

Appendix 8-B: Very Small Quantity Generator Hazardous Waste Management Plan

Very Small Quantity Generator (VSQG) Hazardous Waste Management Plan

Prepared For: Champlain Hudson Power Express Project

> Prepared by: NKT HV Cables AB

New York, United States

Initial Draft Prepared December 2023 Rev January 2024

Prepared By	Date	
Dylan Hammond NKT HV Cables AB		
Reviewed By	Date	
Treavor Clarke		
NKT HV Cables AB		

This Page Intentionally Left Blank

TABLE OF CONTENTS

1.0	Introduction	o
2.0	Purpose	6
3.0	Hazardous Waste Identification and Characterization	6
4.0	Waste Generator Information	8
5.0	Responsibility	9
6.0	Container Management / Labelling	10
6.1	Labelling	10
6.2	Best Management Practices	11
6.3	Satellite Hazardous Waste Storage Area	12
7.0	Shipping Information	
8.0	Spill or Release Response	13
9.0	Records/Logs	13
10.0	Hazardous Waste Management Plan Maintenance	13
Table 1	LIST OF TABLES : Waste Sample Analytical Results Summary	14
Figure ²	LIST OF FIGURES	9

LIST OF ATTACHMENTS

 $\label{eq:Attachment} \textbf{A} - \textbf{Authorized Transportation and Disposal Companies}$

ACRONYMS AND ABBREVIATIONS

BMP BEST MANAGEMENT PRACTICES

CFR CODE OF FEDERAL REGULATIONS

CHPE CHAMPLAIN HUDSON POWER EXPRESS

CP COMPETENT PERSON

EM&CP ENVIRONMENTAL MANAGEMENT AND CONSTRUCTION PLAN

NKT NKT HV CABLES AB

NYSDEC NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

NYSDPS NEW YORK STATE DEPARTMENT OF PUBLIC SERVICE

PM PROJECT MANAGER

PPE PERSONAL PROTECTIVE EQUIPMENT

PPM PARTS PER MILLION
SDS SAFETY DATA SHEET

SOPEP SHIPBOARD OIL POLLUTION EMERGENCY PLAN

TDI TRANSMISSION DEVELOPERS, INC.

TCLP TOXICITY CHARACTERISTIC LEACHATE PROCEDURE

TSDF TREATMENT, STORAGE, DISPOSAL FACILITY

USA UNITED STATES OF AMERICA

EPA UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

VSQG VERY SMALL QUANTITY GENERATOR

WESTON WESTON SOLUTIONS, INC.

THIS PAGE INTENTIONALLY LEFT BLANK

1.0 Introduction

NKT HV Cables AB (NKT) personnel will be performing work activities on the Champlain Hudson Power Express (CHPE) in support of the project site located in New York, United States of America (U.S.A.). The CHPE project is an electric transmission project involving installation of approximately 339 miles of high voltage direct current underground and underwater transmission cables laid in parallel. Transmission Developers, Inc. (TDI) has contracted with NKT to produce the cables, meet permitting requirements, and implement the installation of underwater and associated underground transitions. It is anticipated that hazardous waste could be generated during this project. This hazardous waste management plan has been prepared to provide guidance for site personnel and documentation of the processes and procedures that will be used to manage the generation, storage, and disposal of hazardous waste generated during the project.

It is anticipated that beginning in early 2024, NKT will perform the following tasks during this project:

Underwater Placement of Cables including Cutting and Splicing of Cables on a Marine Vessel:

During this phase of work, the cables will be laid in parallel in the lakebed or riverbed. Cables will need to be cut to length and spliced together using tin-lead solder. For underwater placement, a metallic seal is necessary where a metallic end cap is soldered to the lead sheath of the cable with additional protection of shrink caps, sleeves, and tape.

<u>Underground (On Land) Placement of Cables including Transition of Cables from Underwater to Underground and Splicing of Cables on Land:</u>

During this phase of work, the cables will be transitioned from underwater to underground. To complete the transition, cables will need to be cut and spliced together and laid on the land surface for later underground placement by a separate TDI contractor.

