

#### TOWN OF HAMDEN INVITATION TO BID #2878

#### Storm Water Industrial General Permit Compliance Services and SPCC Training

The Town of Hamden is seeking competitive bids for The Public Works environmental compliance services associated with the *General Permit for the Discharge of Storm Water Associated with Industrial Activity* (Storm Water Industrial General Permit) and Federal Oil Pollution Prevention Regulations as provided by The State of Connecticut Department of Energy and Environmental Protection (DEEP).

Sealed proposals (1 original and 3 copies and 1 electronic copy) will be received at the Finance Office, Government Center, 2750 Dixwell Ave, Hamden, CT 06518 to be held in the Purchasing Lock box until **11:00 A.M**. on **June 11, 2019** at which time they will be publicly opened and read aloud. Bids received after the time set will be considered informal and will be rejected. Last day for questions is **June 4, 2019**.

It is the sole responsibility of the bidder to see that the bid is in the hands of the proper authority prior to the bid opening time.

Specifications and the form of proposal on which bids must be submitted may be downloaded at <u>www.biznet.gov</u> and may also be obtained at the Purchasing Office, Hamden Government Center, 2750 Dixwell Avenue, Hamden, CT between the hours of 8:30 A.M. and 4:30 P.M., Telephone (203) 287-7110. A PDF version may be obtained by e-mail a request to <u>purchasing@hamden.com</u>.

The Town of Hamden reserves the right to accept or reject any or all options, bids or proposals; to waive any technicality in a bid or portion thereof submitted, and to accept the bid deemed to be in the best interest of the Town of Hamden.

Philip W. Goodwin Purchasing Agent

#### REQUEST FOR PROPOSAL STORMWATER INDUSTRIAL GENERAL PERMIT COMPLIANCE SERVICES AND SPCC TRAINING FOR THE TOWN OF HAMDEN DEPARTMENT OF PUBLIC WORKS, PUBLIC WORKS GARAGE, PUBLIC WORKS MAINTENANCE GARAGE, AND TRANSFER STATION

Request for proposal for Town of Hamden Department of Public Works environmental compliance services associated with the *General Permit for the Discharge of Stormwater Associated with Industrial Activity* (Stormwater Industrial General Permit) and Federal Oil Pollution Prevention Regulations as provided by The State of Connecticut Department of Energy and Environmental Protection (DEEP).

Compliance services will help the Town's Public Works Garage, Public Works Maintenance Garage, and Transfer Station maintain compliance with the Stormwater Industrial General Permit and Oil Pollution Prevention Regulations.

The following Scope of Services are to be include:

#### Task 1A: Annual Stormwater Training

The General Permit requires each permittee to inform all appropriate personnel of the components and goals of their Stormwater Pollution Prevention Plan (SPPP) at least annually on the fiscal year of July 1 to June 30. To meet this requirement, provide on-site stormwater management training program at each facility (to be coordinated the same day). This training program, at a minimum, will cover the topics listed below.

- (1) General Permit Overview
- (2) Pollution Prevention Team
- (3) Sampling Requirements
- (4) Purpose of the Stormwater Pollution Prevention Plan
- (5) Review of Pollution Prevention Plan
  - Potential pollutant sources
  - Good housekeeping practices
  - Material handling procedures and storage requirements
  - Preventative maintenance practices
  - Spill prevention and response
  - Location of spill control equipment
- (6) Semi-annual inspections
- (7) Monitoring and Reporting

Record attendance on a training sign-in log for the Town of Hamden to maintain onsite as training documentation.

#### Task 1B: Annual SPCC Training

Facilities with an above ground oil storage capacity of 1,320 gallons or greater are subject to federal oil pollution prevention regulations in 40 Code of Federal Regulations (CFR) Part 112. These regulations require development of an oil Spill Prevention Control and Countermeasure (SPCC) Plan and annual training. The Public Works Garage and Public Works Maintenance Garage have SPCC Plans and require annual training for oil handling personnel.

