ADLER POLLOCK & SHEEHAN P.C.

One Citizens Plaza, 8th Floor
Providence, RI 02903-1345
Telephone 401-274-7200
Fax 401-751-0604 / 351-4607

175 Federal Street
Boston, MA 02110-2210
Telephone 617-482-0600
Fax 617-482-0604

www.apslaw.com

August 19, 2016

Via Federal Express/Electronic Mail

Todd Anthony Bianco, EFSB Coordinator
RI Energy Facilities Siting Board
89 Jefferson Blvd.
Warwick, RI 02888

Re: Invenergy Docket No. SB-2015-06

Dear Mr. Bianco:

On behalf of Invenergy Thermal Development LLC ("Invenergy"), enclosed please find an original and 10 copies of Invenergy's Response to the Town of Burrillville's 15th Set of Data Requests and accompanying exhibit.

Please let me know if you have any questions.

Very truly yours,

ALAN M. SHOER
ashoer@apslaw.com

Enclosures

cc: Service List

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ENERGY FACILITY SITING BOARD

IN RE: INVENERGY THERMAL DEVELOPMENT LLC's APPLICATION TO CONSTRUCTION THE CLEAR RIVER ENERGY CENTER IN BURRILLVILLE, RHODE ISLAND

DOCKET No. SB-2015-06

INVENERGY THERMAL DEVELOPMENT LLC'S RESPONSES TO THE TOWN OF BURRILLVILLE'S 15th SET OF DATA REQUESTS

15-1 Are you aware of whether any databases exist for accidents that have occurred at power plant sites, including, but not limited to, accidents that involve chemical spills, hydrogen accidents, fuel oil accidents, and/or ammonia accidents? If so, please provide information regarding any such databases, including, but not limited to, electronic links, if any exist.

RESPONSE 15-1 The United State Environmental Protection Agency (USEPA) maintains a database called "Enforcement and Compliance History Online" (ECHO). The purpose of this database is used for maintaining toxic releases for all facilities in the United States. The URL for the USEPA ECHO database is located here: https://echo.epa.gov/.

The Right-to-Know (RTK) Network is a database that provides free access to numerous databases and resources on the environment, including spills and accidents. The URL for the RTK network is located here: http://www.rtknet.org.

The only other data bases that we are aware of are:

- The Chemical Safety Board (CSB) has major incidents/spills that typically result in large scale impacts to the environment – website: http://www.csb.gov/.
- Accidents that **do not result in employee injury** are not reported to OSHA nor recorded on OSHA forms/recordkeeping (only internal)

Unless requested the **employee injury** reports are internal only – shared with OSHA upon request.

RESPONDENT: John Niland, Invenergy Thermal Development LLC

DATE: August 19, 2016

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ENERGY FACILITY SITING BOARD

IN RE: INVENERGY THERMAL DEVELOPMENT LLC's APPLICATION TO CONSTRUCTION THE CLEAR RIVER ENERGY CENTER IN BURRILLVILLE, RHODE ISLAND

DOCKET No. SB-2015-06

INVENERGY THERMAL DEVELOPMENT LLC'S RESPONSES TO THE TOWN OF BURRILLVILLE'S 15th SET OF DATA REQUESTS

15-2 Are you aware of any databases that identify natural gas shortages that have occurred in our region over approximately the last 5 years? If so, please furnish copies and/or electronic links.

RESPONSE 15-2: There is little data publicly available on natural gas (NG) shortages requiring power plants in ISO-NE to switch to diesel. However, Invenergy can see from publicly available EPA emissions records when duel fuel plants have fired with diesel fuel, (https://ampd.epa.gov/ampd/), and Invenergy can infer that these instances may have been due to possible NG shortages.

RESPONDENT: John Niland, Invenergy Thermal Development LLC

DATE: August 19, 2016

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ENERGY FACILITY SITING BOARD

IN RE: INVENERGY THERMAL DEVELOPMENT LLC's APPLICATION TO CONSTRUCTION THE CLEAR RIVER ENERGY CENTER IN BURRILLVILLE, RHODE ISLAND

DOCKET No. SB-2015-06

INVENERGY THERMAL DEVELOPMENT LLC'S RESPONSES TO THE TOWN OF BURRILLVILLE'S 15th SET OF DATA REQUESTS

15-3 Do you have any specific traffic information available for accidents involving trucks, as opposed to automobiles, and what is your projection regarding the probability of increased truck accidents with the proposed facility?

RESPONSE 15-3: The vehicle type was obtained from the crash reports provided for the study horizon analyzed (2013-2015). From this data, it has been determined that within the truck route corridor from South Main Street at the Glocester town line to Wallum Lake Road at the proposed site entrance, there were a total of 18 truck related crashes that occurred over this three year period.

The operation of the power plant proposes a small number of ammonia and oil deliveries over the course of the year. Oil is expected to be delivered by truck 3-4 times per hour over the course of several days on rare occurrences to the facility, and ammonia deliveries are expected by truck approximately twice per month (every 15 days).

Based on the existing daily number of trucks traveling on the truck route and the expected number of trucks expected to access the proposed site, there would be an increase of approximately 1% of truck traffic along the truck route to the proposed site. Based on this, it is expected that there would be a negligible increase (a small fraction of a vehicle) of truck crashes per year along this corridor.

RESPONDENT: Maureen McMahon, McMahon Associates
Robert Smith, McMahon Associates

DATE: August 19, 2016

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ENERGY FACILITY SITING BOARD

IN RE: INVENERGY THERMAL DEVELOPMENT LLC's APPLICATION TO CONSTRUCTION THE CLEAR RIVER ENERGY CENTER IN BURRILLVILLE, RHODE ISLAND

DOCKET No. SB-2015-06

INVENERGY THERMAL DEVELOPMENT LLC'S RESPONSES TO THE TOWN OF BURRILLVILLE'S 15th SET OF DATA REQUESTS

15-4 What onsite resources at the facility will be provided to address onsite accidents, including chemical spills and other possible accidents? Please provide all details.

RESPONSE 15-4: Please refer to Section 13.2.4 (Countermeasures) of Exhibit 1, the Preliminary Draft Spill Prevention Control and Countermeasure Plan for details on the onsite resources which will be provided to address onsite accidents at the Facility.

RESPONDENT: Michael E. Feinblatt, ESS Group, Inc.

DATE: August 19, 2016

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ENERGY FACILITY SITING BOARD

IN RE: INVENERGY THERMAL DEVELOPMENT LLC's APPLICATION TO CONSTRUCTION THE CLEAR RIVER ENERGY CENTER IN BURRILLVILLE, RHODE ISLAND

DOCKET No. SB-2015-06

INVENERGY THERMAL DEVELOPMENT LLC'S RESPONSES TO THE TOWN OF BURRILLVILLE'S 15th SET OF DATA REQUESTS

15-5 What do you expect the Town of Burrillville should do regarding service levels needed to address possible accidents at the facility, including chemical spills?

RESPONSE 15-5: Invenergy will coordinate with the Town of Burrillville with regard to the location and amount of storage of hazardous materials on-site and the associated training, personal protective equipment and emergency procedures which may be required in the event of a release.

Please refer to Section 7.0 (Notifications), Section 13.2.4 (Countermeasures), and Appendix A of **Exhibit 1**, the Preliminary Draft Spill Prevention Control and Countermeasure Plan for details on the emergency response procedures which will be implemented at the Facility and the service levels needed to address possible accidents.

RESPONDENT: John Niland, Invenergy Thermal Development LLC
Mike Feinblatt, ESS Group, Inc.

DATE: August 19, 2016

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
ENERGY FACILITY SITING BOARD

IN RE: INVENERGY THERMAL DEVELOPMENT LLC's APPLICATION TO CONSTRUCTION THE CLEAR RIVER ENERGY CENTER IN BURRILLVILLE, RHODE ISLAND

DOCKET No. SB-2015-06

INVENERGY THERMAL DEVELOPMENT LLC'S RESPONSES TO THE TOWN OF BURRILLVILLE'S 15th SET OF DATA REQUESTS

INVENERGY THERMAL DEVELOPMENT LLC
By its Attorneys,

/s/ Alan M. Shoer

Alan M. Shoer, Esq. (#3248)
Richard R. Beretta, Jr. Esq. (#4313)
Nicole M. Verdi, Esq. (#9370)
ADLER POLLOCK & SHEEHAN, P.C.
One Citizens Plaza, 8th Floor
Providence, RI 02903-1345
Tel: 401-274-7200
Fax: 401-751-0604
Dated: August 19, 2016

CERTIFICATE OF SERVICE

I hereby certify that on, I delivered a true copy of the foregoing responses to the Town of Burrillville's 15th Set of Data Requests via electronic mail to the parties on the attached service list.

/s/ Alan M. Shoer

SB-2015-06 Invenergy CREC Service List as of 07/15/2016

Name/Address	E-mail	Phone/FAX
File an original and 10 copies with EFSB: Todd Bianco, Coordinator Energy Facility Siting Board 89 Jefferson Boulevard Warwick, RI 02888 Margaret Curran, Chairperson Janet Coit, Board Member Assoc. Dir., Div. of Planning Parag Agrawal Patti Lucarelli Esq., Board Counsel Susan Forcier Esq., Counsel Rayna Maguire, Asst. to the Director DEM	Todd.Bianco@puc.ri.gov; Patricia.lucarelli@puc.ri.gov; Margaret.Curran@puc.ri.gov; janet.coit@dem.ri.gov; susan.forcier@dem.ri.gov; rayna.maguire@dem.ri.gov; Parag.Agrawal@doa.ri.gov;	401-780-2106
Parties (Electronic Service Only, Unless by Request)		
Invenergy Thermal Development LLC Alan Shoer, Esq. Richard Beretta, Esq. Elizabeth Noonan, Esq. Nicole Verdi, Esq. Adler, Pollock & Sheehan One Citizens Plaza, 8th Floor Providence, RI 02903 John Niland, Dir. Of Business Development Tyrone Thomas, Esq., Asst. General Counsel Invenergy Thermal Development LLC One South Wacker Drive, Suite 1900 Chicago, IL 60600	ashoer@apslaw.com; rberetta@apslaw.com; enoonan@apslaw.com; nverdi@apslaw.com; jniland@invenergyllc.com; Tthomas@invenergyllc.com;	401-274-7200 312-224-1400
Town of Burrillville Michael McElroy, Esq., Special Counsel Leah Donaldson, Esq., Special Counsel Schacht & McElroy PO Box 6721 Providence, RI 02940-6721 Oleg Nikolyszyn, Esq., Town Solicitor 155 South Main St., Suite 303 Providence, RI 02903	Michael@mcelroylawoffice.com; leah@mcelroylawoffice.com; Nikolyszyn@gmail.com;	401-351-4100 401-474-4370
Conservation Law Foundation Jerry Elmer, Esq. Max Greene, Esq. 55 Dorrance Street	Jelmer@clf.org; Mgreene@clf.org;	401-351-1102

Providence RI, 02903		
Ms. Bess B. Gorman, Esq. Assistant General Counsel and Director Legal Department, National Grid 40 Sylvan Road Waltham, MA 02451 Mark Rielly, Esq. Senior Counsel	Bess.Gorman@nationalgrid.com; Mark.rielly@nationalgrid.com;	781-907-1834
Office of Energy Resources Andrew Marcaccio, Esq. Nick Ucci, Chief of Staff Chris Kearns, Chief Program Development One Capitol Hill Providence, RI 02908 Ellen Cool Levitan & Associates	Andrew.Marcaccio@doa.ri.gov; Nicholas.Ucci@energy.ri.gov; Christopher.Kearns@energy.ri.gov; egc@levitan.com;	401-222-3417 401-574-9100
Rhode Island Building and Construction Trades Council Gregory Mancini, Esq. Sinapi Law Associates, Ltd. 2374 Post Road, Suite 201 Warwick, RI 02886	gmancinilaw@gmail.com;	401-739-9690
Residents of Wallum Lake Road, Pascoag, RI Dennis Sherman and Kathryn Sherman Christian Capizzo, Esq. Shechtman Halperin Savage, LLP 1080 Main Street Pawtucket, RI 02869	ccapizzo@shslawfirm.com; kags8943@gmail.com;	401-272-1400
Residents of Wallum Lake Road, Pascoag, RI Paul Bolduc and Mary Bolduc Joseph Keough Jr., Esq. 41 Mendon Avenue Pawtucket, RI 02861 Paul and Mary Bolduc 915 Wallum Lake Road Pascoag, RI 02859	jkeoughjr@keoughsweeney.com; oatyss1@verizon.net;	401-724-3600 401-529-0367
Abutter David B. Harris Michael Sendley, Esq. 600 Putnam Pike, St. 13 Greenville, RI 02828	msendley@cox.net;	401-349-4405

Interested Persons (Electronic Service Only)		
Residents of 945 Wallum Lake Road, Pascoag, RI (Walkers) Nicholas Gorham, Esq. P.O. Box 46 North Scituate, RI 02857	nickgorham@gorhamlaw.com; edaigle4@gmail.com;	401-647-1400
Peter Nightingale, member Fossil Free Rhode Island 52 Nichols Road Kingston, RI 02881	divest@fossilfreeri.org;	401-789-7649
Sister Mary Pendergast, RSM 99 Fillmore Street Pawtucket, RI 02860	mpendergast@mercyne.org;	401-724-2237
Patricia J. Fontes, member Occupy Providence 57 Lawton Foster Road South Hopkinton, RI 02833	Patfontes167@gmail.com;	401-516-7678
Burrillville Land Trust Marc Gertsacov, Esq. Law Offices of Ronald C. Markoff 144 Medway Street Providence, RI 02906	marc@ronmarkoff.com;	401-272-9330
Paul Roselli, President Burrillville Land Trust PO Box 506 Harrisville, RI 02830	proselli@cox.net;	401-447-1560
Rhode Island Progressive Democrats of America Andrew Aleman, Esq. 168 Elmgrove Avenue Providence, RI 02906	andrew@andrewaleman.com;	401-429-6779
Fighting Against Natural Gas and Burrillville Against Spectra Expansion Jillian Dubois, Esq. The Law Office of Jillian Dubois 91 Friendship Street, 4th Floor Providence, RI 02903	jillian.dubois.esq@gmail.com;	401-274-4591
Burrillville Town Council c/o Louise Phaneuf, Town Clerk 105 Harrisville Main Street	lphaneuf@burrillville.org;	401-568-4300