2.0 Purpose

This hazardous waste management plan has been prepared to provide guidance on proper collection, storage and disposal of hazardous waste generated during project activities. This plan outlines procedure to manage waste safely and in accordance with the following regulatory requirements:

- Resource Conservation and Recovery Act (RCRA-40 CFR 264/265),
- Land Disposal Restrictions (40 CFR 268),
- Identification and Listing of Hazardous Waste (40 CFR 261),
- Use and Management of Containers (40 CFR 265.174), and
- State of New York Hazardous Waste Management Rules (6 NYCRR Parts 370 to 374 and 376).

3.0 Hazardous Waste Identification and Characterization

NKT anticipates that minimal quantities of hazardous waste will be generated at the project during the cutting and splicing operations. NKT has identified the following waste streams that could have a possibility of being characteristically hazardous waste:

- Lead cable scrap;
- Soiled rags (oil and solvents);
- Solder (Pb) drips and cuttings;
- Disposable Personal Protective Equipment (PPE);
- Used oil; and,
- Bitumen soiled rags.

During October 2023 NKT conducted a test cut and cap operation and collected representative samples of the following four waste stream materials:

- 1. Cable Dust and Filings;
- 2. Cable Sections;
- 3. Lead Alloy Cable Fragments; and,
- 4. Disposable PPE (worn during the test cut and cap operation).

The samples were submitted to Eurofins Test America Laboratory for analysis of Toxicity Characteristic Leachate Procedure (TCLP) metals to document the hazardous waste status. **Table 1** presents a summary of the analytical results for these waste streams. Based on the analytical results, the Cable Dust and Filings, Cable Sections, and Lead Alloy Cable Fragment wastes are considered characteristically hazardous waste. Once these materials become waste they will be managed as hazardous waste and categorized as follows:

- 1. Cable Dust and Filings D006 Cadmium.
- 2. Cable Sections D008 Lead.
- 3. Lead Alloy Cable Fragments D008 Lead.

The spent solvent wastes would also be considered a hazardous waste since it will likely meet the definition of hazardous due to the ignitability characteristic (liquids with flash points below 60 °C). The waste code for the solvent waste will be D001.

The remaining waste streams (and any newly identified waste streams) will be sampled and analyzed prior to disposal to determine the hazardous waste status.

All newly identified waste streams generated from site operations will be communicated to the NKT Project Manager immediately, will be sampled, analyzed and will be incorporated into this waste management plan.

The site environmental coordinator will be responsible for determining sample type and analytical requirements. The results will be documented in the project files and the waste description and categorization information for these newly identified waste streams will be added to this hazardous waste management plan.

4.0 Waste Generator Information

The hazardous waste generator categories and respective accumulation requirements are documented in the table below:

HAZARDOUS WASTE GENERATOR CATEGORIES

Generator Category	Maximum amount of nonacute hazardous waste generated per month	Approximate maximum volume of nonacute hazardous waste generated per month	Maximum amount of acute or severely toxic hazardous waste generated per month	Maximum amount of contaminated soil, water or other debris from clean-up of acute or severely toxic hazardous waste generated per month			
VSQGs	≤ 100 kilograms (220 lbs.)	≤ half a 55-gallon drum or ≤25 gallons	≤ 1 kilogram (2.2 lbs.)	≤ 100 kilograms			
SQGs	> 100 kilograms (220 lbs.) but < 1,000 kilograms (2,200 lbs.)	> half a 55-gallon drum and < five 55-gallon drums or >25 gallons and < 250 gallons	≤ 1 kilogram (2.2 lbs.)	≤ 100 kilograms (220 lbs.)			
LQGs	≥ 1,000 kilograms (2,200 lbs.)	≥ five 55-gallon drums or ≥ 250 gallons	> 1 kilogram (2.2 lbs.)	> 100 kilograms (220 lbs.)			

