Tipton said they thought Studsvik only processed low-level waste

Tipton recalled that during the discussion over Studsvik's later-aborted plan in 2007 tobuild a radioactive waste incinerator that the company said it was safe and only treated low-level waste.

Akins checked and learned that the FPL waste actually will be a low-level form. He said the release was generated in Europe and that medium-level waste there is the same as low-level waste in the United States. "(The release) should have said low-level



ERWIN RECORD, DEC. 23, 2008, PAGES 1+5A

Contract will keep Studsvik operating

By Mark A. Stevens sher. • mstevens@erwinrecord.r

For nearly six months, it was unclean if the Studsvik Corp. would be able to continue operations in Erwin, but all that changed when the company entered into a long-term storage agree ment with a Texas based firm

tered into a long term storage agree, ment with a Texas based firm Under the agreement with Waste Control Specialists of Texas Studs vik will ship to Texas nuclear residual products that had once been sent to the Barnwell disposal facility in South Catolina

Carolina In July, Barnwell began accepting waste from only three states - no longer including Tennessee

including Tennessee With no outlet for final storage and disposal, Barnwell's decision forced Studsvik to "quit accepting waste" for treatment at the Erwin facility, according to Darrell Akins, chairman of Akins Crisp, Public Strategies and an official spokesperson for Studsvik.

But after entering into a new storage agreement, Studsvik put into, effect a new "waste model" and entered into an agreement with the FPL Group for the treatment of medium-level waste in Erwin. The FPL contract is the first for

waste treatment that Studsvik has signed under its renewed operations. "The strong interest that we see

from customers for this new model has convinced me that we will operate the waste treatment facility in Brwin profitably from 2009 and onwards," said Studsvik Chief Executive Officer Magnus Groth. "The model offers a solution to a major problem for the American nuclear, power industry. "Our initiative

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means that customers now have a competitive and environmentally sound alternative for their medium level waste." Studsvik is now in contract negotiations with several other custom-

ers: The company said it is ready to restart the Erwin facility for waste treatment, as it begins receiving waste from FPL.

In a Friday interview with The Erwin Record, Akins declined to detail what employees have done during the several months when the company could not receive and process nuclear products.

He did confirm, however, that the agreement with WCS and the contract with FPL saved the jobs of many Studsvik employees and, per-

haps, the entire Erwin operation. "This is good news for Erwin," Akins said. "Studsvik has about 60 employees, and, by receiving this contract, the company didn't lay, off any employees. With the new model waste shipping to Texas, the employment base has been maintained."

The contract with the FPL Group lasts through 2013.

FPL operates eight commercial nuclear-power reactors, and with annual revenues of more than \$15 billion and a presence in 27 states, is one of the largest providers of electricity-related services in the United States.

Studsvik launched its new business model for the treatment of medium-level waste in the United

States-after obtaining necessary licenses in October. In the model, Studsvik will treat the waste at the Erwin facility in the same way as before and thereafter take responsibility for storage and final disposal – and that's where Texas' WCS comes into play.

"Our relationship with WCS is essential," said Lewis Johnson, Studsvik's president. "The ability of our two companies to come together to provide this solution for the nuclear industry ensures a continuous waste management path to our customers."

Studsvik treats and reduces the volume of medium level wet waste from the American nuclear power industry, mainly ion exchange resins. The Erwin plant opened in

1998 After treatment, the residual products were previously sent for final disposal to the Barnwell disposal facility in South Carolina.

Based in Sweden, Studsvik has 60 years' experience in nuclear technology and radiological services with companies in Sweden, the United Kingdom, Germany and the United States. The global company employs 1,200 people in eight countries.