Provide a training session on the same day as SPPP training of Task 1A at both the Public Works Garage and Public Works Maintenance Garage. Those who should attend include all personnel involved with the operation and maintenance of oil storage containers/tanks (including operation of equipment related to oil storage containers/tanks), and who respond to spills/leaks from oil storage containers/tanks. Training will cover, at a minimum, the following items below.

- (1) Operation and maintenance of equipment to prevent discharge
- (2) Discharge procedure protocol
- (3) Applicable pollution control laws, rules, and regulations,
- (4) General facility operations
- (5) Contents of the facility SPCC Plan

Record attendance on a training sign-in log for the Town of Hamden to maintain on-site as training documentation.

#### Task 2: Semi-annual Stormwater Monitoring with Visual Sample Collection

The Stormwater Industrial General Permit requires continued (from permit issuance October, 2011) semi-annual monitoring until the average concentration of pollutants in the four most recent samples is less than the stormwater industrial general permit benchmarks. Stormwater Industrial General Permit semi-annual monitoring periods are October 1 through March 31, and April 1 through September 30.

Collect two (2) sets of requisite semi-annual samples from established monitoring outfalls at the Town of Hamden Public Works Garage, Public Works Maintenance Garage, and Transfer Station/Landfill. Collect samples during the following periods:

- April 1 September 30
- October 1 March 31

This testing protocol assumes the same time frames with the reissuance of the existing Industrial regulations on October 2019. Should the parameters or testing change, the testing item may be reexamined.

Deliver semi-annual samples to a CT state certified laboratory for testing required under the Stormwater Industrial General Permit. Upon receipt of laboratory results, prepare the CT DEEP Stormwater Monitoring Report (SMR) for each sampling outfall for the Town of Hamden submission to CT DEEP. Revised April 9, 2019

-3-

#### Task 3: Visual Stormwater Monitoring

Perform quarterly visual monitoring four (4) times for the Public Works Garage and Public Works Maintenance Garage (two at the same time as the semi-annual monitoring event and two during alternate quarters), and twice for the Transfer Station (concurrent with collection of semi-annual sample collection). Document the results/findings for the Town of Hamden records. Note that quarterly visual sampling is required for the entire permit term.

#### Task 4: Semi-Annual Stormwater Inspections

Conduct two sets of semi-annual inspections for the three Town facilities (identified above) covered under the Stormwater Industrial General Permit using forms found in each facility's SPPP. Any deficiencies will be immediately communicated to the Pollution Prevention Team. Monthly (as well as weekly and quarterly for the Transfer Station) inspections are also required under the Stormwater Industrial General Permit. The Town of Hamden is responsible for conducting these inspections.

#### Task 5: Permit Renewal

The current plan is scheduled to expire on September 30, 2019. The Commissioner of the Connecticut Department of Energy and Environmental Protection intends to reissue a new industrial general permit with modifications prior to the expiration of the current permit. If a new industrial general permit is issued, provide updates as required to the existing Stormwater Pollution Prevention Plan (SPPP).

CT DEEP Permit fees for renewal will be borne by the Town.

#### TOWN OF HAMDEN

#### **GENERAL BID SPECIFICATIONS -- PART A**

Bids shall be made on the bid forms furnished by the Town, without alteration. Bids shall be submitted in a sealed envelope, stating on the outside of the envelope the words "BID DOCUMENTS", the Town's bid number, the title of the Project, the title of the bid package for which a bid is being submitted, and the time and date of the bid opening. All bidders shall provide 1 original, 3 copies and 1 electronic copy of their bid, unless otherwise stated.

Bids received after the bid opening deadline shall be rejected. All spaces on the bid form must be filled in with figures and words or the Town, in its sole discretion, may reject the bid as non-responsive. No faxed or emailed bids are allowed.

Applicable if checked.