NKT has determined that the generator category that will apply to this project will be a Very Small Quantity Generator (VSQG). Although VSQGs are not required to obtain a United States Environmental Protection Agency (EPA) ID number, it is considered a best practice to do so. NKT's Generator Site Address, EPA Generator ID number, and Accumulation Time Limit for the site location that may generate hazardous waste during the project is as follows:

Site Name	Hudson River (Marine Vessel)
Site Address:	
EPA ID #:	TBD (Application in progress)
Accumulation Time	
Limit:	01/01/2024 to 01/01/2026

During the course of the project, NKT may identify additional sites that could generate hazardous waste. Any additional sites will have a unique EPA ID number and have the above information documented in **Attachment A** of this plan.

5.0 Responsibility

Figure 1 shows the NKT organizational structure proposed for the project.

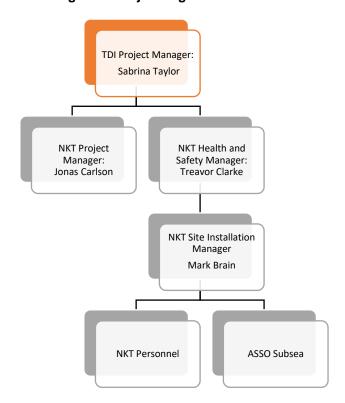


Figure 1: Project Organizational Chart

Specific training requirements are not required for VSGQs; however, best practice recommended by the New York State Department of Environmental Conservation (NYSDEC) includes employee training regarding how to properly handle hazardous waste and the procedures to be followed in case of spills or emergencies.

NKT will provide training for all site personnel associated with collection, storage, shipping, and document management for the hazardous waste generated during site operations. Training will be completed prior to allowing site personnel to manage hazardous waste on site. Training documentation will be maintained by NKT site environmental manager. The documentation will include the Name, Title/Job Description, and Training Date for all authorized personnel designated to manage waste and sign waste manifests.

6.0 Container Management / Labelling

Each of the hazardous wastes documented in Section 3 of this hazardous waste management plan will be managed in a manner to prevent any release of the wastes into the environment. For liquid wastes, when filling containers NKT Personnel will take the following steps:

- Leave at least 2-inches of headspace in the container to allow for waste material thermal expansion.
- Always close containers after adding material. This includes:
 - ball valves in funnels.
 - bung caps.
 - reinstall rings on open-top containers.
- Inspect all containers and waste storage areas at the end of each shift and record the findings of the
 inspection in a project-specific log. NKT will establish a procedure to follow up with any inspection
 findings that are less than satisfactory.
- Secure containers prior to transportation or movement within the Site and/or off-site.
- Prior to transportation off-site, any temporary lids/funnels must be removed and the container secured. Containers are considered secure when all port holes, valves and other access points are closed and lids are properly fitted with threaded bung seals, locking rings, clamps or other devices designed to prevent the release of the container's contents during its relocation.

For solid wastes NKT will collect the wastes generated and properly store the wastes in closed containers to prevent any releases to the environment.

6.1 Labelling

Hazardous waste containers will be labelled with a preprinted, yellow, hazardous-waste sticker. The sticker will contain the following language:

"HAZARDOUS WASTE--Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency."



When completing the label, the accumulation start date should be filled in unless the container is at the Point of Generation (see Satellite containers below).

Mark the container with the waste code and a description of the waste. Containers must be marked (and previous markings obliterated) before any amount of hazardous or liquid industrial waste enters the container.

For non-hazardous waste containers, each will be marked with the words "Nonhazardous Waste".

6.2 Best Management Practices

While not required by the hazardous waste regulations, NYSDEC strongly encourages VSQGs to use the following best management practices (BMPs) for managing hazardous waste containers and storage areas to ensure proper waste management and a safer working environment. NKT and its contractors will ensure compliance with the BMPs listed below:

Label each container "Hazardous Waste."
Label each container with its specific contents, such as "Waste Cable Dust and Filings". If samples of the waste have been submitted but results have not been received, mark the waste container with "Analysis Pending" prior to affixing a waste sticker.
Keep containers closed except when adding or removing waste. (New York State air regulations require all containers used to store fresh and used coatings, thinners, and solvents to be kept closed at all times except when filling or emptying.)
Keep your storage containers in good shape, with no leaks, corrosion, rust, or bulges. If a container is not in good condition or is leaking, transfer the hazardous waste into a container that is in good condition.
Open, handle, and store hazardous waste containers carefully to prevent them from rupturing and to prevent the waste from leaking or spilling. Use caution when you move containers and protect them from moving vehicles.
Store incompatible hazardous wastes separately. Store each kind of waste in a different container. This will help you avoid putting incompatible wastes in the same container. Mixing wastes can cause dangerous reactions and makes waste disposal more expensive and difficult. For example, you should never store acids (like battery acid) and bases (like alkaline rust remover) in the same container or cabinet. Keep liquid wastes separate from other wastes.
Store wastes in containers that are compatible with the waste (so the wastes will not dissolve, corrode, or react with the container itself), or use containers with compatible liners. Steel drums approved by the DOT should be used for all paints, thinners, gun cleaners, and paint strippers. Acid wastes should be stored in plastic containers, not metal ones.
Store rags and any other materials that may have touched solvents or paint strippers in closed, airtight containers. Leaving dirty, solvent-soaked rags lying around can cause a fire or explosion if fumes from the rags come in contact with a spark.
Store all containers far enough apart so that you have room to inspect them thoroughly.
Store containers on a surface that will contain spills and leaks, such as a small concrete pad and berm, or a commercially available containment pallet or tray.
Store containers inside, in an area protected from the weather.

not compatible with the hazardous wastes you are generating.
Lock your storage area to keep it secure.
Use a ground strap on metal drums storing flammable materials to avoid sparks from static electricity.
Don't allow hazardous waste storage containers to leak, rust, or get damaged.
Don't allow rainwater to accumulate on the top of drums.
Don't allow smoking near hazardous wastes.
Have a written plan for how to prevent and respond to emergencies. Post a list of emergency phone numbers (i.e., fire and police departments, spill reporting number, name and phone number of person in charge in case of emergency) and the locations of emergency response equipment next to the telephone.
Keep the following equipment in the work area: A telephone in the work area, to call for help; Fire extinguishers; Materials to control spills (i.e., spill absorbents, extra 55-gallon drums to transfer wastes); Decontamination supplies (i.e., neutralizing agents like lime).
Don't block emergency equipment. Keep aisle space free of clutter to allow people to get out in case of emergency.
Provide employee training regarding how to properly handle hazardous waste and the procedures to be followed in case of spills or emergencies.

6.3 Satellite Hazardous Waste Storage Area

Satellite hazardous waste containers will be managed near the point at which the waste is generated and under the control of the person(s) generating the waste and include the following:

- Maintained in a secure area marked with a sign designating it as a satellite accumulation area and hold no more than 55 gallons of hazardous waste;
- Marked and labeled according to the directions above for hazardous waste with the exception of the accumulation start date;
- Maintained such that incompatible materials are separated from one another; and,
- Remain closed except to add or remove wastes.

When the satellite container is full, the accumulation start date will be added to the labeling and will be moved to the main hazardous waste accumulation area immediately.

7.0 Shipping Information

NKT will use licensed transportation and disposal companies to transport and dispose of all hazardous waste generated from site operations. Attachment B documents the list of transportation and disposal companies that may be used during the project. All transportation and disposal subcontractors that manage hazardous waste generated at the site will have a current NYSDEC Part 364 Permit. No onsite treatment or disposal will be allowed at the site.

8.0 Spill or Release Response

In the unlikely event of a release of hazardous waste from site operations, NKT will follow the Spill Prevention, & Control Plan (SPCP) plan, Oil Spill Contingency Plan (OSCP) and Shipboard Oil Pollution Emergency Plan (SOPEP) established for the vessel. The NKT emergency notification flowchart and Environmental Management and Construction Plan (EM&CP) spill notification procedures approved by New York State Department of Public Service (NYSDPS) and NYSDEC are maintained in the project files at site.

9.0 Records/Logs

To document the waste generation quantities and NKT's exemption status as a VSQG, NKT will develop and maintain a Hazardous Waste Accumulation Log. Trained NKT personnel will use the log to document waste generation, and final disposal within allowable timeframe (or submit an exception report if the documentation of waste receipt at the Treatment, Storage, Disposal Facility is not available).