In May, the Texas Commission on Environmental Quality issued WCS a license for disposal of byproduct material. The WCS site is located about 31 miles west of Andrews, Texas, and six miles east of Eurice in New Mexico THE ERWIN RECORD JUNE 23, 2009, PLAND



Studsvik Inc. has put its downtown corporate offices, up for sale. The Swedish-based company operates (a nuclear waste-treatment facility off Carolina Avenue that employs 41 people. Less than 10 have been employed at the corporate office, located on the corner of Nolichucky Avenue and Tucker Street We have put the corporate office up for sale;" said Darrell, Akins, a media spokesman for StudsvikWe've notified the city and county about that decision? Mr/Akins said the change comes as the company pursues cost saving measures me "We've had three positions inthe accounting area that have become either vacant or will be through resignations;" he said:

"Those accounting jobs will be moved to our Atlanta office. We're trying to consolidate some functions." With accounting moving to Atlanta, that leaves only six people at the corportate office, located in historic downtown Erwin. Akins said it was possible the remaining corporate personnel may be moved to the operations plant or the company could opt to lease office space. Studsvik took over the building in 2005, completing remodeling the facility, which was once used as the headquarters for the how-defunct Erwin Emergency and Rescue Squad

Akins said the decision to move the cor-

porate office is not a reflection on Studsvik's overall plans for Erwin. There are no plans, he said, to eliminate jobs in the operations area.

County Mayor Greg Lynch said he hoped Studsvik, with assistance from the local Economic Development Board, could soon find someone interested in the twostory building. "It was more of a cost-savings thing just

It was note of a cost savings time just like everybody is doing with this economy," Lynch said, "I'm sorry we're losing jobs at the corporate office, a few jobs her and a few jobs there; but a lot of companies are consolidating where they can." "Who knows we might can find another company interested in moving here."

Net sales



Net sales for the third quarter amounted to SEK 275.0 million (274.2) and for the period January-September, to SEK 867.8 million (964.8). Net sales increased in local currencies by 3.1 per cent in the third quarter and decreased by 15.5 per cent in the period January-September. There is growth in the three segments; Sweden, Germany and Global Services, while the other two segments report falling sales.

Profit

Operating profit for the third quarter amounted to SEK –7.8 million (-4.4) and for the period January-September to SEK –68.1 million (20.7). The Group's loss is attributable to the USA and the UK. The operating margin in the other segments was 8.9 per cent (10.2) in the third quarter and 8.0 per cent (8.4) in January-September. Foreign exchange effects had a negative impact of SEK –1.1 million (1.0) on the operating profit for the third quarter and of SEK –9.9 million (1.0) for the period January-September.

Net financial income deteriorated by SEK 6.4 million due to increased net interest-bearing debt and increased borrowing costs.

Sweden

Net sales in the third quarter were slightly lower than the previous year and amounted to SEK 34.5 million (38.4). In January-September sales increased by 5.5 per cent to SEK 115.8 million (109.8). Operating profit in the third quarter fell to SEK 3.5 million (11.5) and in January-September to SEK 9.1 million (22.0). The operating margin for January-September fell to 7.9 per cent (20.0).

The deterioration in earnings is due to a poorer product mix and an unplanned six-day production stoppage at the melting plant and longer throughput times for the large components treated in 2009. New equipment has been brought into operation and the production bottlenecks are being successively eliminated. The market and order situation continue to be good. During the quarter Studsvik signed its first order for treatment of low-level waste from Italy. The order is for 270 tonnes of organic waste from the nuclear power facility in Caorso.

United Kingdom

Net sales in the third quarter fell to SEK 18.4 million (34.2) and amounted to SEK 65.8 million (113.9) in January-September. The operating profit for the third quarter was SEK –7.3 million (0.6) and for January-September SEK –40.8 million (2.0).

Capacity utilization in the consulting operations increased after two weak quarters, but did not compensate for continued low capacity utilization in the decommissioning operations. Decommissioning projects have been focused on smaller and clearly defined contracts since the end of the first half-year. The decommissioning market contracted during the year as a consequence of the tight financial situation in the British economy. Extensive marketing initiatives are being carried out, but the order book was at a low level at the end of the third quarter.

The metallic recycling facility in Workington became operational in September, when the first volumes of commercial material were also processed.

Germany



The market and order situation in the German operations is good. Profitability improved in both engineering and services and decommissioning. Annual maintenance work at power-producing reactors continued at a normal rate during the third quarter. Ongoing decommissioning projects in Germany and Belgium went according to plan and at a good level of profitability.

USA

Net sales for the third quarter amounted to SEK 42.2 million (47.4) and for the period January-September, to SEK 149.6 million (272.0). The operating loss for the third quarter amounted to SEK -12.8 million (-17.3) and for the period January-September, to SEK -54.3 million (-5.2).