**BID SECURITY**: Each bid shall be accompanied by a certified check or bid bond for five percent (5%) of the total bid. The Bid Security will be returned by the Town upon signing of the contract with the successful bidder. Checks or bonds must be made to the order and for the benefit of the "Town of Hamden". Security may be held by the Town of Hamden for a period not to exceed 90 days from the date of the opening of the bids for the purpose of reviewing the bids. Bids shall not be combined, unless otherwise permitted in the Invitation to Bid or Instructions to Bidders. A separate bid surety shall be presented for each bid.

**LIQUIDATED DAMAGES**: The successful bidder, upon his/her/its failure or refusal to sign the contract within five (5) business days of receipt of the contract from the Town, shall forfeit to the Town as liquidated damages for such failure or refusal an amount equal to the security deposited with his/her bid.

The Town may make such investigations and conduct such scope reviews as deemed necessary by the Town in order for the Town to determine the ability of the bidder to perform the work and the bidder shall promptly, upon the Town's request, furnish to the Town all such data for this purpose. The Town expressly reserves the right to reject a bid if, in the Town's sole discretion, the Town determines that a bid is non-responsive, a bidder is not responsible, a bidder is not qualified to perform the work or the Town otherwise determines that the award of a contract to the bidder is not in the best interest of the Town. Conditional bids will not be accepted.

**SUBCONTRACTORS**: The bidder is specifically advised that any person, firm or other party to whom bidder intends to award a subcontract or purchase order must be acceptable to the Town and that approval of the proposed subcontract award cannot be sought from the Town unless and until the successful bidder submits all information and evidence to the Town regarding the qualifications, experience and responsibility of the proposed subcontractor. Although the bidder is not required to attach such information to its bid, the bidder is hereby advised of this requirement so that it may plan accordingly and prevent delays.

**MODIFICATION**: Any bidder may modify his/her/its bid **prior** to the scheduled deadline for receipt of bids. See paragraph one above. The bidder wishing to modify its bid shall submit such modified bid in

accordance with paragraph one above, shall unequivocally indicate that its prior bid is superseded by the modified bid and shall submit its modified bid in an envelope clearly marked "**MODIFIED BID**".

**ERRORS**: The Town, in its sole discretion, reserves the right to waive typographical or technical defects in the bid, as well as its right to correct an award erroneously made as a result of a clerical error on the part of the Town of Hamden.

**PERMITS/LICENSES**: All applicable permits and licenses shall be obtained at the sole cost of bidders. No permits or permit fees shall be waived by the Town unless otherwise stated in the Town's Invitation to Bid or Instructions to Bidders.

**OBLIGATIONS OF BIDDER**: Each bidder shall, prior to submitting a bid, familiarize itself with the conditions under which the work will be performed and conduct its own due diligence. Bidders shall be presumed to have read and to be thoroughly familiar with the specifications and all bid documents. The failure of any bidder to request, receive or examine any information or the failure of the bidder to familiarize itself with the conditions relating to the performance and timing of the work shall in no way relieve any bidder from any obligation in respect to the bid and shall not subject the Town to any liability whatsoever.

Furthermore, the bidder is responsible for being aware of and conforming in all respects to all existing Federal, State of Connecticut, and Town of Hamden Statutes, Ordinances, Regulations, laws and other legal applicable legal requirements, regardless of whether any such applicable requirements are specifically identified in the bid documents.

**WITHDRAWAL OF BIDS**: Bids may be withdrawn prior to the time fixed for opening by submitting written notification of withdrawal to the Town prior to the bid opening deadline.

Negligence or mistake on the part of the bidder in preparing the bid confers no right of withdrawal or modification of the bid after such bid has been opened.