NKT trained on-site personnel will document the waste storage area inspections and maintain the documentation in the site environmental records.

A land disposal restriction notification is required for the first shipment of a hazardous waste stream to each Treatment, Storage, Disposal Facility (TSDF). Most TSDFs have their own form. Ensure the waste stream has a completed Land Disposal Restriction Notification form.

10.0 Hazardous Waste Management Plan Maintenance

NKT will maintain this hazardous waste management plan and update the plan as site conditions change. The NKT PM is responsible for ensuring this plan is representative of site conditions and waste management activities for the project.

Table 1: Waste Sample Analytical Results Summary

Eurofins Environment Testing Northeast, LLC

Eurofins Edison Lab Job ID: 460-292104-1

Client ID		C-1			C-2			C-2t			C-3						
Lab Sample ID			46	0-2921	.04-1	460-292104-2 460-292104-3			460-292104-4								
Sampling Date		10/03/2023 14:07:			7:00	10/03/2023 15:10:00			10/03/2023 14:07:00			10/03/2023 14:05:00					
Matrix					TCLP				TCLP				TCLP	TCLP			
Sample Description		Cable	Dus	t and F	Cable Section			Lead Alloy Cable Fragments			Disposable PPE						
	USEPA TCLP Limit	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL	Result	Q	MDL	RL
TCLP BY 6020B(UG/L)																	
Arsenic	5000	20.0	U	8.9	20.0	20.0	U	8.9	20.0	20.0	U	8.9	20.0	20.0	U	8.9	20.0
Barium	100000	246		9.1	40.0	47.5		9.1	40.0	24.0	J	9.1	40.0	67.1		9.1	40.0
Cadmium	1000	1160		3.9	20.0	14.7	J	3.9	20.0	968		3.9	20.0	20.4		3.9	20.0
Chromium	5000	40.0	U	25.0	40.0	40.0	U	25.0	40.0	40.0	U	25.0	40.0	40.0	U	25.0	40.0
Copper	NA	40.0	U	24.5	40.0	192		24.5	40.0	40.0	U	24.5	40.0	816		24.5	40.0
Lead	5000	200		8.4	12.0	17400		8.4	12.0	618000		84.4	120	2720		8.4	12.0
Nickel	NA	134		9.1	40.0	40.0	U	9.1	40.0	40.0	U	9.1	40.0	22.9	J	9.1	40.0
Selenium	1000	25.0	U	5.9	25.0	25.0	U	5.9	25.0	25.0	U	5.9	25.0	25.0	٥	5.9	25.0
Silver	5000	20.0	U	2.9	20.0	20.0	U	2.9	20.0	20.0	U	2.9	20.0	20.0	U	2.9	20.0
Zinc	NA	325000		326	800	1260		65.2	160	113	J	65.2	160	17900		65.2	160
TCLP BY 7470A(UG/L)																	
Mercury	200	4.9		0.091	0.20	7.7		0.091	0.20	23.0		0.27	0.60	4.3		0.091	0.20
TCLP SUMMARY																	
Leachate Fluid Initial Amt	NA			NA	NA			NA	NA			NA	NA			NA	NA
Sample Initial Amt	NA	0.10015	Kg	NA	NA	0.1001	Kg	NA	NA	0.10007	Kg	NA	NA	0.10002	Kg	NA	NA
Leachate Final pH	NA	6.13	SU	NA	NA	6.14	SU	NA	NA	6.10	SU	NA	NA	6.12	SU	NA	NA
Leachate Final Amt	NA	2	L	NA	NA	2	L	NA	NA	2	L	NA	NA	2	L	NA	NA

Highlighted Concentrations shown in bold type face exceed limits

J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U : Indicates the analyte was analyzed for but not detected.