Harrisville, RI 02830		
Thomas J. Kravitz, Town Planner Christine Langlois, Deputy Planner Town of Burrillville 144 Harrisville Main Street Harrisville, RI 02830 Joseph Raymond, Building Official	tkravitz@burrillville.org; clanglois@burrillville.org; jraymond@burrillville.org;	401-568-4300
Michael C. Wood, Town Manager Town of Burrillville 105 Harrisville Main Street Harrisville, RI 02830	mcwood@burrillville.org;	401-568-4300 ext. 115
Mr. Leo Wold, Esq. Department of Attorney General 150 South Main Street Providence, RI 02903	LWold@riag.ri.gov;	401-274-4400
Public Utilities Commission Cynthia Wilson Frias, Esq., Dep. Chief of Legal Alan Nault, Rate Analyst	Cynthia.Wilsonfrias@puc.ri.gov; Alan.nault@puc.ri.gov;	401-941-4500
Division of Public Utilities and Carriers John J. Spirito, Esq., Chief of Legal Steve Scialabba, Chief Accountant Tom Kogut, Chief of Information	john.spirito@dpuc.ri.gov; steve.scialabba@dpuc.ri.gov; thomas.kogut@dpuc.ri.gov;	401-941-4500
Matthew Jerzyk, Deputy Legal Counsel Office of the Speaker of the House State House, Room 302 Providence RI, 02903	mjerzyk@rilin.state.ri.us;	401-222-2466
Hon. Cale Keable, Esq., Representative of Burrillville and Glocester	Cale.keable@gmail.com;	401-222-2258
Nick Katkevich	nkatkevich@gmail.com;	
Ambar Espinoza	aespinoza@ripr.org;	
Joseph Bucci, Acting Administrator Highway and Bridge Maintenance Operations RI Department of Transportation	joseph.bucci@dot.ri.gov;	
Jared Rhodes, Chief Statewide Planning Program	jared.rhodes@doa.ri.gov;	

Jennifer Sternick Chief of Legal Services RI Department of Administration	Jennifer.sternick@doa.ri.gov;	
Doug Gablinske, Executive Director TEC-RI	doug@tecri.org;	
Tim Faulkner ecoRI News 111 Hope Street Providence, RI 02906	tim@ecori.org;	401-330-6276
Robert Tormey Conanicut Energy, LLC	rjtormey@conanicutenergy.com;	617-306-1601
Sally Mendzela	salgalpal@hotmail.com;	
Keep Burrillville Beautiful Paul LeFebvre	paul@acumenriskgroup.com;	401-714-4493
Mark Baumer	everydayyeah@gmail.com;	
Nisha Swinton Food & Water Watch New England	nswinton@fwwatch.org;	
Kaitlin Kelliher	Kaitlin.kelliher@yahoo.com;	
Joe Piconi, Jr.	jiggzy@hotmail.com;	
Hon. Aaron Regunberg Representative of Providence, District 4	Aaron.regunberg@gmail.com;	
Paul Ernest	paulwernest@gmail.com;	
Skip Carlson	scarlson@metrocast.net;	
Kathryn Scaramella	kscaramella@outlook.com;	
Diana Razzano	Dlrazzano13@verizon.net;	
David Goldstein	tmdgroup@yahoo.com;	
Douglas Jobling	djobling@cox.net;	
Claudia Gorman	corkyhg@gmail.com;	
Curt Nordgaard	Curt.nordgaard@gmail.com;	
Collee Joubert	Colleenj1@cox.net;	
Matt Smith Food & Water Watch	msmith@fwwatch.org;	
Christina Hoefsmit, Esq. Senior Legal Counsel RI Department of Environmental Management	Christina.hoefsmit@dem.ri.gov;	

Steven Ahlquist, RIFuture	atomicsteve@gmail.com;	

EXHIBIT 1

PRELIMINARY DRAFT

Spill Prevention Control and Countermeasure Plan

Clear River Energy Center
Burrillville, Rhode Island

PREPARED FOR:

Invenergy Thermal Development LLC
One South Wacker Drive
Suite 1900
Chicago, IL 60606

PREPARED BY:

ESS Group, Inc.
10 Hemingway Drive, 2nd Floor
East Providence, Rhode Island 02915

ESS Project No. I108-013.04

August 2016

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN
Clear River Energy Center
Burrillville, Rhode Island

Prepared For:

Invenergy Thermal Development LLC
One South Wacker Drive
Suite 1900
Chicago, Illinois 60606

Prepared By:

ESS Group, Inc.
10 Hemingway Drive, 2nd Floor
East Providence, Rhode Island 02915

ESS Project No. I108-013.04

August 2016

TABLE OF CONTENTS

DURING AN EMERGENCY IMMEDIATELY TURN TO APPENDIX A

TABLE OF CONTENTS
(CONTINUED)

SECTION **PAGE**

APPENDICES

CLEAR RIVER ENERGY CENTER POWER

CROSS REFERENCE CHECKLIST

40 CFR 112 - SPCC REGULATIONS

Sections of 40 CFR 112 that are not provided below are not applicable to this facility.

40 CFR 112 Section	Requirements	Location in Plan
Subpart A – Applicability, Definitions, and General Requirements for All Facilities and All Types of Oils		
112.1	**General applicability and exclusions:** Non-transportation related facility that uses oil in quantities that could be expected to discharge oil quantities that may be harmful to navigable waters of the United States or adjoining shorelines must implement SPCC Plan. Does not apply to: • Equipment not subject to 311(j)(1)(C) of Clean Water Act • Facility not reasonably expected to have a discharge of oil • Equipment subject to authority of U.S. Department of Transportation • Total underground storage ≤ 42,000 gallons • Total aboveground storage ≤ 1,320 gallons • Containers with capacity of < 55 gallons • UST/ancillary equipment subject to technical requirements of Part 280/281 • Facility used exclusively for wastewater treatment (production, recovery, recycling of oil is not treatment)	N/A
112.2	**Definitions:** Key definitions are: *Bulk Storage Container* - container used to store oil, used for purposes including the storage of oil prior to use, while being used, or prior to further distribution in commerce. Oil-filled electrical, operation, or manufacturing equipment is not a bulk storage container. *Navigable Waters* – waters of the U.S. including: • Waters used for interstate or foreign commerce • Waters subject to ebb and flow of tide • Interstate waters and wetlands • Intrastate waters, wetland, mudflats, etc., which if used could affect interstate or foreign commerce (including travel, recreation, fishing, industry, etc.)	N/A
112.3(a-c)	**Timeline to prepare and implement SPCC Plan:** If operational after February 18, 2005, prepare and implement the Plan before beginning operations.	N/A
112.3(d)	**Certification Requirements**: A licensed PE must review and certify a Plan for it to be effective. Certification should state: • The PE is familiar with requirements of 40 CFR 112. • The PE (or an agent of the PE) has visited and examined facility. • Plan has been prepared in accordance with good engineering practice and applicable industry standards. • Procedures for required inspections and testing have been established. • Plan is adequate for facility.	2.0
112.3(e)	**Record keeping**: Plan must be maintained at the facility, if facility is normally attended at least 4 hours per day or at the nearest field office and must be available to USEPA for onsite review during normal working hours.	9.1
112.3(f)	**Requests for Extensions:** USEPA may authorize extensions to Plan deadlines.	N/A
112.4	**Significant Spill Reports:** Significant oil spills to navigable waters require filing of a report to USEPA and the State (include information in 112.4). Significant spills include single discharges > 1,000 gallons or two or more discharges > 42 gallons within 12 month period. The SPCC Plan may be required to be formally amended and submitted to USEPA for approval.	
112.5	**Amendments:** Plan review and evaluation required every 5 years. Necessary amendments (i.e., those that include more effective prevention and control technology) must be made within 6 months and the updated Plan must be implemented within 6 months of the update. Document reviews and include in Plan. A PE must certify technical amendments.	11.0
112.7	**Management Approval:** Plan must have full approval of management to commit the necessary resources to fully implement the Plan.	11.0

40 CFR 112 Section	Requirements	Location in Plan
112.7(a)(1-2)	**Plan Elements – Conformance:** Include discussion of facility's conformance/compliance with applicable requirements.	13.1
112.7(a)(3)	**Plan Elements – Facility Diagram:** Describe physical layout of facility and include facility diagram. Diagram must show: location and contents of each container; completely buried tanks, transfer stations; connecting pipes.	13.2
112.7(a)(3) (i, iii), (b), (c)	**Plan Elements – Storage and Control:** Discuss type and amount of oil in containers, controls (e.g. secondary containment), and other structures.	13.2.1
112.7(a)(3) (ii)	**Plan Elements – Discharge Prevention:** Discuss discharge prevention including procedures for routine handling of products (loading/unloading).	13.2.4
112.7(a)(3) (iv-v)	**Plan Elements – Countermeasures:** Discuss countermeasures for discharge recovery, response, and cleanup (include methods of disposal/recovery).	13.3
112.7(a)(3) (vi)	**Plan Elements – Notifications:** Include contact list and phone numbers for facility response coordinator, National Response Center, cleanup contractors, and appropriate Federal, State, and local agencies who must be contacted.	13.3 and Appendix A
112.7(a)(4-5)	**Plan Elements – Emergency Response:** Provide procedures to enable a person to respond to a discharge and report necessary information.	13.4
112.7(b & c)	**Plan Elements – Facility Drainage:** Include prediction of direction, rate of flow, and quantity that could be discharged as result of major equipment failure. Provide appropriate containment and/or diversionary structures or equipment.	13.5 and Figure
112.7(d)	**Plan Elements – Non-Conformance:** If conformance is not practicable, explain why and provide an oil spill contingency plan (per Part 109) along with a written commitment of personnel, equipment, and materials required to control and remove any quantity of oil discharged that may be harmful.	N/A
112.7(e)	**Plan Elements – Inspections, Tests, and Records:** Conduct inspections, tests, and records in accordance with written procedures developed for the facility. Maintain records for 3 years.	13.8
112.7(f)(1,3)	**Plan Elements – Training:** At least annually, train/brief oil handling personnel in equipment/facility operations, discharge procedures, applicable regulations.	Appendix F
112.7(f)(2)	**Plan Elements – Designated Individual:** Designate a person who is accountable for discharge prevention and who reports to facility management.	Appendix A
112.7(g)(1-5)	**Plan Elements – Security:** Ensure your facility has adequate security to prevent vandalisms and respond to emergencies: • Fence oil storage areas and lock/guard when facility is unattended. • Ensure master flow valves and valves permitting outward flow remain closed. • Lock starter controls in "off" position and allow access to authorized personnel. • Securely cap or blank-flange loading/unloading connections of piping. • Provide facility lighting.	14.0
112.7(h)	**Plan Elements – Loading/Unloading:** Requirements for tank car and tank truck loading/unloading racks.	Appendix C
112.7(i)	**Plan Elements – Repairs:** Evaluate aboveground container if it undergoes a repair/alteration or a change in service that might affect risk of discharge.	16.0
112.7(j)	**Plan Elements – Conformance, Additional Regulations:** Include discussion of conformance with more stringent State rules, regulations, and guidelines.	17.0
Requirements for Petroleum Oils and Non-Petroleum Oils (Except Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and Vegetable Oils, Including Oils from Seeds, Nuts, Fruits, and Kernels):		
112.8(a)	Meet general requirements listed under Section 112.7.	Above
112.8(b)(1-5) and (c)(3)	**Plan Elements – Facility Drainage:** Diked areas – drainage must be manual, keep bypass valve closed, inspect retained rainwater, open the bypass valve, and reseal it following drainage under supervision, keep records. Undiked areas with a potential for a discharge – design flow so oil is retained or returned to facility, provide redundancy for pumps used to treat drainage.	13.5 and 18.0
112.8(c)(1-2)	**Plan Elements – Aboveground Bulk Containers:** Containers must be compatible with the material stored and conditions of storage such as pressure and temperature. Sufficient secondary containment must be provided.	18.0
112.8(c)(4-5)	**Plan Elements – Underground Bulk Containers:** Protect buried metallic tanks installed on or after Jan, 10, 1974 from corrosion by coatings and regularly leak test. Protect partially buried or bunkered tanks.	NA

40 CFR 112 Section	Requirements	Location in Plan
112.8(c)(6)	**Plan Elements – Aboveground Bulk Containers Testing:** Perform visual and non-destructive integrity tests on a regular basis and when repaired, and keep records. Include supports and foundations. Frequently inspect containers (exterior) for deterioration, discharges, or accumulation inside containment.	18.0
112.8(c)(7)	**Plan Elements – Internal Heating Coils:** Monitor or control steam return and exhaust lines if discharging to water body.	NA
112.8(c)(8)	**Plan Elements – Bulk Container Controls:** Provide good engineering practices, including one of the following: high liquid level alarms; high liquid level cutoff; audible or code signal communication during loading/operation; sight gauge (or equivalent). Regularly test liquid level sensing devices.	18.0
112.8(c)(9-10)	**Plan Elements – Inspections:** Observe effluent treatment frequently to detect system upsets. Promptly correct visible discharges from containers/equipment.	18.0
112.8(c)(11)	**Plan Elements – Portable Containers:** Position to prevent discharge and provide secondary containment.	18.0
112.8(d)(1-5)	**Plan Elements –Piping:** Provide buried piping installed or replaced on or after Aug. 16, 2002 w/ protective wrapping and coating. Design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction. Regularly inspect aboveground valves and piping. Cap or blank-flange the terminal connection at the transfer point. Warn vehicles of aboveground piping or other oil transfer operations.	18.0
Requirements for Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and for Vegetable Oils (Including Oils from Seeds, Nuts, Fruits, and Kernels)		
112.12	Requirements for Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and for Vegetable Oils (Including Oils from Seeds, Nuts, Fruits, and Kernels)	NA

1.0 FACILITY INFORMATION

Facility Name:	Clear River Energy Center (Clear River)
Latitude:	
Longitude:	
Facility Address:	
City:	Burrillville
State:	Rhode Island
Zip Code:	02830
County:	Providence
Owner:	Invenergy Thermal Development LLC
Mailing Address:	One South Wacker Drive Suite 1900 Chicago, IL 60600
Assessors Plat & Lot	
Contact Person:	John E. Niland, Director of Business Development
Telephone:	
Fax:	
Email:	
Facility Operator Name:	Clear River Energy Center
Operator Address:	
City:	Burrillville
State:	Rhode Island
Zip Code:	02830
County:	Providence
Facility Type:	Electric Power Generation
NAICS Code:	221112
Facility Attended:	24/7
Number of Above Ground Storage Containers:	
Largest Above Ground Storage Tank Capacity:	(1) Fuel Oil Storage - 2,000,000 gallons
Total Facility Capacity:	To be determined
Type(s) of Oil Stored:	Dielectric Oil Lubricating Oil Diesel Fuel No. 2 Fuel Oil
Located in Indian Country:	No

Clear River Energy Center Personnel

Plant Manager:	To be determined
Operations Manager:	To be determined
Environmental Specialist	To be determined
Maintenance Manager	To be determined

Control Room	To be determined
Emergency Response Contractor	To be determined

Government Agencies

Fire, Police, & Rescue	911
RI Department of Environmental Management	401-222-1360
RIDEM “Hot-line"	401-222-3070
National Response Center	800-424-8802
MA Department of Environmental Protection	888-304-1133

Clear River's Control Room will contact the Plant Manager, Operations Manager, Maintenance Manager, and Environmental Specialist.