Another two contracts were signed for the Erwin operations. Contracts have now been signed covering 51 of the USA's 103 reactors. The volumes delivered to the facility were, however, low and some deliveries were postponed. Consequently the Erwin operations reported a continued loss. The efficiency improvements made in Memphis have resulted in more robust operations that are profitable at considerably lower volumes than before. The third quarter's inflow of material for processing was, however, low, resulting in a minor loss in the quarter. The low waste volumes, both in Erwin and Memphis, are mainly a consequence of the economic conditions.

In the USA a small consulting business has been started, focusing on Studsvik's patented THOR technology. The business is profitable and the customer base consists of both American and international customers. The interest in evaluating THOR technology for different types of waste is great.

THOR Treatment Technologies (TTT) signed an order in October for a waste treatment facility at the US Department of Energy's facilities at Savannah River. The order value is USD 55 million. The work will start in 2010 and is expected to continue for three years. TTT is a joint venture with the American URS Corporation. Studsvik has a 50 per cent share in TTT.

Global Services

Net sales rose in the third quarter to SEK 51.2 million (41.6). Net sales in January-September were SEK 177.1 million (133.6), which corresponds to an increase of 16.8 per cent in local currencies. Operating profit for the third quarter increased to SEK 5.8 million (3.6) and to SEK 21.3 million (7.6) for the period January-September. Profitability improved during the year and the operating margin for January-September was 12.0 per cent (5.7).

In materials technology demand continued to be strong for reactor fuel and materials testing associated with the ageing, overhaul and modernization of nuclear power plants around the world. Modernization, modification and new production also create heavy demand for consultants with advanced nuclear engineering skills, which resulted in stronger earnings for the consulting operations. ALARA Engineering, which was acquired in late 2008, performed well. Software for fuel optimization reported a profit that was by and large on the same level as the previous year.

After the close of the reporting period Studsvik agreed to sell its personal dosimetry operations to the American company Landauer. The sale means a capital gain of SEK 6.5 million, which will be reported in the fourth quarter.

Investments

The Group's investments in the third quarter were SEK 23.8 million (20.2) and for the period January-September, to SEK 74.6 million (60.3). Investments in the new treatment facility in the United Kingdom of SEK 8.3 million are included in the third quarter and of SEK 51.8 million in January-September.

Studsvik

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November 2, 2009

Studsvik's Interim Report for January-September 2009

- The operating loss for the third quarter amounted to SEK -7.8 million (-4.4).
- The loss is attributable to the USA and UK, while Germany and Global Services continued to develop strongly.
- Overall, a positive operating profit and cash flow are expected for the second half of the year.
- A first contract for treatment of low-level waste from Italy was signed during the quarter.
- After the close of the reporting period TTT signed an order for a waste treatment facility in the USA.
- After the close of the reporting period the personal dosimetry operations were sold, giving a capital gain of SEK 6.5 million.

	July-Sept 2009	July-Sept 2008	Jan-Sept 2009	Jan-Sept 2008	Full Year 2008
Net sales, SEK million	275.0	274.2	867.8	964.8	1,285.9
Operating profit, SEK million	-7.8	-4.4	68.1	20.7	12.7
Profit after tax, SEK million	-9.7	-3.7	-63.0	8.4	1.1
Profit per share after tax, SEK	-1.19	-0.31	7.67	0.68	-0.05
Equity per share, SEK	63.13	70.28	63.13	70.28	74.32
Equity-assets ratio, %	37.9	42.3	37.9	42.3	40.4

The interim report will be presented at a telephone conference call according to earlier distributed invitation at 3:30 PM today.

Please read the full interim report in the attached file.

Facts about Studsvik

Studsvik offers a range of advanced technical services to the international nuclear power industry in such areas as waste treatment, decommissioning, engineering & services, and operating efficiency. The company has 60 years experience of nuclear technology and radiological services. Studsvik is a leading supplier on a rapidly expanding market. The business is conducted through five segments: Sweden, United Kingdom, Germany, USA and Global Services. Studsvik has 1,100 employees in 8 countries and the company's shares are listed on the NASDAQ OMX Stockholm.