Attachment A – Authorized Transportation and Disposal Companies

The following is a partial list of Part 364-permitted waste transporters from New York State Department of Environmental Conservation (NYSDEC)'s database. Inclusion on this list does not constitute approval or endorsement of that facility by NYS Environmental Facilities Corporation, or provide any assurance with regard to the quality of services provided or the transporter's environmental compliance history. Please be sure to verify the permit status of the transporter you choose as this list does not ensure the permit is current. Also note that not all listed transporters provide service to small businesses. Many transporters service all of New York State regardless of where their central office is located, including those located outside of New York.

Permit	Permitee Name	Phone	# of Vehicles	Waste Type	
	21st CENTURY ENVIRONMENTAL MANAGEMENT; INC. OF RHODE				
RI-018	ISLAND	(401) 781-6340	10	Hazardous Waste	Used Oil
2A-451	A. L. EASTMOND & SONS; INC.	(718) 378-7000	29	Used Oil	
1A-002	AB OIL SERVICE; LTD	(631) 567-6545	15	Used Oil	
2A-124	ABC TANK REPAIR & LINING; INC.	(718) 272-2800	12	Used Oil	
1A-378	ACTION TRUCKING COMPANY; INC.	(516) 781-3000	15	Hazardous Waste	Used Oil
PA-376	AERC.COM; INC.	(610) 797-7608	14	Hazardous Waste	Used Oil
4A-330	ALBANY TANK SERVICES; INC.	(518) 756-6527	10	Used Oil	
NJ-389	ALL STATE OIL RECOVERY	(973) 696-3122	15	Used Oil	
4A-015	ALLIED WASTE SERVICES OF NORTH AMERICA; LLC	(518) 785-7030	28	Used Oil	
PA-364	AMERICAN ENVIRONMENTAL SERVICES; INC.	(724) 933-4100	17	Hazardous Waste	Used Oil
ME-017	AMERITECH ENVIRONMENTAL SERVICES; INC.	(207) 438-9149	47	Hazardous Waste	
3A-476	APPROVED STORAGE & WASTE HAULING; INC.	(914) 664-4791	18	Hazardous Waste	
1A-371	ASBESTOS TRANSPORTATION COMPANY; INC.	(631) 924-5050	59	Hazardous Waste	Used Oil
7A-116	ASHLAND DISTRIBUTION(DIVISION OF ASHLAND; INC.)	(607) 723-8254	19	Hazardous Waste	Used Oil
NJ-197	AUCHTER INDUSTRIAL VAC SERVICE; INC.	(908) 925-1515	31	Hazardous Waste	Used Oil
OH-067	AUTUMN INDUSTRIES; INC.	(330) 372-5002	30	Hazardous Waste	Used Oil
MO-013	BED ROCK; INC.	(417) 624-3131	39	Hazardous Waste	Used Oil
IL-041	BEELMAN TRUCK COMPANY	(618) 646-5312	12	Hazardous Waste	-
NJ-459	CARE ENVIRONMENTAL CORPORATION	(973) 398-5100	15	Hazardous Waste	Used Oil
NJ-294	CASIE ECOLOGY OIL SALVAGE: INC.	(856) 696-4401	38	Hazardous Waste	Used Oil
OH-133	CHECKERED EXPRESS; INC.	(330) 259-0407	17	Used Oil	
MI-031	CHEMICAL ANALYTICS; INC.	(734) 326-9400	12	Hazardous Waste	
MA-006	CLEAN HARBORS ENVIRONMENTAL SERVICES; INC.	(781) 792-5764	442	Hazardous Waste	Used Oil
IN-016	CLEAN STREAMS; INC.	(219) 844-1161	12	Hazardous Waste	Used Oil
NJ-396	CLEAN VENTURE; INC.	(908) 355-5800	114	Hazardous Waste	Used Oil
CT-145	CONNECTICUT TANK REMOVAL; INC.	(203) 384-6020	13	Hazardous Waste	Used Oil
7A-022	CONSOLIDATED TRANSPORTATION; INC.	(315) 253-0373	26	Hazardous Waste	
OH-047	DART TRUCKING COMPANY; INC.	(800) 541-8206	238	Hazardous Waste	1
NJ-643	DISPOSAL SYSTEMS; INC.	(609) 259-6340	12	Used Oil	