Operators conducting site inspections, mechanics working on oil-containing equipment, and persons responsible for loading and unloading materials carry 2-way radios and are in contact with the Control Room at all times (24 hours/7 days).

Emergency Response

If the discharge reaches the Iron Mine Brook, immediately contact the National Response Center.

2.0 PROFESSIONAL ENGINEER'S REVIEW – [112.3(D)]

The undersigned Licensed PE is familiar with the requirements of Chapter 40 of the Code of Federal Regulations Part 112 (40 CFR 112) and has supervised examination of this facility. The undersigned Licensed PE attests that this SPCC Plan has been prepared in accordance with good engineering practices including applicable industry standards and in accordance with the requirements of Chapter 40 of the Code of Federal Regulations Part 112 (40 CFR 112), that procedures have been established for required inspection procedures and testing, and that the plan is adequate for the facility.

_____
Signature

Eric A. Pearson
Name

Senior Engineer
Title

ESS Group, Inc.
Company

_____
Date

RI 5711
PE Registration Number

3.0 CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA [(PER 40 CFR 112.20)]

Facility Name: Clear River Energy Center

Facility Address: Burrillville, Rhode Island 02830

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

   Yes _____ No ___X___

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest above ground oil storage tank plus sufficient freeboard to allow for precipitation within any above ground oil storage tank area?

   Yes _____ No ___X___

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?

   Yes ___X___ No _____

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?

   Yes _____ No ___X___

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

   Yes _____ No ___X___

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature Name (please type or print)

Title Date

4.0 STATEMENT OF MANAGEMENT COMMITMENT

This SPCC Plan Amendment is fully approved by the management of Clear River Energy Center and has been implemented as described herein. All necessary manpower, equipment, and materials will be committed to the prevention, control, and remediation of any spills at Clear River Energy Center.

Signature: _____ Date: _____

Name: _____

Title: _____

5.0 SPCC REVIEW PAGE [40 CFR 112.5]

In accordance with 40 CFR 112.5(b), a review and evaluation of this SPCC Plan is conducted at least annually, with PE review and certification once every five years.

This review, as a minimum, shall:

- Update the Site Spill History by documenting and describing known spill events, failures, or malfunctioning equipment, and
- Detail any changes in facility design, construction, or operation and maintenance that materially effects the facility's potential for the discharge of oil into or upon navigable waters or the adjoining shoreline.

With reviews indicate the need for amendment, Clear River will ensure such amendments are completed within six months of the review date.

Review Date	Signature
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

6.0 LOCATION OF SPCC MANUALS 40 CFR 112.3(E)

In accordance with 40 CFR 112.3(e), copies of this SPCC Plan shall be maintained at this facility in the following locations:

Controlled Copy #	Name/Location
1	Control Room
2	Environmental Specialist
3	Plant Manager
4	Incident Command Post

The Control Room copy will be available 24 hours per day/7 days per week. The plan will be available for inspection by the Regional Administrator during normal business hours.

7.0 NOTIFICATIONS 112.7(A)(3)(VI)

Provided below is a list of contact information for all agencies, companies and personnel which may be needed during an emergency spill response. For ease of use, this information can also be found in the emergency response section provided in Appendix A of this Plan.

Clear River Energy Center Personnel

Plant Manager	To Be Determined
Operations Manager	To Be Determined
Environmental Specialist	To Be Determined
Maintenance Manager	To Be Determined
Control Room	To Be Determined
Emergency Response Contractor	To Be Determined

Government Agencies

Fire, Police, & Rescue	911
RI Department of Environmental Management	401-222-1360
RI "DEM Hot-line"	401-222-3070
National Response Center	800-424-8802
MA Department of Environmental Protection	888-304-1133

Clear River's Control Room will contact the Plant Manager, Operations Manager, Maintenance Manager, and Environmental Specialist.

Operators conducting plant inspections, mechanics working on oil-containing equipment, and persons responsible for loading and unloading materials carry two-way radios and are in contact with the Control Room at all times (24 hours/7 days).

Emergency Response

If the discharge reaches the Iron Mine Brook, immediately contact the National Response Center.

8.0 FACILITY RESPONSE PLAN (FRP) APPLICABILITY

The Facility is required to prepare and implement an FRP as outlined in 40 CFR 112.20. The Facility does have a total oil storage capacity of at least 1 million gallons and is located approximately 1,000 feet to sensitive environments (refer to the Emergency Response Plan in Appendix H).

9.0 SPCC GENERAL APPLICABILITY [40 CFR 112.11]

Clear River is regulated under 40 CFR part 112.

- The Facility maintains an aggregate aboveground oil storage capacity over 1,320 gallons.
- The Facility is a non-transportation facility engaged in storing, using, and consuming oil and oil products, which due to its location could reasonably be expected to discharge oil into or upon the navigable waters of the United States.

Affected Waterway: Iron Mine Brook

Distance: 1,000 Feet

Flow Path to Waterway: East

This document serves as the Facility's current SPCC Plan.

9.1 Recordkeeping [112.3(e)(1)]

The Plan is available in the Facility's Control Room. The Control Room at Clear River operates 24 hours a day, 7 days a week and serves as a command center for all communications and operations at the Facility. The Control Room can be reached at all times via telephone or two way radio. A copy is also available at all times in the Incident Command Post in the _____ Building.

The Plant Manager and Environmental Specialist maintain additional copies of the SPCC Plan in the Administration Building.

9.2 Qualified Facilities [112.3(g)(2)]

Clear River is neither a Tier I nor Tier II Qualified Facility and therefore cannot self-certify this SPCC Plan.

- The Facility maintains individual aboveground oil containers greater than 5,000 gallons; and
- The Facility has more than 10,000 gallons of aggregate aboveground oil storage capacity.

10.0 AMENDMENT OF SPCC PLAN BY REGIONAL ADMINISTRATOR (RA) [40 CFR 112.4]

112.4(a),(c) The Facility is a new facility has not released more than 1,000 gallons of oil in a single reportable discharge in any 12-month period to date. In addition, the Facility has not released more than 42 gallons in each of two reportable discharges in any 12-month period.

112.4(d),(e) This is a new plan and has not been reviewed by the Regional Administrator or the by EPA Region 1.

11.0 AMENDMENT OF SPCC PLAN BY THE OWNER OR OPERATOR [40 CFR 112.5]

The Plant Manager is responsible for initiating a review of the facility's SPCC Plan annually within one month of the anniversary date of the most recent PE certification. The site's Environmental Specialist will coordinate and complete the work. Designated representatives from Clear River will review those portions of the SPCC Plan within their level of expertise. In addition to reviewing changes in facility design,

construction, operation, and maintenance, the review should also address lessons learned from drills or actual events and changes in federal, state, or municipal requirements. Once the review is completed, the necessary revisions will be made to the SPCC Plan as soon as possible, but no later than six months after the changes/review is completed. Copies of the revisions will be distributed to the controlled copy holders of the plan (e.g. Control Room, ICP, Plant Manager, and Environmental Specialist). An annual SPCC Plan review will be conducted each year and recorded as part of Appendix E.

All call-out lists that support notification procedures will be verified semi-annually and updated as necessary in order to maintain accuracy.

12.0 TIER II QUALIFIED FACILITY PLAN REQUIREMENTS [40 CFR 112.6(B)]

As discussed in Section 9.2, Clear River does not meet the requirements of a Tier II Qualified Facility.

13.0 GENERAL SPCC PLAN REQUIREMENTS [40 CFR 112.7]

Clear River is committed to providing all necessary resources to fully implement this SPCC Plan. The Facility maintains a Written Commitment to Manpower, Equipment, and Materials statement signed by the Plant Manager. The signed statement can be found in Section 4.0 of this Plan.

This Plan has been designed to follow the sequence of the rule and includes cross-reference to all provisions.

All of the facilities, procedures, methods, and equipment at the Facility are fully operational.

13.1 Conformance [112.7(a)(2)]

This SPCC Plan does not include deviations from the requirements of 40 CFR 112.7(g), (h)(2) and (3), and (i) and subparts B and C of the rule.

13.2 Facility Layout [112.7(a)(3)]

The Clear River Energy Center Facility, owned and operated by Invenergy Thermal Development LLC, is a combined-cycle electric generating facility located at the Spectra Energy Algonquin Compressor Station site on Wallum Lake Road (State Route 100) in Burrillville, Rhode Island.

The Facility will be configured as a two-unit one-on-one (1x1), duct fired, combined cycle generation station. Each unit will consist of an advanced class (G, H, or J class) gas turbine operated in a combined-cycle configuration with a heat recovery steam generator (HRSG) equipped with natural gas fired duct burners and one steam turbine. The combustion turbine, steam turbine, and generator of each unit will be connected via a common shaft, (single shaft). Each gas turbine will fire natural gas as a primary fuel and ultra-low sulfur diesel (ULSD) fuel as a backup fuel for limited periods when natural gas is unavailable. The ULSD will be stored in one 2,000,000-gallon on-site storage tank. ULSD will be delivered to the Facility by truck. The natural gas supply for the Facility will be provided by pipeline from the adjacent Spectra Energy Algonquin Compressor Station.

The Facility will have a nominal power output at base load of approximately 850-1,000 megawatts (MW) while firing natural gas (with supplementary HRSG duct firing) and 650-800 MW while firing ULSD. The electrical power generated by the Facility will be transmitted through a new 345-kV transmission line to be installed from the Facility within a short section of the right-of-way (ROW).

Each unit will utilize air-cooled condensers (ACC) to limit water usage and wastewater discharge. The water supply for the Facility will be provided by the Pascoag Utility District (PUD) through a dedicated pipeline to be installed from the PUD water supply well field to the Facility. Wastewater from the Facility will be discharged to the Burrillville Wastewater Treatment Facility for treatment through a dedicated sewer line to be installed.

The oil stored on the facility is primarily located in one 2,000,000 gallon No. 2 fuel oil storage tank, two gas turbines, one steam turbine, two Generator Step Up transformers to the Facility switchyard, one fire pump, and two emergency generators. Each has a form of secondary containment.

The Facility Diagrams provided in Appendix B gives a general layout of the Facility and identifies the following:

- Location and contents of all regulated fixed oil storage containers;
- Storage areas where mobile or portable containers are located;
- Loading/Unloading areas;
- Oil/water separator;
- Spill kit building locations;
- Predicted direction of sheet flow; and
- Storm drain locations.

The Facility has also included the following record drawings in Appendix B: Turbine and Boiler Area Plumbing, Oil Separator Pits and Pump Stations, and Drainage Plan. These drawings provide supplemental information about the layout of the Facility.

13.2.1 Complete Inventory [112.7(a)(3)(i)]

A complete inventory of the Facility's oil storage capacity is provided on Table 1 in Appendix B of this Plan. The table includes the tank identification number (if applicable), type of oil, storage capacity, type of secondary containment, and secondary containment volume. The identification numbers in Table 1 correspond to those shown on the Facility Diagram. Spill scenarios are presented in Section 13.2.3.

13.2.2 Written Procedure [112.7(a)(3)(ii)]

Clear River maintains a written procedure for hazardous material deliveries. Key features of the document are described below. The entire document can be found in Appendix C.

- Shipments must be properly identified and accompanied by the appropriate SDS.
- A facility escort will be assigned to accompany the bulk delivery driver while on site.
- The facility escort will verify that the amount of material to be delivered can be contained in the storage tank.
- Before connecting the delivery lines to the unloading pump, an inspection for kinks, cuts, abrasions, and general wear shall be performed.
- Delivery line fittings shall be inspected for wear and integrity of the seal.
- After delivery lines are connected and secured, verify that all cam locks are tied down and appropriate spill pans and/or buckets are placed under connections outside of the containments area.
- When the delivery driver is ready to begin unloading operations, the Control Room shall be notified.
- The unloading operations shall be observed to ensure that the delivery driver is monitoring the transfer equipment.
- After the product is transferred, verify that the delivery valves are closed and the delivery hose purged to remove all liquids. Fixed equipment valves shall be closed and locked. When delivery lines are disconnected, any drips or residual must be directed to the drip pans or buckets.
- The Control Room shall be notified when the delivery is complete.

In the event that a delivery truck was to discharge its contents during a delivery, a Oil/Water Separator Retention tank could accept up to 10,000 gallons before being overcome. Additionally, the apron has a storage capacity of approximately 1,200 gallons. Any released volume not contained within the retention tank or apron would be captured by storm drains leading to one of the two stormwater detention ponds. The detention ponds at Clear River are described in Section 13.2.3.

Diesel Fuel is handled by Clear River personnel on a daily basis to fuel on-site vehicles. All personnel are trained in oil handling and spill response procedures during annual training. The diesel fuel tank is located on a concrete apron which is curbed on three sides and sloped towards drains. There are catch basins on the apron which direct flow to a Oil/Water Separator via a lift station.

13.2.3 Oil Storage Spill Scenarios [112.7(a)(3)(iii)]

All oil storage at Clear River is aboveground, in tanks, drums, totes, and process-related vessels. The construction material of each tank and container is compatible with the material stored in it. The construction material of the containment, either concrete or steel, is sufficiently impervious to oil. The contents of all tanks and containers of oils are kept at ambient temperature and pressure.

Clear River maintains two stormwater detention ponds on site which serve as emergency secondary containment for the entire facility. To serve as sufficient secondary containment, each pond must be able to contain the volume of Clear River's largest oil storage container plus the quantity of rainfall resulting from a 25-year storm event. In Northern Rhode Island, a 25-year storm will deliver 5.6-inches of rainfall in 24 hours.

The Stormwater Detention Pond #1 is approximately 12,120 square meters in area. The pond is approximately 100 meters by 125 meters in rectangular size.

The Stormwater Detention Pond #2 is approximately 907 square meters acres in area. The pond is approximately 30 meters by 50 meters in triangular size.

Clear River utilizes diked containment areas as the primary means of secondary containment throughout the Facility.

Switchyard Generator Step-Up Transformers: Concrete moats filled with crushed stone (to approximately one-foot below moat rim elevation) are utilized as secondary containment for the two (2) switchyard Generator Step-Up (GSU) transformers. The concrete moats are connected in triplicate by cross-moat piping to provide additional storage in the case of a major release. Each switchyard transformer contains approximately 20,000 gallons of oil. Assuming 20% void space within the crushed stone, a single concrete moat provides approximately 22,000 gallons of secondary containment capacity. The sum of two connected moats allows for approximately 44,000 gallons of secondary storage capacity. The required storage capacity to contain a complete release of a switchyard transformer is 36,500 gallons (including considerations for 5.6 inches of rainwater during a 25-year storm event). Therefore the switchyard transformers are provided with sufficient secondary containment capacity.