U.S. Equal Employment Opportunity Commission

PRESS RELEASE 12-31-09

Race, LLC / Studsvik to Pay \$650,000 to Settle EEOC Racial Harassment & **Retaliation Suit**

Radioactive Waste Processing Company Targeted Black Workers for Higher Radiation Exposure, Federal Agency Charged

MEMPHIS - A Memphis radioactive waste processing company will pay \$650,000 to 23 African American employees and provide other relief to settle a race and retaliation discrimination lawsuit filed by the U.S. Equal Employment Opportunity Commission (EEOC), the agency announced today.

According to the EEOC's suit against Race, LLC, doing business as Studsvik, LLC (Civil Action No. 2:07-cv-2620, filed in U.S. District Court for the Western District of Tennessee, Western Division), Courtney Britton, who worked as a lead worker in the shop for Studsvik, and other African American employees, were subjected to racially offensive comments by their white supervisor. Further, the complaint alleged that Britton's supervisor regularly referred to him and other African American employees with the N-word and other derogatory slurs, such as "boy."

In addition, the EEOC said, white managers subjected Britton and other African American employees to excessive radiation exposure, more than their white co-workers. The EEOC also charged that Britton was suspended for 15 days and then laid off in retaliation for complaining about the racial harassment.

"Some of the discrimination alleged in this case is unusually extreme because of the physical danger it created for African American employees," said EEOC Acting Chair Stuart J. Ishimaru. "It is deeply disturbing that this kind of race-based discrimination could be inflicted upon innocent workers. Further, the EEOC is particularly concerned when people who have the courage to speak out against such discrimination then experience retaliation by their employer. The EEOC will fight such misconduct forcefully, as we did in this case."

Besides the monetary relief, the three-year consent decree resolving the case enjoins Studsvik from discriminating against its employees because of their race and from retaliating against workers who assert their rights, and enjoins Studsvik from making assignments in the shop area based on race. Studsvik agreed to adopt and maintain an anti-discrimination policy prohibiting discrimination, to distribute the policy and complaint procedure to all employees, and to provide mandatory training to all employees regarding the policy.

At the training, Studsvik's highest ranking individual will either appear in person or via video conferencing to announce and affirm the company's commitment to a zero tolerance policy concerning race discrimination, its new anti-discrimination policy, and the penalty for violating the policy. Finally, Studsvik will provide annual written reports for three years to the EEOC regarding its job assignments and any complaints about discrimination.

Regional Attorney Faye A. Williams of the EEOC's Memphis District, which includes Tennessee, Arkansas, and 17 counties in Northern Mississippi, said, "Racial harassment remains a longstanding problem in the workplace for many minorities. Mr. Britton and other African American employees endured the abuse because they needed to work to support their families. The manager who rendered such abuse is no longer employed and cannot be rehired. This resolution ensures that there are now policies and procedures in place so that African American employees are treated with dignity and respect in this workplace."

The EEOC enforces federal laws prohibiting employment discrimination. Further information about the EEOC is available on its web site at www.eeoc.gov.



EEOC: Black workers got more radiation

Published: Jan. 16, 2010 at 10:33 PM

MEMPHIS, Jan. 16 (UPI) -- A Tennessee company that processes nuclear waste has agreed to settle federal claims black employees were subjected to higher levels of radiation than others.

The Studsvik Memphis Processing Facility, formerly known as Radiological Assistance Consulting and Engineering, or RACE, has signed a consent agreement with the Equal Employment Opportunity Commission, the Memphis Commercial Appeal reported. Under the agreement, 23 black employees are to receive a total of \$650,000.

The EEOC alleged the company assigned black employees to work with radioactive waste and manipulated dosimeters to show lower levels of radiation than the actual ones. Black employees were also paid less and subjected to other kinds of discrimination.

"I've been here (with the EEOC) 30 years, and I've never heard allegations of race discrimination that I consider this serious -- because of the health risk," said Carson Owen, an EEOC trial lawyer.

Lewis Johnson, president of Studsvik, said the alleged discrimination took place before the Swedish-based company bought the Memphis facility.

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Exhibit A

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

Southern Nuclear Operating Company

(COL Application for Vogtle Electric Generating Plant, Units 3 and 4) Docket Nos. 52-025-COL and 52-026-COL

January 29, 2010

AFFIDAVIT OF STEVEN JAMESON

I, Steven Jameson, do hereby state as follows:

1. I am employed by Studsvik, Inc. ("Studsvik") as Vice President of Sales and Marketing. My business address is 5605 Glenridge Drive, Suite 705, Atlanta, GA 30342. I am authorized to provide this certification on behalf of Studsvik, Inc.