Auxiliary Transformers: Concrete moats filled with crushed stone (to approximately one-foot below moat rim elevation) are utilized as secondary containment for the auxiliary transformers. Each auxiliary transformer contains approximately 1,500 gallons of oil. Assuming 20% void space within the crushed stone, a single concrete moat provides approximately 3,500 gallons of secondary containment capacity. The required storage capacity to contain a complete release of an auxiliary transformer is approximately 2,400 U.S. gallons (including considerations for 5.6 inches of rainwater during a 25-year storm event). Therefore the auxiliary transformers are provided with sufficient secondary containment capacity.

Gas Turbines, Steam Turbines, and Hydraulic Oil Reserve Equipment: The two (2) steam turbines, and two (2) hydraulic reserves are all located in the basement of the Turbine Building. The storage capacity of the largest container in this group is 2,500 gallons of lubricating oil. The Turbine Building basement provides more than 50,000 gallons of secondary storage capacity.

Emergency Generator Diesel Tanks: The diesel storage tank associated with the emergency generator is equipped with internal secondary containment. The secondary containment associated with these storage tanks was supplied by the generator unit manufacturer and meets the SPCC Plan regulation's requirements [40 CFR 112.6(a)(3)(ii)].

Diesel Fire Pump Tank: Within the fire pump building, there is a steel diesel tank to supply the fire pumps. The tank is located within a concrete berm inside a building. Floor drains within the building discharge to the Oil/Water Separator.

No. 2 Fuel Oil Tank: One (1) 2,000,000-gallon aboveground steel tank is used to store No. 2 fuel oil. The tank is marked with the tank contents, design capacity, the identification number, and working capacity. The tank is surrounded by a steel dike that provides secondary containment for 110% of the capacity of the tank. Tank level monitoring is provided on each No. 2 fuel oil tank and is monitored continuously via a differential pressure detector connected to the Distributor Control System (DCS) Tank pressure level is measured at the start of each hour and that reading is used as the set point. The tank is monitored throughout the hour and an alarm sounds in the Control Room if there is a 1/8 inch difference in level (equivalent to approximately 500 gallons) anytime during the hour. At the start of a new hour, a new set point is determined. When the turbines are running on oil, the DCS uses the fuel flow to calculate a predicted level drop then compares the predicted drop to the actual drop. In addition, the tanks are equipped with high level and high-high level monitors that alarm in the Control Room and are visible at the tanks (within a few feet of the loading area). The system is equipped with an automatic shut-off for high levels. The level monitoring devices are on a preventative maintenance schedule to be tested annually.

A surveillance camera has been installed and continuously provides the monitors in the control room with pictures of the fuel unloading apron area. This monitoring system is used in conjunction with the operators' twice-per-shift (four times daily) walk-through inspection of the area.

13.2.4 Countermeasures [112.7(a)(3)(iv)]

Visual inspections of the Facility are completed four times daily as part of Clear River's standard operating procedures. These visual inspections include notes regarding site security, tank and equipment condition, and any noticeable signs of staining. This inspection program would allow Clear River to identify any discharge in a timely manner. In addition, the Facility is continually monitored on a 24/7 basis via the Control Room. Spill response procedures are discussed below as part of 112.7(a)(3)(iv). The response to spill emergencies at Clear River will be implemented in accordance with the Spill Response Procedure which is contained in Appendix A to this SPCC.

Site procedures provide for one individual to assume command and control from the beginning of emergency operations. Normally, this would be the First Responder to the scene. The First Responder will take whatever actions are possible to mitigate the consequences of the emergency, alert personnel working in the area to potential danger, and communicate the details of the emergency to the Control Room. Upon notification, the Senior Control Room Operator or a designee will report to the event site and accept responsibility for emergency response from the First Responder. After determining the extent of the problem, the Senior Control Room Operator/designee will assume command of the spill response until relieved by a qualified Clear River Incident Commander (IC).

Initial actions in a spill situation will be to perform an assessment of the potential health and safety effects for emergency response personnel and personnel working in the vicinity of the incident. The assessment must consider the following:

- Material(s) involved;
- Potential toxicological properties of the materials involved; and
- Potential for fire/explosion (all potential ignition sources should be extinguished).

Based on this assessment, the individual in command may warn or evacuate non-essential personnel from the area. The spill area should also be cordoned off to prevent non-essential

personnel from entering. An exclusion zone of 150 feet is recommended for most spills, but this may vary based on the material spilled, the size of the spill, and weather conditions.

For both hazardous and non-hazardous spill situations, available site personnel under the direction of the IC will take immediate, defensive actions to stop the leak, contain the spilled substance, and initiate cleanup procedures within practicalities of the situation and the limits of team members' training. At no time shall any employee endanger his/her own safety while responding to an emergency situation. This response may include, but is not be limited to: constructing temporary dikes around the spill using dirt, sand, or manufactured booming equipment; covering storm drains with plastic sheeting; shutting down sump pumps; and isolating equipment.

Once contained, most spills of non-hazardous substances may be cleaned up using normal housekeeping procedures.

Minor spills of hazardous substances (e.g. 10 gallons or less) may be cleaned up by on-site personnel provided that: the SDS for that material is consulted for proper clean-up techniques; the workers are properly briefed on these techniques and the hazards of the materials involved; and proper PPE is worn. Onsite personnel will respond to a spill utilizing available equipment. Mobile spill kits are available onsite. Each spill kit contains a quantity of absorbent pillows, absorbent pads, large and small spill socks, waste bags, and nitrile gloves. Other available spill response equipment such as intrinsically-safe shovels, brooms, etc. can be obtained from the warehouse. Heavy equipment such as back-hoes, trucks, earthmoving equipment, etc. are either available on site or will be rented. The site's spill contractor will be called to clean up all spills, hazardous or non-hazardous, that cannot be handled by onsite personnel, except in the case of a petroleum spill to surface water, in which case the Oil Spill Response Organization (National Response Corporation) is contacted for response.

Appropriate regulatory notifications will be made based on the material spilled, the size of the spill and the potential for the spill to reach surface waters (see Table 2). As a rule and at a minimum:

- Spills of petroleum products > 5 gallons and all spills of hazardous substances regardless of volume which are indoors, outdoors in containment, or outdoors totally contained on concrete or macadam, must be reported to RIDEM.
- All spills of petroleum products and hazardous materials regardless of volume likely to or having reached surface waters must be reported to RIDEM and the National Response Center (NRC).

The Spill Response Procedure, shown in Appendix A, provides the phone numbers for these agencies. The State Spill Hotline and the NRC Hotline are available 24/7.

In order to provide RIDEM and the NRC with appropriate information, the IC or designee will complete a Spill Incident Form (Attachment 2 to the Spill Response Procedure in Appendix A). This form, approved for use by the U.S. Environmental Protection Agency, provides the regulatory agencies with the following information:

1. Name, facility address, and facility phone number;
2. Date and time of discharge;
3. Location, type, and quantity of material discharged;
4. Source of the discharge;
5. Description of all affected media (i.e., water, land, etc.);

6. Cause of discharge;
7. Danger or threat caused by release;
8. Weather conditions;
9. Actions taken to stop, remove, and mitigate the effects of the discharge;
10. Damages or injuries sustained;
11. Whether an evacuation has occurred; and
12. Names of other individuals/organizations contacted.

13.2.5 Disposal [112.7(a)(3)(v)]

Clear River is committed to ensuring that all recovered materials are disposed of in accordance with all applicable legal requirements. In the case of a small spill cleanup, Clear River would dispose of the debris in accordance with RIDEM regulations. Section 13, Paragraphs (B), (C), and (D) of RIDEM *Oil Pollution Control Regulations* are provided below.

- *Oil spill cleanup debris shall be removed from the site only in secured drums or canisters or in a vehicle which is covered.*
- *Oil spill cleanup debris shall be removed only to one of the following facilities:*
    1. *Special facilities constructed within a licensed sanitary landfill designed and constructed in accordance with Rule 10.06(d)(6) of the Rules and Regulations for Solid Waste Management Facilities;*
    2. *Asphalt manufacturers or others that are licensed as solid waste management facilities and approved by RIDEM to accept Oil Spill Debris;*
    3. *Any out-of-state facility that will agree to take the material and that is allowed to accept the material by the state in which it is located.*
- *Within ten (10) days of removal of the oil spill cleanup debris from the site, the owner or operator of the site shall submit to RIDEM documentation showing when the material was removed and to where the material was removed.*

The Facility's Emergency Response Contractor will conduct cleanup of larger spills and the services are provided on an as-needed basis.

Clear River is responsible for the disposal of any oil products leaving the Facility. Clear River is directly responsible for disposal of any oil products handled during an in-house spill response. The Facility's Emergency Response Contractors shall assume responsibility for disposal of oil products when called to the Facility during a spill response situation.

13.3 Notification [112.7(a)(4)]

Information and procedures for a person reporting an oil discharge are discussed in Section 13.2.4 of this Plan. For ease of use, this information can also be found in the emergency response section provided in Appendix A of this Plan.

13.4 Emergency Response [112.7(a)(5)]

Included with this Plan is an emergency response section (Appendix A) created specifically to be readily usable in an emergency.

13.5 Facility Drainage [112.7(b)]

Surface flow from the plant portion of the site which is not captured by storm drains flows towards the _____. Some flow is captured through parking area drains, which flow through an oil/water separator with the clean portion flowing on to one of the two stormwater detention ponds. Sheet flow may also flow towards the lower elevations via the access road and reach the wetland areas along the road.

Where experience indicates a reasonable potential for equipment and/or tank failure at the Facility, the SPCC Plan addresses a prediction of the direction, rate of flow, and total quantity of oil which could be discharged as a result of each type of major equipment failure. This section discusses the failures that could most probably result in a discharge.

Switchyard Generator Step-Up Transformers: The most likely significant failure involving any of the two (2) generator step-up (GSU) switchyard transformers would be an equipment malfunction allowing an assumed flow of 20 gallons per minute to escape the transformer. The released oil would begin to fill the transformer's secondary containment until the transformer was empty (20,000 gallons) or the release was observed and reported. If somehow the secondary containment was to fail (i.e., filled with undrained rainwater prior to release), the oil would first infiltrate the crushed stone surrounding the transformer. If the release reached the concrete access road to the _____, the oil would enter the Facility's drainage system and be directed to the stormwater detention ponds.

Auxiliary Transformers: The most likely significant failure involving any of the auxiliary transformers would be an equipment malfunction allowing an assumed flow of 20 gallons per minute to escape the transformer. The released oil would begin to fill the transformer's secondary containment until the transformer was empty (1,500 gallons) or the release was observed and reported. If somehow the secondary containment was to overflow (i.e., filled with undrained rainwater prior to release), the oil would reach the nearby access road and travel via sheet flow towards the _____. The oil would then enter the Facility's drainage system and be directed to the stormwater detention ponds.

Gas and Steam Turbines: The most likely significant failure involving the two (2) gas turbines or one (1) steam turbine would be an equipment failure allowing an assumed flow of 20 gallons per minute to escape the turbine or the adjacent false start drain tanks. For a steam turbine, the released oil would begin to fill the basement of the turbine building until the turbine was empty (i.e., 2,500 gallons) or the release was observed and reported. In this case, it would not be possible for the secondary containment area (the basement) to overflow. If the lift station used to drain the basement to the Oil/Water Separator were to fail, the oil would remain in the basement until it was removed and disposed. If a release were to occur from one of the two gas turbines, oil (i.e., 2,500 gallons per unit) would potentially travel to the Turbine Building floor drains, where it would be moved via basement sump to the oil/water separator.

Emergency Generator Diesel Tank: The most likely significant failure involving the diesel fuel tank associated with the emergency generator would be a human error leading to a puncture in the tank and its internal secondary containment. An assumed flow of 10 gallons per minute would be released. The diesel fuel would begin to infiltrate the area of crushed stone surrounding the generator and potentially reach the nearby paved access road and travel via sheet flow towards the east until the tank was empty or the release was observed and reported. The oil would then enter the Facility's drainage system and be directed to the stormwater detention ponds.

Diesel Fire Pump Tank: The most likely significant failure involving the diesel fire pump tank would be associated with human error leading to tank puncture or collapse from its supporting legs. An assumed flow of 10 gallons per minute would be released. The diesel fuel would collect in the concrete berm until the tank was empty or the release observed and reported. Any fuel oil

overtopping the secondary containment would potentially enter the floor drains within the Fire Pump Building and be directed to the Oil/Water Separator. In a case where the oil/water separator malfunctioned simultaneously, the release would make its way through the Facility drainage system to the stormwater detention ponds.

No. 2 Fuel Oil Tank: The most likely significant failure involving the No. 2 Fuel Oil Tank would be a tank or joint failure allowing an assumed flow of 100 gallons per minute to escape the tank. If the release was not detected and captured by the secondary containment, the released material would travel a short distance to the _____ and enter the Facility's drainage system. A potential 2,000,000 gallons of oil could be released to the Facility's drainage system, and ultimately the release would make its way through the Facility drainage system to the stormwater detention ponds.

13.6 Facility Drainage [112.7(c)]

The Facility provides containment and/or diversionary structures to prevent an off-site release. Both individual- and full-facility containment systems are designed to prevent escape of a discharge before cleanup occurs. The method, design, and capacity for secondary containment address the typical failure mode and the most likely quantity of oil that would be discharged.

Table 1 in Appendix B of this Plan provides a full inventory of all oil storage containers and operational equipment at the Facility.

Section 13.2.3 of this Plan provides a full description of the secondary containment type and storage capacity for all oil storage containers and operational equipment at the Facility.

Section 13.5 of this Plan provides a failure analysis for all oil storage containers and operational equipment at the Facility.

Bulk Storage Containers:

- Diesel tanks (3) utilize internal secondary containment.
- Turbine false start drain tanks (4) utilize an impervious concrete basement.
- No. 2 fuel oil tanks (2) utilize steel secondary containment.

Mobile/Portable Containers:

- Drum storage areas utilize impervious built-in containment.

Oil-filled Operational Equipment:

- Switchyard transformers utilize an impervious concrete moat.
- Auxiliary transformers utilize an impervious concrete moat.
- Gas turbines, steam turbines, and hydraulic oil reserves.

Transfer Areas, Equipment, and Activity:

- The loading/unloading area utilizes a concrete curb.

Drainage Features:

- The Oil/Water Separator retention tank utilizes an impervious concrete moat.

13.7 Non-Conformance [112.7(d)]

Secondary containment is not determined to be impracticable for any of the following provisions: general secondary containment, loading/unloading rack, bulk storage containers, and mobile/portable containers.

13.8 Inspections, Tests, and Records [112.7(e)]

Clear River maintains documentation of all inspections and tests conducted in accordance with the procedures in this Plan. A blank version of each inspection form can be found in Appendix E. All other inspection records are maintained with the SPCC Plan. Records are kept in the facility control room for a minimum of three years.

Four-Times-Daily Inspections: Clear River conducts visual inspections of the entire Facility four times daily (twice per shift, with one inspection per shift is formally logged). Items checked during these inspections include: tank condition, evidence of staining around tanks, valve condition, and diked area condition.

Monthly Inspections: Clear River conducts monthly inspections which include evaluations of the following Facility components: emergency generators, loading/unloading areas, aboveground storage tanks, alarm components (both DCS displays and level verification controls), rooftops, storage sheds, retention pond outfalls, catch basins, diesel fuel storage area, and oil/water separator. All other inspection records are maintained with the SPCC Plan.

13.9 Training [112.(f)(1)]

Clear River management is responsible for instructing facility personnel in the operation and maintenance of equipment and applicable pollution prevention laws.

Safety Data Sheets (SDS) for the all petroleum products used and stored at Clear River can be found in Clear River's electronic SDS inventory at any time by any employee. Hard copies of all SDS are located in Water Treatment, Maintenance Shop, and Control Room. In the event of a discharge, SDS would be referenced before and during any spill response action to identify hazards associated with the discharged chemicals.

All Clear River personnel designated as haz mat employees receive appropriate spill prevention and response training. The initial training required under this SPCC Plan is Hazardous Materials Technician Level Training (24-hour) and an annual SPCC training. SPCC Plan training is conducted annually at Clear River. The training highlights the following issues:

- Response to oil spills including equipment, personnel, emergency contacts, and the oil spill contingency plan.
- Past spill events or failures, the cause of such occurrences, the remedial response, suggestions to improve response actions, and precautions to avoid similar occurrences.
- Malfunctioning, dilapidated, or worn equipment, valves, or piping that should be considered for repair, replacement, or upgrade.

In addition, any spill events or failures, malfunctioning components and/or newly developed precautionary measures are reviewed during weekly safety meetings. Copies of all associated training records are maintained at Clear River and can be found in Appendix F of this Plan.

13.10 Designated Individuals [112.7(f)(2)]

Clear River's Senior Control Room Operators are designated as the personnel accountable for discharge prevention at the Facility and report to the Facility Plant Manager). At minimum, one Senior Control Room Operator is on duty on a 24/7 basis. The Senior Control Room Operator on duty is responsible to initiate response to a petroleum release and report to management; at that point, it will be taken over by the plant manager/environmental specialist.

13.11 Training [112.7(f)(3)]

Clear River site managers conduct training annually at the facility to ensure adequate understanding and effective implementation of this SPCC Plan. Annual Discharge Prevention Briefings occur simultaneously with the annual training. In addition to a review of Clear River policies and procedures relating to pollution prevention, these briefings highlight and describe known spill events, failures, or near misses at Clear River, malfunctioning components, and recently developed precautionary measures. Contained within Appendix F is a log of the annual training that documents these meetings, which may occur in conjunction with review of other environmental, health, or safety issues at the Clear River.

Clear River personnel receive instruction in operation and maintenance of equipment to prevent the discharge of oil and in applicable laws, rules, and regulations. Operators and other personnel have an opportunity during the briefings to share recommendations concerning health, safety, and environmental issues encountered during facility operations.

A typical outline of the annual Discharge Prevention Briefing is as follows:

- Identification and responsibilities of personnel accountable for Discharge Prevention;
- Spill prevention regulations and requirements;
- Spill prevention procedures;
- Spill reporting and cleanup procedures;
- History/cause of known spill events at the Facility;
- Equipment maintenance, failures, and operational issues;
- Recently developed spill prevention response measures or procedures;
- Procedures for draining liquids from containment structures; and
- Spill-related waste management.
- Records are kept in the locked office of the Environmental Specialist.

14.0 Security [112.7(g)]

Clear River is surrounded by a chain-link fence with several access gates. All gates are kept closed and locked throughout the day. Entry to the facility may be gained through: 1) a steel gate which is controlled by operators in the Control Room; 2) the contractor gate, which is monitored via camera from the Control Room and is checked once per shift (12 hours) by operators. It is chain-locked when not in use; 3) the gate at Water Treatment which is monitored via camera from the main Control Room. It can be operated locally. All other gates are kept closed and locked. Appropriate vehicle warning signs are posted at truck entrances regarding aboveground piping.

All unused pipelines are capped and marked when out of service for an extended period. Master flow valves and drain valves will be maintained in the closed position when not in use with the exception of the Turbine Building sump. Personnel visually inspect the facility daily and log this on their daily reports. A blank copy of this report can be found in Appendix E.

A surveillance camera provides the control room operators with pictures of all access locations 24 hours a day, 7 days a week. Lighting at night is adequate to perform inspections, identify any leaks, and prevent vandalism. Additional portable emergency lighting is available for use during a release response.

15.0 Loading/Unloading [112.7(h)]

Tank car and tank truck loading/unloading rack procedures are included in Appendix C.

16.0 Repairs [112.7(i)]

All ASTs at the site are subject to monthly inspections per RIDEM guidelines and four times-daily inspections in accordance with plant procedures. In the event of any required repairs due to a brittle fracture or other catastrophic event, the container will be thoroughly inspected and assessed in order to address all fracture risks or structural inadequacies prior to return to service.

17.0 Conformance, Additional Regulations [112.7(j)]

A combination of engineering controls and best management practices (BMPs) are utilized at Clear River in order to minimize the potential for a discharge of petroleum to the environment and to help control a spill should one occur. These controls and practices are discussed below.

Engineering Controls

Engineering controls utilized to help prevent spills to the environment and to control potential spills include:

- Double-walled construction of storage tanks to provide secondary containment;
- Concrete moats;
- Oil/Water Separator; and
- Direct-reading gauges to determine volume of oil in storage container.

Best Management Practices

Clear River observes various BMPs in operations at the Facility, including:

- In the waste oil shed, a concrete pit is used as secondary containment for stored 55-gallon drums of liquid petroleum products.
- Periodic inspections of the ASTs, piping, and containers provide the primary means to identify degrading equipment and other site conditions that could cause an oil spill. Personnel conduct regular inspections that focus on the condition of each AST and its appurtenances. An Inspection Checklist Form is contained in Appendix E.

17.1 Oil-Filled Equipment [112.7(k)]

There are multiple pieces of qualified oil-filled equipment present at the Facility as listed in 112.7(c). Secondary containment is provided for this equipment as discussed in section 13.2.3 of this Plan. All oil-filled equipment is included in the four times-daily rounds, in which equipment is inspected for signs of corrosion or failure and the surrounding areas inspected for evidence of a release. Any discharge from this equipment would either be drained to one of on-site oil/water separator or enter the site drainage system and be isolated within a retention pond.

18.0 ONSHORE FACILITIES (EXCLUDING PRODUCTION) [40 CFR 112.8/112.12]

18.1 Diked Storage Areas [112.8(b)(1) / 112.12(b)(1)]

Drainage from diked storage areas is restrained by manually-operated valves. When valves are placed in the "open" position drainage flows to one of the Facility's on-site oil/water separator. Location of the oil/water separator is shown on the Facility Diagram included in Appendix B.

18.2 Drain Valves [112.8(b)(2) / 112.12(b)(2)]

Diked storage area drain valves are manually operated (open-and-closed). When drainage is released from diked areas, it flows to one of the Facility's on-site oil/water separator. From the on-site oil/water separator, the clean water portion is directed to the cooling towers and integrated into the zero-liquid discharge system. The two detention ponds allow no unintended flow to leave the Facility. There is no direct discharge from diked storage areas to a watercourse.

18.3 Undiked Areas [112.8(b)(3) / 112.12(b)(3)]

Drainage from undiked areas with a potential for discharge is designed to flow to one of the two stormwater detention ponds at the Facility. The detention ponds are both located away from flood areas.

18.4 Non-Engineered and Multiple Treatment Units [112.8(b)(4),(5) / 112.12(b)(4)(5)]

Section 18.4 is not applicable to the Facility.

18.5 Construction Material [112.8(c)(l) / 112.12(c)(l)]

The construction material of each tank and container at the Facility is compatible with the material stored in it. The construction material of the containment, either concrete or steel, is sufficiently impervious to oil. The contents of all tanks and containers of oils are kept at ambient temperature and pressure.

18.6 Secondary Containment [112.8(c)(2) / 112.12(c)(2)]

As described in Section 13.2.3 of this Plan, the majority of bulk storage tanks are provided with sufficient secondary containment capacity (whether immediate or site-wide) to hold the capacity of the largest container and sufficient freeboard for precipitation. Any release from those without adequate secondary containment would be contained via an on-site oil/water separator or retention pond.

Diked areas are sufficiently impervious to contain oil and any discharge to the Facility's drainage system will be directed an oil/water separator.

18.7 Release [112.8(c)(3) / 112.12(c)(3)]

When drainage is released from diked areas it flows to one of the Facility's on-site oil/water separator. From an oil/water separator, the clean water portion is directed to the cooling towers. The two detention ponds allow no unintended flow to leave the Facility. Drainage system details are shown in Drainage Plan in Appendix B.

18.8 Completely Buried Metallic Tanks [112.8(c)(4) / 112.12(c)(4)]

This Section is not applicable. There are no completely buried metallic tanks at the Facility.

18.9 Partially Buried or Bunkered Metallic Tanks [112.8(c)(5) / 112.12(c)(5)]

This Section is not applicable. There are no partially buried or bunkered metallic tanks at the Facility.

18.10 Integrity Inspections and Testing [112.8(c)(6) / 112.12(c)(6)]

Integrity inspections and testing is conducted in accordance with Steel Tank Institute (STI) Standard SP001, "Standard for the Inspection of Aboveground Storage Tanks." As such, monthly inspections are conducted by trained facility personnel. All components of the AST (valves, piping, container supports, foundations, etc.) are inspected along with the body of the tank. Also, properly-trained personnel check for signs of deterioration, discharges, or accumulation of oil. A sample inspection checklist is provided in Appendix E. Reports for each monthly inspection are maintained on-site and made available to inspectors upon request for a period of ten (10) years. All monthly inspection reports and any other inspections conducted during a year are submitted to RIDEM by December 31 of each year.

In addition to monthly inspections, the 2,000,000-gallon oil storage tank will be thoroughly inspected by certified inspectors in accordance with API 653 or equivalent whenever major repairs are conducted or at ten-year intervals, or lesser intervals as recommended in the inspector's report, using such techniques as hydrostatic testing, visual inspection, or a system of non-destructive shell thickness testing. Tank supports, foundations, and piping would be included in these inspections. Pressure testing of piping in areas where failure may lead to a spill event will be performed at the same time. The ten-year inspections will consist of an applicable pressure test of the tank and connecting piping or an inspection that consists of the following:

- Cleaning
- Removal of sludge
- Inspecting shell for soundness
- Testing welds and seams on tank bottom for tightness and porosity
- Visual inspection of the internal surface for corrosion or failure
- Inspecting internal coating for signs of failure
- Testing connecting underground piping and valves for tightness

If any inspection reveals a deficiency, structural weakness, or potential for a leak, preventative measures will be taken.

In addition, Clear River personnel visually inspect the Facility four times daily including all aboveground valves, piping, and containment areas. The results of these inspections are recorded and filed in the Control Room Log.

Personnel conducting both daily and monthly inspections are trained in oil handling and emergency response procedures while having a working knowledge of the equipment at the Facility.

18.11 Internal Heating Coils [112.8(c)(7) / 112.12(c)(7)]

Section 18.11 is not applicable to the Facility, since there are no bulk storage tanks at the facility that are equipped with internal heating coils.

18.12 Alarms [112.8(c)(8) / 112.12(c)(8)]

Each container at the Facility is equipped with at least one of the following:

- High liquid-level alarms with an audible or visual signal at a constantly-attended operation station (Control Room);
- High liquid-level pump cutoff device set to stop flow at a predetermined container content level;
- Direct audible or code signal communication between container gauge and pumping station; or
- Fast response system for determining liquid level (direct vision gauge) and a person present to monitor gauges and overall filling of bulk containers.

Liquid level sensing devices and level control verification equipment are inspected during monthly inspections to ensure proper operation. DCS controls are tested and compared to mechanical level

sensing devices to ensure accuracy between redundant systems. All tank, sump, and oil/water separator alarms are tested on an annual basis.

18.13 Effluent Treatment Facilities [112.8(c)(9) / 112.12(c)(9)]

Effluent treatment facilities (oil/water separator and detention ponds) are inspected four times daily to detect possible system upsets that could cause a discharge.

18.14 Visible Discharges [112.8(c)(10) / 112.12(c)(10)]

Visible discharges representing a loss of oil from a container, such as from seams, gaskets, piping, pumps, valves, rivets, or bolts, would be detected during the four daily inspections. Clear River personnel would respond immediately to correct the problem and dispose of released oil in a manner consistent with all local, State, and Federal regulations.

18.15 Portable Containers [112.8(c)(11) / 112.12(c)(11)]

Portable containers (55-gallon drums) are kept in an upright position within their specified secondary containment. Portable containers are only removed from their secondary containment during loading/unloading operations. The secondary containment utilized for drums has a capacity greater than 100 gallons and is not exposed to rainfall.

18.16 Double-Walled Steel Cathodic Protection [112.8(d)(1) / 112.12(d)(1)]

There is no double-walled steel cathodic protection buried piping installed at the Facility. If buried piping is exposed for any reason in the future, it will be inspected for deterioration and corrosion. If any deficiencies are noted, the pipe(s) will be removed from use and corrective action will be taken immediately.

18.17 Piping [112.8(d)(2) / 112.12(d)(2)]

Piping at the Facility is marked as to origin and capped/blank-flanged when not in service or in standby service for an extended period.

18.18 Pipe Supports [112.8(d)(3) / 112.12(d)(3)]

Pipe supports at the Facility are designed to minimize abrasion and corrosion and allow for expansion and contraction.

18.19 Aboveground Valves, Piping, and Appurtenances [112.8(d)(4) / 112.12(d)(4)]

Aboveground valves, piping, and appurtenances (e.g. flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces) are visually inspected during the four daily inspected conducted at the Facility.

Clear River will conduct integrity and leak tests on buried piping at the time of any installation, modification, construction, relocation, or replacement.

18.20 Exterior Aboveground Piping [112.8(d)(5) / 112.12(d)(5)]

Any exterior aboveground piping at the Facility is protected by concrete-filled bollards which are painted bright yellow. In addition, only properly authorized and trained personnel are permitted to operate motor vehicles within the Facility.

Appendix A

Emergency Response Information

SPILL/RELEASE RESPONSE PROCEDURE
CLEAR RIVER ENERGY CENTER

	Name	Signature	Date (yyyy/mm/dd)
Document Approved by			

1.0 PURPOSE:

This procedure provides individuals working at the Clear River Energy Center (Clear River) with instructions for responding to spill emergencies. The instructions are given in the form of checklists.

2.0 RESPONSIBILITY:

.1 The *Plant Manager* is accountable for ensuring that this procedure is properly managed and implemented.