2. Studsvik owns and operates a waste processing facility located near Erwin, Tennessee.

3. Studsvik is licensed by the State of Tennessee to accept Class A, B, and C lowlevel radioactive (LLW) wastes. Specifically, Amendment 28 (issued October 2008) to Studsvik's Erwin, Tennessee Radioactive Material License (R-86011-E17) provides the authority for Studsvik to become the attributable generator and therefore allowing title of the waste to transfer to Studsvik.

4. Studsvik offers the nuclear industry a process to permanently disposition for disposal Class A, B, and C LLW. Under the Waste Disposition for Disposal Program, this approved path authorizes attribution and title to all "Qualifying Material" to transfer from the utility to Studsvik.

5. "Qualifying Material" is defined as Class A, B and C LLW, as addressed in Studsvik's Tennessee License and the corresponding Waste Acceptance Guidelines. Typically this includes bead, powdered, and similar resins, filter media and filters, liquids, and sludges.

6. Studsvik thermally processes the waste at its Erwin facility. The final waste product, now attributed to Studsvik, is dispositioned by Studsvik for disposal as follows: (1) The Class A material is sent directly to Clive, Utah where it is disposed of as Studsvik waste; and (2)

Studsvik transports its Class B and C LLW to the WCS Facility in Andrews County, Texas for storage until a permanent disposal option becomes available.

7. To the best of my knowledge, information and belief, the topegoing information is true and correct.

Steven Jameson

Subscribed and sworn to before me this $\frac{28}{28}$ day of January, 2010.

Notary Public

My Commission Expires: 5/13/2013



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The following Affidavit is Exhibit A, by Steven Jameson, Studsvik Vice President of Sales and Marketing, from the motion by Southern Nuclear Operating Company, to dismiss the "low-level" radioactive waste contention against 2 new nuclear power reactors, Vogtle 3 and 4, in Georgia. Note that by Studsvik taking title and liability to the waste, the argument is being made that the nuclear utility that generates the waste will not have to be responsible for it. The waste will be attributable to Studsvik. This is because *TDEC approved, in October 2008, Amendment 28 of Studsvik license R-6011 E-17*.

Motion to Dismiss:

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UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)) Docket Nos. 52-025-COL and 52-026-COL Southern Nuclear Operating Company)

(COL Application for Vogtle Electric) January 29, 2010 Generating Plant, Units 3 and 4))

SOUTHERN NUCLEAR OPERATING COMPANY'S MOTION FOR SUMMARY DISPOSITION OF CONTENTION SAFETY-1

)

Studsvik

Class A/B/C Waste Strategy processing of radioactive waste



Studsvik Class A/B/C Program

Studsvik and Waste Control Specialists (WCS) of Texas have entered into an agreement whereby Studsvik will process the client waste stream at its Erwin Tennessee facility then transfer and store the material at the WCS Texas Site where it will remain until a disposal site is available. It is the Studsvik/WCS combined industry approach that gives the waste generator the ability to continue to process and disposition all of its waste material in the same manner

A critical situation faces the nuclear industry. It is a situation that will occur on June 30, 2008 when the Barnwell, South Carolina Low-Level Radioactive Waste (LLRW) disposal site closes to generators of (LLRW) in 34 states. Class A LLRW, a waste class that contains the lowest levels of radioactive material content, will continue to have a direct disposal path. However, Class B and C Waste material will not. This situation requires an effective resolution and generators, utilities, hospitals, universities and research facilities are all working to find such a resolution.

As with any situation several resolutions are being presented or proposed. Some appear to require radical changes from current regulatory positions and accepted practices, some are stopgap measures, and some will invite public criticism and perhaps even strong opposition (i.e., downblending). Under an environment which requires generators to manage



Studsvik Processing Facility Erwin's Control Room

waste streams on-site there are issues that generators and processors alike are required to consider. These issues are:

- Commingling restrictions that exist when processing waste off site for the purpose of having it returned for onsite storage.
- The financial impact of adding or managing additional onsite storage facilities.
- Waste downblending that could result in present or future public and regulatory scrutiny.