.2 The *Clear River Environmental Specialist or other individual designated by the Plant Manager* is accountable and/or responsible for ensuring:

- That a review of this procedure is performed annually and revisions made if necessary;
- That a routine tests/drills of this procedure are performed in accordance with regulations;
- That the training, drill and exercise records that pertain to this document are properly completed and maintained, and
- The coordination and cooperation with local, state and federal agency resources and with the spill contractors in regards to the implementation of this procedure.

.3 *All employees, contractors and visitors* at Clear River have the responsibility for complying with this procedure.

The following individuals may be contacted by employees who need more information about this procedure.

Name/Title	Office Extension
To Be Determined	

3.0 POLICY

.1 During emergency incidents, consideration for the safety of all personnel onsite is paramount.

.2 For purposes of recognition by Clear River and non-Clear River personnel, the site employee in command of emergency incidents shall wear an Incident Command vest. The Clear River individual in command and control of an emergency will be the Incident Commander (IC). The IC will be either a Senior Control Room Operator or an Clear River manager. Emergency response agencies have been and will be instructed to look for the Incident Command vest upon entry to the site. The IC's orders are to be followed by all Clear River employees.

.3 During an emergency situation, all emergency responders will establish and maintain radio contact through the use of portable intrinsically-safe hand held radios set to **Channel 5**.

.4 Tests of the emergency alarms are performed.

.5 This procedure shall be reviewed at least annually, and if appropriate revised and reissued.

4.0 PROCEDURE

PERSONNEL/CONTRACTORS/VISITORS	
ACTION	**✓ Time/Date**
Upon discovery of a spill/release of a hazardous substance:	
Notify all other personnel working in the vicinity of the situation and direct them to leave the area.	
Retreat to a safe location.	
Report the incident to the Control room using in-house radio communications or by phone: **To Be Determined**	
At a minimum, provide the following information: Your name Nature of the emergency Location of the incident Pieces of equipment involved Extent of injuries to personnel	
If necessary and if possible, shut off all ignition sources.	
Take whatever DEFENSIVE actions are needed to stop the flow of the substance and/or take whatever DEFENSIVE actions you can to contain the spill. Any and all actions must be done at a safe distance. For example: - Cover potentially affected road drains or floor drains with plastic sheeting or other appropriate material based on the substance spilled. Note: Plastic sheeting will not work with a spill of concentrated sulfuric acid. - Attempt to contain or divert the spread of the substance using dry sand or other inert material.	
Many incidents due to incident size, type and location will not require a response from contractors, visitors and most employees. Employees, contractors and visitors should listen and pay attention to emergency alarms and announcements and act accordingly.	

INCIDENT COMMANDER	
ACTION	**✓ Time/Date**
Report to the incident site. Alternately, determine as much information regarding the spill from the First Responder.	
Assume command and control of the event. Continue with all steps until close out of the incident, or until relieved by another qualified Clear River IC or the lead individual from the primary emergency response agency.	
Make an assessment of the situation. Consider the following: _____ Location of the incident; _____ Materials Involved; _____ Potential toxicological properties of the materials involved _____ Potential for spread of fire or risk of an explosion _____ Danger to employees; _____ Wind direction	
Warn non-essential personnel from the area.	
Direct an available employee to print a copy of the SDS Sheet for the spilled material and have it brought to you.	
Ensure that notifications are made to a minimum of one of the site managers and to the Environmental Specialist to apprise them of the situation. Plant Manager Operations Manager Maintenance Manager Environmental. Specialist	
PERFORM THE FOLLOWING FOR MINOR SPILLS/RELEASES A spill is considered **minor** if it is ≤ 20 gallons in volume, it can be contained, it has not reached surface waters, and it can be safely cleaned up by site personnel. **Note:** Use the < 20 gallon volume as a guide only. Consider all factors such as the material spilled	

INCIDENT COMMANDER	
ACTION	**✓ Time/Date**
and the location of the spill in determining if it is safe to allow onsite personnel to perform cleanup. **Note**: Based on the site's chemical inventory, minor spills as defined in this procedure would not be reportable to regulatory agencies.	
Designate a hot zone of appropriate size based on the SDS Sheet or the Emergency Response Guide Book. If neither of these is immediately available, a hot zone of 100 feet in all directions is recommended for minor spills. If possible, station personnel at key points who will prevent employees from entering the area.	
Set up an Incident Command Post (ICP) in an appropriate location based on the location of the incident, wind direction and speed, and other weather conditions.	
Begin keeping a log of your actions on the Incident Briefing form that is Attachment 1 to this procedure. Use the form as a briefing tool when turning over command duties to another individual.	
Begin growing your IC organization, as needed, with available qualified personnel. At a minimum: - Assign a Safety Officer - Assign a Scribe to assist you with the Incident Briefing form in Attachment 1 - Assign an Emergency Communicator	
Designate the radio frequencies and phone numbers to be used by response personnel.	
Assemble a Cleanup Team of appropriate size.	
Note: This procedure does **NOT** provide specific guidance on response actions or use of PPE due to the variety of chemicals onsite. You must consult the SDS sheet or the Emergency Response Guide Book for the material spilled prior to beginning cleanup actions. Consult the SDS Sheet or the Emergency Response Guide Book for the spilled material.	
Brief the clean-up team on the hazards of the material to be cleaned up and the proper clean-up techniques. Stress standard GWP and JSA protocols. Note: Spill kits are available onsite that are good for spill containment and cleanup purposes. Other tools/materials are available in the warehouse. Ensure intrinsically safe equipment is used for the cleanup of flammable materials.	

INCIDENT COMMANDER	
ACTION	**✓ Time/Date**
Ensure proper PPE is worn by the cleanup team.	
Supervise the cleanup of the spill.	
Once the spill has been satisfactorily cleaned up, ensure that tools and PPE are properly cleaned and stored.	
When the area is deemed safe, allow personnel back into the evacuated area and allow work to continue.	
Collect all paperwork related to the incident.	
A debriefing shall be conducted within 24 hours. The results of the debriefing shall be recorded on the appropriate TC Debriefing Form.	
Enter information about the evacuation and the site's response into the SAP System as an Incident. The Debriefing Form, photos, charts and all other pertinent documents shall be attached to the Incident Report.	
PERFORM THE FOLLOWING FOR MAJOR SPILLS/RELEASES A spill is considered **Major** if *any or all* of the following are true: - The spill is > 20 gallons in volume - The spill is ongoing; - The spill cannot be contained and is or may impact surface waters or other offsite areas; - The spill is a large volume of a hazardous substance; - Cleanup would be beyond the capabilities of onsite employees.	
Consider the need for a partial or full evacuation of the site. If an evacuation is warranted: Sound the emergency alarm and make an announcement over the two-way radio giving the location of the incident, and directing personnel to evacuate. Provide any special directions, if necessary. **Note:** The decision to redirect site personnel by alternate routes to the Muster Area to avoid the spill must be made on a case-by-case basis.	

INCIDENT COMMANDER	
ACTION	**✓ Time/Date**
Ensure that after a building or structure has been evacuated that no employee re-enters that building to serve in search and rescue operations or to perform other duties until an "All Clear" announcement is made.	
Designate a hot zone of appropriate size based on the SDS Sheet or the Emergency Response Guide Book. If neither of these is immediately available, a hot zone of 300 feet in all directions is recommended. If possible, station personnel at key points who will prevent employees from entering the area.	
Call or direct the Control Room Operator to call emergency services if: - There's a fire or the potential of a fire; - There is the need for ambulance services, and/or; - There is the need for emergency HAZMAT services. Emergency Services: **911**	
Have the Control Room Operator restrict access in and out of the Main Gate. Admit only incoming emergency vehicles and essential personnel. If there are any questions regarding this, the CRO should ask you for a ruling. If possible, direct an available employee to the Main Gate. Have this individual direct all incoming emergency services personnel to you at the ICP. Alternately have the individual escort emergency services to the ICP	
Begin keeping a log of your actions on the ICS Form 201 that is Attachment 1 to this procedure. Maintenance of this form is required under the ICS system. Use the form as a briefing tool when turning over command duties to another individual.	
Call the spill contractor: To Be Determined	
Begin growing your IC organization, as needed, with available qualified personnel. At a minimum, assign a: - Safety Officer - Scribe to assist you with the Incident Briefing form in Attachment 1 - Emergency Communicator	
Designate the radio frequencies and phone numbers to be used by response personnel.	

INCIDENT COMMANDER	
ACTION	**✓ Time/Date**
Until the arrival of the spill contractor, with available personnel, continue to take whatever DEFENSIVE actions are necessary to: - Stop the source of the leak; - Ensure all sources of ignition are extinguished; - Contain the spill using inert materials like sand. Do not use a material like sawdust which is combustible; - Prevent exposures; - If indoors, provide maximum ventilation to the area. At no time shall any employee endanger his/her own safety while responding to a hazardous substance incident.	
Consider all major spills as reportable. Enlist the help of the Environmental Specialist to make spill notifications. - Obtain and complete a Spill Incident Form. The Spill Incident Form is Attachment 2 to this document. - Provide the completed Spill Incident Form to an available qualified person and direct that individual to call the Environmental Specialist and provide her/him with the information on the phone. Clear River Environmental Specialist **To Be Determined** - If the Environmental Specialist is not available, direct that individual to call the necessary agencies in accordance with the Spill Notification Directory. The SND is attachment 3 to this procedure - Direct that the Environmental Specialist or the communicator inform you when the spill notifications are complete.	
Contact the mustering point and obtain an accountability of personnel.	
Upon the arrival of local emergency services (ES): ____ Meet with the lead ES representative and discuss the incident specifics and the result of the site accountability. ____ If there are missing employees, work with emergency services to determine the employees' last known locations and prepare for a search. ____ Once the ES Chief determines that the incident can be safely dealt with, either set up a Unified Command or	

INCIDENT COMMANDER	
ACTION	**✓ Time/Date**
turn over the responsibilities and control of the incident to ES Chief, as appropriate. **If the ES Chief is assuming total command:** ____ Remove your IC vest to avoid confusion as to who is in charge. ____ Stay with the ES IC to coordinate response actions and to assist with site specific information. ____ Continue with this checklist only to the extent that you are looking out for Clear River's interests. If in doubt, get approval from the emergency services IC. Command turned over to: _____ Time: _____ (24h) Date: ____/____/____ **If a Unified Command is created** ____ Work in coordination with the ES Chief until closeout of the emergency. **In all cases, ensure that an announcement is made so that all responders are aware of any change in command.**	
Upon the arrival of the Spill Contractor, the IC/UC should: - Meet with the lead representative to discuss the incident specifics. Use your Incident Briefing Form in Attachment 1 as an aid. - Turn over the responsibilities of spill response/site remediation to the lead Spill Contractor representative. - Stay with the spill contractor to coordinate response actions and to assist with site specific information and to represent Clear River interests.	
If it is determined that the event poses a risk to grid integrity, call or have an available employee call the New England ISO. **New England ISO** **1-**	

INCIDENT COMMANDER	
ACTION	**✓ Time/Date**
Call the Clear River Emergency Number: Emergency Number Leave your contact information with the PDL Operator. Once you are contacted by the Corporate EOC Manager, discuss the need to activate the Corporate EOC and Corporate Media.	
Call the Clear River Safety Specialist to report instances of injury / deaths associated with this incident. Safety Specialist: To Be Determined	
Notify Director **To Be Determined** If the Director is not available, Vice President, is advised of the incident **To Be Determined**	
If the event appears to be security related, place a call to Clear River's Security. Do this regardless of Corporate activation. **Clear River's Corporate Security – To Be Determined**	
Periodically conduct a briefing of your staff and lead response personnel. At a minimum, discuss the following: Size and complexity of the event Incident objectives Your expectations Policy on outside information dissemination (media and outside agencies) Agencies/organizations/stakeholders/business community Incident activities/situation Special concerns Length of Operational Periods.	
IF THERE IS AN INTERNAL TRANSFER OF COMMAND AND CONTROL (E.G. FROM THE CONTROL ROOM OPERATOR TO AN CLEAR RIVER MANAGER)	
Upon arrival of the relief Clear River IC: - Brief the incoming IC using the Incident Briefing Form in Attachment 1	

INCIDENT COMMANDER	
ACTION	**✓ Time/Date**
- Upon turn-over of command and control to the incoming IC, enter the required information at the end of this section. Command and control turned over to _____ Time: _____ hours Date: ____/____/____	
Ensure that an announcement is made concerning the change in command. **Note**: If the fire department is in control of the incident do not make this announcement.	
ONCE THE EMERGENCY IS DECLARED OVER BY YOU, THE EMERGENCY SERVICES IC OR THE UNIFIED COMMAND	
Reassume the responsibilities of IC from the ES IC, IF APPLICABLE. Command turned over to: _____ Time: _____ (24h) Date: ____/____/____	
Determine whether or not it is safe for personnel to return to the work place. If the workplace is deemed safe, declare "TERMINATE INCIDENT" and make an "ALL CLEAR" announcement via radio. Allow personnel back into the buildings. **DO NOT USE THE PLANT ALARM TO ANNOUNCE THE ALL CLEAR SINCE IT GENERATES CONFUSION.**	
Begin direction of recovery actions.	
A debriefing shall be conducted within 24 hours. The results of the debriefing shall be recorded on the appropriate TC Debriefing Form.	
Ensure the collection of all incident paperwork.	
Ensure that all Clear River, federal and state reporting is completed within the appropriate time limits. Reference Section 5.0, Documentation/Reporting Requirements, for specifics.	

ENVIRONMENTAL SPECIALIST	
ACTION	**✓ Time/Date**
Upon notification of a spill of a hazardous substance:	
If not already done, call the spill contractor: To Be Determined	
Assist the site by making spill notifications to the regulatory agencies. Obtain a blank Spill Incident Form. The SIF is Attachment 2 to this procedure. Using the SIF, gather as much information about the spill as possible from the IC. At a minimum, you need this information: - The specific location of the release. - The chemical name or identity of substances released and a description of the container or vessel from which the release occurred. - An estimate of the quantity of substances which were released into the environment. - The time and duration of the release. - The medium or media into which the release occurred. - Any known or anticipated acute or chronic health risks associated with the release and, if within the informant's knowledge, advice regarding medical attention necessary for exposed individuals. - Proper precautions to take as a result of the release, including evacuation and other proposed response actions. - The name and telephone number of the person or persons to be contacted for further information.	
Obtain the name and phone number of the IC.	

ENVIRONMENTAL SPECIALIST	
ACTION	**✓ Time/Date**
Obtain the Spill Notification Directory (Attachment 3 to this procedure). Based on the information from the site and the guidance provided in the Spill Notification Directory, make all appropriate notifications. - Provide them with the information about the spill incident using the SIF and answer any questions they may have. - If you cannot answer their questions, get a call back number and tell them you will get back to them with the needed information. - Determine if they plan to send a representative to the facility. - Enter the date and time of the call and the name of the agency representative. - Obtain the Spill Identification Number from the National Response Center and record it on the SND.	
Inform the IC when you have completed all regulatory notifications. - Inform the IC that you have completed all required agency notifications; - Discuss any issues that arose during the notifications, get questions answered; - Inform the IC if any of the agencies plan to send a representative to the site.	
File the completed Spill Notification Directory and all other pertinent documentation pertaining to the spill incident. Make sure that the IC or the Documentation Unit Leader gets all paperwork once the incident is closed out.	
Prepare and send any required written reports to regulatory agencies.	

5.0 DOCUMENTATION / REPORTING REQUIREMENTS

5.1 Reporting – Clear River Energy Center

.1 All completed paperwork relating to the emergency shall be forwarded to the Incident Commander or other designate.

.2 A debriefing shall be conducted within 24 hours of close-out of the incident. The results of the debriefing shall be recorded on the appropriate TC Debriefing Form.

The Debriefing Form can be found by following these links: INFOcus / Departments / CS&E / Emergency Management / Forms and Templates. The Debriefing Form is found in the lower left under the Emergency Preparedness heading.

.3 Enter the information on the incident into EHSM through SAP. The completed Debriefing Form, Incident Command Forms, photos, charts and all other pertinent documents shall be attached to the Incident Report.

5.2 Federal and State Reporting

.1 Oral Notifications

- EPA for any spill of a hazardous substance or petroleum into surface waters in any amount, and/or any spill or release of a hazardous substance to the land or air of an amount equal to or above the substance's RQ.

- To RIDEM for any actual or imminent environmental incident (such as a release of a hazardous substance) of any amount whether on land, in the water or in the air.

- To the local LEPC as soon as possible after discovery of a spill or release of a hazardous/ extremely hazardous substance at or above the RQ for that substance.

- The Massachusetts Department of Environmental Protection for any spill or release to the environment that will or could affect that state's lands.

.2 Written Reports

a. Rhode Island Department of Environmental Management (RIDEM)

Within ten (10) days after the oil spill or fifteen (15) days after any other spill/release incident, the owner/ operator of a facility where a release has occurred that required notifications pursuant to RIDEM regulations shall submit to RIDEM a written report. At a minimum, the investigative report shall include:

- Name, address and telephone number of the owner/ operator;

- Name, address and telephone number of the facility;
- Date, time and type of incident (e.g. fire, explosion)
- Name and quantity of material(s) involved and the duration of the release;
- The equipment, materials, procedures and personnel involved;
- The extent of injuries, if any;
- An assessment of actual or potential hazards to human health or the environmental where this is applicable, and
- The estimated quantity of recovered materials from the event and its disposition.

b. Regional Administrator of the EPA and RIDEM whenever the facility has

- Discharged more than 1,000 gallons of oil into or upon navigable waters of the state or adjoining shorelines in a single spill event, or;
- Discharged more than 42 gallons of oil into or upon navigable waters of the state or adjoin shorelines in two spill events within any 12-month period.

c. Reporting for injuries/deaths

If there were any injuries and/or deaths associated with the incident, ensure that all oral and written reports are made to OSHA.

6.0 REFERENCES

To Be Determined

7.0 DEFINITIONS

None

8.0 ATTACHMENTS

Attachment 1	Incident Briefing
Attachment 2	Spill Incident Form
Attachment 3	Spill Notification Directory

ATTACHMENT 1

(4 pages)

1. Incident Name	2 Prepared by: (name) Date: Time:	INCIDENT BRIEFING (pg 1 of 4)

1. Incident Name	2. Prepared by: (name) Date: Time	Incident Briefing (page 2 of 4)

4. Initial Incident Objectives

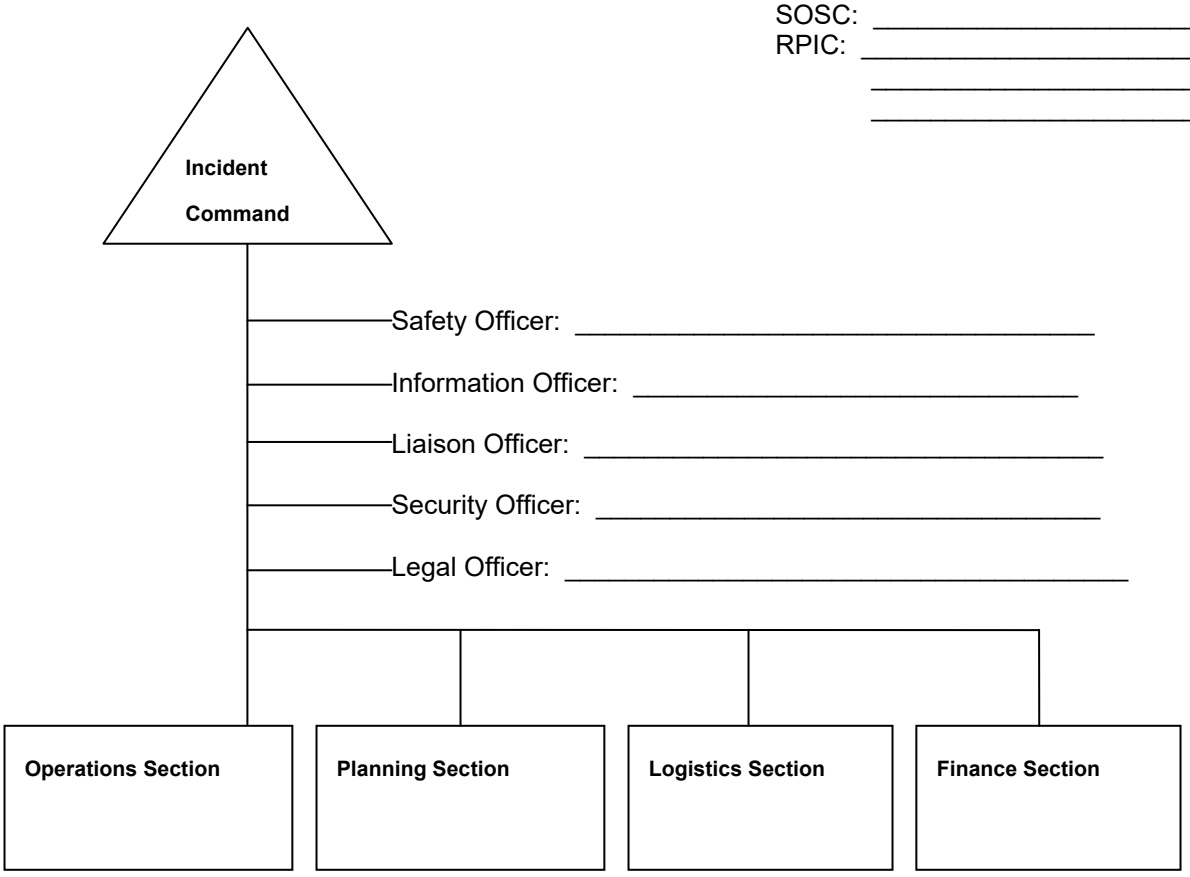
5. Summary of Current Actions

Time	Action/Note

1. Incident Name	2. Prepared by: (Name) Date: Time	Incident Briefing (pg. 3 of 4)

6. Current Organization

FOSC: _____
SOSC: _____
RPIC: _____
_____
_____



1. Incident Name	2. Prepared by: (Name) Date: Time:	Incident Briefing ICS 201-OS (pg 4 of 4)

7. Resources Summary

Resources Needed	Time Ordered	Resources Identifier	ETA	On-Scene (X)	NOTES: Location/ Assignment/Status

ATTACHMENT 2

SPILL INCIDENT FORM

SPILL INCIDENT FORM

(Involved Parties)

(A) Reporting Party	(B) Suspected Responsible Party
Name Phones: _____ Position Company: Clear River Energy Center Name of Spill Site: Clear River Energy Center Address: Village: Town: Burrillville State: RI Zip: 02814 Calling For Responsible Party Yes ____ No ____	Name Phone: _____ Company Organization Type: ___ Private citizen ___ Private enterprise ___ Public utility ___ Local government ___ State government ___ Federal government City State Zip

***It is not necessary to wait for all information before calling the National Response Center – 1-800-424-8802**

Incident Description

Were Materials Discharged? Yes ____ No ____

Date of Spill Discovery: ____/____/____ Time of Spill Discovery: _____ Hours (use military time)

Source and/or Cause of Spill:

Tank No. _____ Tank Capacity: _____ Gallons

Storage Tank Container Type: Aboveground (Y/N) Belowground (Y/N) Unknown

Incident Address/Location: 1575 Sherman Farm Road, Harrisville, RI 02830-1124

Nearest City: Providence, RI Distance From City:

Site Coordinates Latitude Degrees: 42 degrees, 0 min., 32 sec. Longitude Degrees: 71 degrees, 41 min., 15 sec.

Materials

Material Discharged: _____

Estimated Amount of Material Spilled: Land _____Gallons Water _____Gallons

Source Stopped? Yes _____No _____

If Not, Rate of Flow: _____

Material Contained? Yes _____No _____ Unknown _____

Response Actions

Actions Taken to Correct/Control or Mitigate Incident:

Impact

Number of Injuries: _____ Number of Fatalities: _____

Were there Evacuations (Y/N/U)? Number Evacuated: _____

Was there any Damage (Y/N/U)? Damage in Dollars: _____

Additional Information

Any information about the incident not recorded elsewhere in the report

Caller Notifications

EPA (Y/N) State (Y/N) Other (Y/N) Describe _____

PERSON TO CONTACT FOR ADDITIONAL INFORMATION:

Name _____ Phone # _____

****

Recipient's Name: _____ Title: _____

Spill Number Assigned by the National Response Center (NRC): _____
Spill Number Assigned by RIDEM: _____

ATTACHMENT 3

SPILL NOTIFICATION DIRECTORY

Date: _____/_____/_____

Notifications Made By: _____
Name and Title

Agency/Individual To Be Contacted (check all that apply)	Reason for Notification/ Special Directions	Phone Number	Name of Person Accepting Call (if applicable)	Time/Date (Military Time
Spill Cleanup Contractor – To Be Determined	Need for spill response	To Be Determined		
Rhode Island Department of Environmental Management (RIDEM)	Any actual or imminent environmental incident (such as a release of a hazardous substance) of any amount whether on land, in the water or in the air.	401-222-1360 401-222-3070 (hot line)		
U.S. Environmental Protection Agency (US EPA) via the National Response Center (NRC) EPA Region 1 ERT EPA 24-hour spill hotline	Verbal notification within 15 minutes of discovery of a spill or release of a hazardous/extremely hazardous substance at or above the RQ. Or Any release of a hazardous substance/petroleum to surface water of any amount.	800-424-8802 617-860-4300 617-223-7265	NRC Spill Number: _____	
Local LEPC Chair	Verbal notification within 15 minutes of discovery of a spill or release of a hazardous/extremely hazardous substance at or above the RQ.			

Agency/Individual To Be Contacted (check all that apply)	Reason for Notification/ Special Directions	Phone Number	Name of Person Accepting Call (if applicable)	Time/Date (Military Time
Massachusetts Emergency Management Agency	The Massachusetts Department of Environmental Protection for any spill or release to the environment that will or could affect that state's lands.	1-508-820-2000		

CALL AS NEEDED TO DESIMINATE EVENT INFORMATION **IF NECESSARY, DRAFT ONE INDIVIDUAL TO REPORT TO THE SITE TO ASSUME THE ROLE OF INCIDENT COMMANDER**				
Name	Office Phone	Cell Phone		Time/Date
CALL AS NEEDED TO DESIMINATE EVENT INFORMATION				

Appendix B

Figures, Drawings, and Tables

HAZARD IDENTIFICATION – OIL-BEARING CONTAINERS AND CONTAINMENTS							
Tank No.	Substance Stored	Working Capacity (Gallons)	Maximum Capacity (U.S. Gallons)	Tank Type/ Year (1)	Containment Type	Containment Capacity (U.S. Gallons)	Tank Failure/ Cause
	No. 2 Fuel Oil	2,000,000	2,000,000	A/S/O/2016	Steel	2,200,000	None
	Diesel (Emergency Generator)	TBD	TBD	A/S/2016	Internal	TBD	None
	Diesel (Fire Pump)	TBD	TBD	A/S/2016	Internal	TBD	None
	Lubricating Oil (Turbine Hydraulic Reservoir)	2,500	2,500	A/R/I/2016	Turbine Building Basement	44,000	None
	Lubricating Oil (Turbine Hydraulic Reservoir)	2,500	2,500	A/R/I/2016	Turbine Building Basement	44,000	None
	Dielectric Oil (GSU transformer)	20,000	20,000	A/T/O/2016	Concrete Moat	44,000	None
	Dielectric Oil (GSU transformer)	20,000	20,000	A/T/O/2016	Concrete Moat	44,000	None
	Dielectric Oil (Auxiliary Transformer)	1,500	1,500	A/T/O/2016	Concrete Moat	3,500	None
	Dielectric Oil (Auxiliary Transformer)	1,500	1,500	A/T/O/2016	Concrete Moat	3,500	None
Total Oil Storage Volume Using Maximum Capacity of Tanks							

Key:

A = Aboveground
I = Indoor
O = Outdoor
R = Oil Reservoir
To = Plastic Tote
DWS – Double Wall Steel
TOS = Temporarily Out of Service
S = Steel
T = Transformer

TABLE 2 – SPILL CLASSIFICATION TABLE				
Material Spilled	Amount Spilled	Location of Spill	Specifications	Actions
Any petroleum product	≤ 5 gallons	Indoors **or** outdoors within containment **or** outdoors on concrete/asphalt	Fully contained and cannot and will not reach water or land (dirt or gravel). Spill must be cleaned up within 2 hours of discovery	This is a *de minimus* spill, no notifications are required.
Any petroleum product or Any hazardous material	> 5 gallons	Indoors **or** outdoors within containment **or** outdoors on concrete/asphalt	Spill must be totally contained with no chance of the material reaching surface water	Control Room Operator makes Class I Notifications
Any petroleum product or Any hazardous material	Any amount	Outdoors on gravel/dirt	Spill must be totally contained with no chance of the material reaching surface water	Control Room Operator makes Class I Notifications
Any petroleum product or Any hazardous material	Any amount	Indoors **or** outdoors	Containment is questionable and material will most likely reach surface waters	Control Room Operator makes Class II Notifications
Any petroleum product or Any hazardous material	User's discretion	Outdoors	Spill is totally on land and has no chance or reaching surface water but will severely affect the environment and/or is impacting offsite properties.	Control Room Operator makes Class II Notifications
Any petroleum product or Any hazardous material	Any Amount	Surface Water	If spilled material of any amount reaches surface water, make appropriate notifications.	Control Room Operator makes Class II Notifications

Appendix C

Hazardous Material Deliveries Procedures

HAZARDOUS MATERIAL DELIVERIES

1.0 PURPOSE

The purpose of this procedure is to:

1.1 Define the precautions to be taken when handling bulk deliveries and packages of hazardous materials.

1.2 Minimize the risks associated with the delivery process.

2.0 DEFINITIONS

2.1 **Bulk Delivery** - A delivery of a hazardous material in a container (including a transport vehicle or freight container) with an internal volume greater than 119 gallons (450 liters) of a liquid, greater than 882 pounds (400 kilograms) of a solid; or a water capacity greater than 1000 pounds (453.6 kilograms) for a gas.