• Liability, whether real or perceived, and the financial/risks associated with managing and maintaining processed waste material on-site.

There are three key features to the Studsvik Programmatic Approach

1. The program relieves the client of having to make changes to its current processing practices, thereby having no effect on their current operational methodology

2. There is no deviation from accepted regulatory practices since waste disposition maintains a direction that follows a consistent industry interpretation of technical positions that have survived both regulatory and public scrutiny for over 20 years.

3. Title, Generator Attribution, and Financial Liability will be borne by Studsvik. Therefore, under Studsvik's Program, on July 1, 2008 it will be business as usual for LLRW generators.

Title and Generator Attribution

Under this Program, Studsvik becomes the attributable generator and takes, from the generator, Title and Generator Attribution of the transformed radioactive material (discussed below); whereby, Title and Generator Attribution including Disposal Liability is transferred in the same manner as when title and liability is transferred through direct disposal.

Studsvik accomplishes this when the radioactive material, sent by the generator to Studsvik's Erwin, Tennessee facility, is processed through Studsvik's THOR™ (Thermal Organic Reduction) process. The THOR™ process volume reduces and transforms the identity of the material to a state that is only attributable to Studsvik and not that of the original material generator (i.e., chemical form is changed; radioactivity identity is no longer attributed to a single source). The process produces an ash-like substance referred to as Reformed Residue (RR) that will be packaged and shipped to WCS's Texas Facility where it is stored in cells that have been specifically constructed for the storage of this material.

Liability Management

Financial liability to the initial generator (i.e., the utility) is minimized as waste title and disposition liability transfers to Studsvik, a process performed in the same manner as waste title and liability transfers when sending directly for disposal. Studsvik accomplishes this through creation of a Waste Disposal and Storage Fund (DSF) Trust Fund. This fund is created to meet the financial assurances associated with storage and/or disposal requirements established by the States of Tennessee and Texas¹. The DSF Trust Fund ensures that Liability Management is performed through the following means:

• The DSF receives a portion of the fee, based upon the current cost of disposal², for each cubic foot of waste received into a Studsvik facility and stored at the WCS facility.

• The DSF Trust Fund provides assurance that disposal liability of the stored material is financed to current known levels.

• It also meets disposal financial liability in much the same manner as decommissioning funds are assessed.

 The DSF Trust Fund is structured such that access to it is available to pay for final disposal and meeting the Financial Assurance requirements in Texas.

1 A waste generator must have a means to accept the return of its waste. Any return path, if required, is to the Studsvik's State of Generation (Tennessee)

2 Fee portion placed in DSF Growth Trust Fund is calculated by taking the cost to dispose of Class B and C waste at Barnwell SC, currently \$3,146/ft3, divided by Studsvik's 5:1 volume reduction factor



The WCS Facility in West Texas

Summary

Studsvik's programmatic approach to solving this industry need for an uninterrupted path for dispositioning its Class B/C Waste material goes even further. Studsvik is offering and ensuring that all waste streams have alternatives rather than a single path through one organization or entity. Studsvik's program offers the following:

 It relieves the client of long term Financial Liability when the alternative is to accrue \$3146/cubic foot to account for future disposal as required by prudent financial accounting.

- It eliminates the financial burden and management constraints that are associated with on-site storage
- Waste Title and Financial Liability is transferred away from the generator
- Waste disposition for the client maintains a direction that follows a consistent industry interpretation of a position that has satisfied both regulatory and public scrutiny for over 20 years
- Positive public and regulatory confidence is maintained



Reverse view of the WCS Facility



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USA – Q4

Waste Treatment

- Erwin profitable in Q4
 - Improved waste receipts

 - Memphis turned to profit
 - Waste levels remained low due to customer spend restrictions
 - Significant share of TTT profit
 - SEK 8.8 million
 - Overall low visibility for waste receipts in first half of 2010

Current focusGet waste into Erwin and Memphis

Sales and operating profit



Studsvi

Summing up

USA 18% of sales Get waste in to Erwin Sweden 13% of sales Restore margins while growing Global Services 22% of sales Capitalize on stron order book

UK 7% of sales Orderbook in Waste and Engineering

> Germany 37% of sales Grow in Engineering and France

Share of sales calculated on FY