2.2 **Facility Escort** - A shift supervisor or designee assigned to oversee off-loading of bulk deliveries of hazardous materials.

2.3 **Hazardous Materials** - Substances that fall into one or more of the following eleven classes of materials:

- Class 1 (explosive) materials
- Class 2 (gases) materials
- Class 3 (flammable liquid) materials
- Class 4 (flammable solid) materials
- Class 5.1 (oxidizing) materials
- Class 5.2 (organic peroxide) materials
- Class 6 (poison) materials
- Class 7 (radioactive) materials
- Class 8 (corrosive) materials
- Class 9 (miscellaneous) materials
- Other Regulated Materials (ORM-D)

2.4 **Hot Work** - All flame or spark producing activities such as grinding, plasma cutting, etc. (excluding smoking in designated smoking areas).

2.5 **Job Safety Analysis (JSA)** - A method for studying a job in order to: a) identify hazards or potential accidents associated with each step or task; and b) develop solutions that will eliminate, nullify, or prevent such hazards or accidents.

2.6 **Safety Data Sheet (SDS)** - A document prepared by a chemical manufacturer describing the properties and hazards of chemicals.

2.7 **Non-bulk Delivery** - A delivery of a hazardous material in a container with an internal volume equal to or less than 119 gallons (450 liters) of a liquid, equal to or less than 882 pounds (400 kilograms) of a solid; or a water capacity equal to or less than 1000 pounds (453.6 kilograms) for a gas.

3.0 PROCEDURE

3.1 All shipments of hazardous materials received at the facility must be properly labeled (i.e., amount, content, nature of hazard, etc.) in accordance with government rules. All shipments of hazardous materials must be accompanied by an SDS and the appropriate shipping papers.

3.2 A delivery of hazardous materials cannot be accepted at the facility until an SDS has been obtained.

3.3 The following steps should be taken prior to accepting hazardous materials for delivery:

3.3.1 Verify that the hazardous material has been approved for use at this facility via the site's material approval process.

3.3.2 Verify that the hazardous material is included on the list of approved materials.

3.3.3 Verify that an SDS is currently available on site for the hazardous materials.

3.3.4 If an MSDS is not on site, determine whether an SDS is included with the shipping papers or available from the driver delivering the hazardous material.

3.3.5 If necessary, obtain a copy of the SDS by calling the manufacturer. You may also obtain a copy from the worldwide web.

3.3.6 Verify that the content and quantity of the hazardous materials listed on the shipping papers match what is being delivered.

3.3.7 Verify that the vehicles transporting hazardous materials are not leaking. Leaking vehicles will not be permitted on site.

3.4 Bulk Delivery

3.4.1 Follow site-specific standard operating procedures for receiving bulk deliveries of hazardous materials and ensure that the following steps are included:

3.4.1.1 Prior to handling the material, the SDS should be reviewed.

3.4.1.2 The JSA must be reviewed to: a) determine the appropriate personal protective equipment (PPE) and respiratory protection, if applicable, to be worn before handling any hazardous materials; and b) determine the sequence of steps to be performed and the hazards associated with each step.

3.4.1.3 Bulk delivery drivers must check in at the Control Room upon arrival at the Facility. The Facility Escort shall verify that the tank has the necessary capacity to receive the shipment being delivered. If for any reason a clear determination of the tank level cannot be made, the shipment must not be accepted.

3.4.2 A Facility Escort will be assigned by the Control Room, where possible, to accompany the bulk delivery driver while on site. The Facility Escort must ensure that the following procedures are used:

3.4.2.1 The delivery driver shall be assisted, as necessary, in maneuvering the delivery truck into the proper position.

3.4.2.2 Delivery vehicles shall park as far off the road as possible. The vehicle hand brake must be set and the wheels chocked.

3.4.2.3 Sewer drain covers and spill containment must be in place and the unloading area must be properly isolated.

3.4.2.4 The proper PPE must be worn, as described in the JSA.

3.4.2.5 Before connecting the delivery lines to the unloading pump, an inspection for kinks, cuts, abrasions, and general wear shall be performed.

3.4.2.6 Delivery line fittings shall be inspected for wear and the integrity of the seal.

3.4.2.7 Persons in the vicinity of the unloading operation shall be prohibited from smoking, lighting matches, or carrying other ignition sources near the

delivery area. This can be accomplished by cordoning off the delivery area with "Caution" tape to prevent unauthorized access. No authorized hot work shall be performed within 35 feet (1 0.7 meters) of the delivery area.

Cell phones should not be used in the delivery area

3.4.2.8 The truck engine shall be turned off during unloading, unless the use of the engine is required to operate the transfer pump. ***The engines of trucks hauling hydrocarbons must be stopped before connecting or disconnecting the delivery lines.***

3.4.2.9 If the truck is delivering flammable or combustible liquid; the following shall be verified:

- The tank truck is grounded.
- If the grounding cable is not permanently fixed at the storage tank end, the proper grounding procedure is to first connect the storage tank end and then make connection to the tank truck.
- When disconnecting, the proper procedure is to first remove the connection from the tank truck and then remove the connection from the tank.

3.4.2.10 After delivery lines are connected and secured, verify that all cam locks are tied down and appropriate spill pans and/or buckets are placed under connections outside of the containment area. All connections shall be inspected.

3.4.2.11 Trucks used to deliver ammonia, or other products that can readily release hazardous vapors to the atmosphere, shall be equipped with vapor recovery systems. Before unloading, the recovery lines shall be checked to ensure that they are connected and utilized.

3.4.2.12 Before the transfer or pressure pump is started, the delivery valves shall be open and connections shall be checked for leakage. If any leaks are observed, the valves must be closed and realigned. This process shall be repeated until no leaks are observed.

3.4.2.13 When the delivery driver is ready to begin unloading operations, the Control Room shall be notified.

3.4.2.14 The unloading operations shall be observed to ensure that the delivery driver is monitoring the transfer equipment.

3.4.2.15 After the product is transferred, verify that the delivery valves are closed and the unloading hose purged to remove all liquids. Fixed equipment valves shall be closed and locked. When the delivery lines are disconnected, any drips or residual must be directed to the drip pans or buckets.

3.4.2.16 Verify that no liquid product has drained to the ground.

3.4.2.17 All caps, blank flanges, etc. that were removed to deliver product must be replaced. Gaskets shall be checked to make sure they are sound.

3.4.2.18 The Control Room shall be notified when the delivery is complete.

3.4.2.19 In the event of a spill or leak, the delivery pump shall be shut off immediately. If possible, all delivery valves shall be shut off

3.4.2.20 The Control Room shall be notified and containment, clean-up, and reporting procedures must be implemented, as necessary. Delivery cannot resume until any spilled material is recovered, and the cause of the spill or leakage is eliminated.

3.4.2.21 Applicable reporting, Incident Reporting, and Investigation must be performed.

3.5 Non-Bulk Delivery

3.5.1 Follow site-specific standard operating procedures for receiving package deliveries of hazardous materials and ensure the following steps are included:

3.5.1.1 Trucks to be unloaded must be parked in the delivery area with the engine off (unless the engine is required to operate a lift gate, etc.).

3.5.1.2 Spill containment equipment shall be easily accessible to the unloading operations.

3.5.1.3 Delivery vehicles must park as far off the road as possible. The vehicle hand brake must be set and the wheels chocked.

3.5.1.4 If site personnel notice that the truck floor is wet or there is fluid dripping from the truck during dry weather, the delivery driver shall be instructed to identify the source of the drip and eliminate it. Any spilled materials shall be treated as unknown hazardous materials until a determination is made. Assist the delivery driver by providing spill containment equipment to catch leaking material.

3.5.1.5 Leaking delivery vehicles must not leave the site until the leak has been stopped.

3.5.1.6 In the event of a spill, implement spill control procedures and notify the Control Room immediately. Leaking hazardous materials must be contained and moved promptly to the designated storage area along with the materials used to clean up the spill.

3.5.2 Drum Handling and Storage

3.5.2.1 Hazardous materials shall be stored in drums that are in good condition. The material must be compatible with the drum.

3.5.2.2 The drum storage area shall be designed and operated to contain any leaks or spills. The area should be covered unless a drainage system is installed to properly handle rainwater.

3.5.2.3 The storage area shall be inspected regularly. The inspector shall check for leakage and deterioration of the containment system.

3.5.2.4 Ignitable and reactive materials must be stored at least 50 feet (17 meters) inside the facility property line.

3.5.2.5 Incompatible materials must be kept separated by barriers such as walls, berms, etc.

3.5.2.6 Drums must be clearly marked with the contents of the container.

3.5.3 Compressed Gas Cylinders Handling and Storage

3.5.3.1 Cylinder storage areas shall be appropriately labeled.

3.5.3.2 The contents of a compressed gas cylinder shall be properly labeled on the cylinder.

3.5.3.3 When the cylinder is not connected for use, the metal cap shall be in place to protect the cylinder valve.

3.5.3.4 The cylinder valve shall always be opened slowly.

3.5.3.5 Before a regulator is removed from a cylinder, the cylinder valve shall be closed first and then the gas from the regulator released.

3.5.3.6 Cylinders shall not be taken into process vessels, tanks, unventilated rooms or other confined spaces. (This requirement does not apply to gas cylinder associated with self-contained breathing apparatus.)

3.5.3.7 When cylinders are connected to a process where there is the potential for backflow of process materials to contaminate the cylinder, a check valve or other suitable device shall be used to prevent backflow into the regulator.

3.5.3.8 Cylinders shall be stored upright and be secured to prevent falling.

3.5.3.9 Oxygen cylinders shall be stored at least 20 feet (6.1 meters) from a cylinder containing flammable gases or there must be a firewall rated for at least 30 minutes between the cylinders.

3.5.3.10 Cylinders shall not be stored near sources of heat, such as radiators or furnaces, or near highly flammable substances, like gasoline.

3.5.3.11 Empty cylinders shall be clearly identified as empty or segregated from full cylinders.

3.5.3.12 Always handle and consider cylinders as being full.

3.5.3.13 Cylinders shall be transported only when they are secure and in the upright position.

3.5.3.14 Cylinders shall not be rolled or dragged.

DO NOT drop cylinders or allow them to strike violently.

4.0 TRAINING

4.1 Each employee handling hazardous materials deliveries shall be trained in Emergency Action Plan, General Chemical Management Awareness Training, and Hazard Communication.

5.0 AUDITING

5.1 Not applicable.

6.0 RESPONSIBILITY

6.1 Plant Manager

The Plant Manager is responsible for:

6.1.1 Ensuring that all personnel understand and comply with this procedure.

6.1.2 Ensuring that all personnel dealing with hazardous materials have received general chemical management awareness training.

6.2 Employees

Site Employees are responsible for:

6.2.1 Ensuring an SDS is on site for all package deliveries of hazardous materials.

6.2.2 Verifying that the type and quantity of hazardous material delivered to the facility in package form match the description provided in the shipping papers.

6.3 Facility Escort

The Facility Escort has the following responsibilities:

6.3.1 Assisting the delivery driver, as necessary, in maneuvering the delivery truck into the proper position.

6.3.2 Putting sewer drain covers and spill containment in place and isolating the unloading area.

6.3.3 Prohibiting persons in the vicinity of the unloading operation from smoking, lighting matches, or carrying other ignition sources near the delivery area. This can be accomplished by cordoning off the delivery area with "Caution" tape to prevent unauthorized access. No authorized hot work shall be performed within 35 feet (10.7 meters) of the delivery area.

6.3.4 Notifying the Control Room when the delivery driver is ready to begin unloading operations.

6.3.5 Observing the unloading operations to ensure that the delivery driver is monitoring the transfer equipment.

6.3.6 Verifying that the delivery valves are closed and the unloading hose is purged to remove all liquids after the product is transferred. Fixed equipment valves shall be closed and locked. When the delivery lines are disconnected, any drips or residual must be directed to the drip pans or buckets.

6.3.7 Verifying that no liquid product has drained to the ground.

6.3.8 Verifying that all caps, blank flanges, etc. that were removed to deliver product must be replaced. Gaskets shall be checked to make sure they are sound.

6.3.9 Notifying the Control Room when the delivery is complete.

6.3.10 Notifying the Control Room of a spill or release.

6.3.11 Ensuring that containment, clean-up, and reporting procedures (EHS Procedure No. R3, Incident Reporting and Investigation, and Site Emergency Response Plan) are implemented, as necessary.

7.0 REFERENCES

7.1	29 CFR 1910.1200	Occupational Safety and Health Administration Hazard Communication
7.2	49 CFR 172	Department of Transportation Rules for Transporting Hazardous Materials

Appendix D

Emergency Spill Response Contractor Documentation

APPENDIX D:

EMERGENCY SPILL RESPONSE CONTRACTOR DOCUMENTATION

Appendix E

Inspection Forms

CLEAR RIVER ENERGY CENTER

DAILY SITE INSPECTION CHECKLIST

To Be Developed

CLEAR RIVER ENERGY CENTER

MONTHLY SITE INSPECTION CHECKLIST

Each month, the areas identified below must be inspected for the following:

- *Leaks, spills, or evidence of pollution entering the storm water drainage system*
- *Need for housekeeping, repairs, or maintenance*
- *Effectiveness of Best Management Practices (BMP's) and engineering control effectiveness (e.g. secondary containment, level gauges, berms, et cetera)*
- *Presence of liquid in containment areas - if so, inspect discharge for evidence of pollutants*
- *Integrity of oil containing vessels (tanks and drums)*

Inspection Area	Note Deficiencies (Indicate OK if None)	Date Deficiencies Corrected*
Emergency Generator		
Loading/ unloading areas		
Aboveground storage tanks		
Rooftops		
Dumpsters		
Storage Buildings		
General yard area (including lay down area)		
Empty Drum Storage		
Hazardous Waste Storage Area		
Outfall and Drainage System/Catch Basins		
Diesel Fuel Storage		
Oil/Water Separators		
Non-Hazardous Waste Storage Area		
Additional Comments:		
What, if any, changes to the SPCC are necessary?		
Inspection Date and time: _ _____ **Personnel Conducting Inspection**: ____ _____		

Monthly inspection records must be kept for five years
****Deficiencies must be corrected within 14 days***

Appendix F

Annual Training Documentation

Clear River Energy Center Environmental Training

Person Conducting:

Main Topic: SPCC Program	Date:

What were the subtopics:
What significant questions or concerns were expressed:
Action Items:

Attendance:

Employee Name:	Employee Signature:	Date:

Appendix G

Oil/Water Separator Clean Out and Level Sensor Documentation

Appendix H

Emergency Response Plan
(To Be Developed)