"OR EQUAL" CLAUSE: Whenever a material, article or piece of equipment is identified in the bid document by reference to manufacturers' or vendors' names, trade names, catalog numbers, etc., it is intended to establish a standard, unless otherwise stated; any material, article, or equipment of other manufacturers and vendors which will perform adequately the duties imposed by the general design may be considered equally acceptable if, in the opinion of the Town, the material, article, or equipment so proposed is of equal substance and function. Any substitutions must be approved in writing by the Purchasing Agent or his designee, who shall have sole discretion to determine the acceptability of the proposed substitute.

**PATENTS**: The contractor shall indemnify, defend and hold harmless the Town and its officers, agents, and employees from and against liability and costs of any nature or kind, including cost and expenses for, or on account of, any patented or unpatented invention, process, article, or appliance manufactured or used in the performance of the contract, including its use by the Town unless otherwise specifically stipulated in the contract or bid documents.

**NON-COLLUSIVE BID STATEMENT**: All bidders shall be required to sign the non-collusive statement attached.

**FUNDING**: The municipal non-appropriation clause may be applicable.

Applicable if checked



**PERFORMANCE AND** PAYMENT BONDS: To ensure the delivery of goods and services in conformity with the specifications provided and payment of all subcontractors and suppliers, bidders shall provide payment and performance bonds for any project (1) which is governed by Connecticut's Little Miller Act, C.G.S. §49-41 or (2) for which the Town requires the provision of payment and performance bonds. Successful bidders shall provide the Town with payment and performance bonds, at the bidder's expense, each for the full amount of the contract awarded. The Town shall be the Obligee under each bond and the bonds shall be issued by a company authorized to conduct surety business in the State, listed on the U.S. Department of the Treasury's List of Approved Sureties and subject to approval by the Town.



**INSURANCE**: The contractor will provide adequate proof of insurance to the Town for the types of insurance and limits indicated below, providing for all of its operations performed in compliance with this contract.

The successful bidder shall obtain and pay for the insurance coverage described below with the indicated minimum limits. Bidders agree to furnish Certificates of Insurance to the Town and/or its Board of Education, certifying coverage to be in effect for the term of this contract and that the Town and/or Board of Education will be given sixty (60) days prior written notice of cancellation or non-renewal.

These requirements if checked also apply to any subcontractor or common carrier used by the Bidder.

<u></u>.

WORKERS COMPENSATION	
Connecticut	
Applicable Federal	
Employer's Liability	

Statutory Limits Statutory Limits \$100,000 per Accident \$100,000 Disease per Employee \$500,000 Policy Limit

#### II. COMMERCIAL GENERAL LIABILITY

Each Occurrence	\$1,000,000
Fire Damage	\$ 100,000
Medical Expense	\$ 5,000
Personal Injury/Advertising	\$ 1,000,000
General Aggregate	\$ 3,000,000
Products & Completed Operations Aggregate	\$ 1,000,000
Body Injury and Property Damage	\$ 1,000,000

III. BUSINESS AUTOMOBILE LIABILITY (including owned, hired & non-owned vehicles) Liability (Combined Single Limit) \$1,000,000

(If hazardous material or potential pollutants are transported, MCS90 – Accidental Pollution coverage is required)

IV. UMBRELLA/EXCESS LIABILITY (If Required) Liability Limit – Each Occurrence over primary Self-Insured retention \$5,000,000 \$10,000

V. RAILROAD PROTECTIVE LIABILITY (If Required) Bodily Injury and Property Damage	\$1,000,000 Each Occurrence \$1,000,000 Aggregate
VI. POLLUTION LIABILITY (If Required)	
Bodily Injury and Property Damage	\$1,000,000 Each Occurrence \$1,000,000 Aggregate
VII. PROFESSIONAL LIABILITY (If Required)	
	\$3,000,000 Each Occurrence \$3,000,000 Aggregate
VIII. MONEY & SECURITIES-BROAD FORM	\$( <u>Insert Limit)</u>

IX. The Town of Hamden and/or Hamden Board of Education to be named as additional insured on all insurance policies, except Workers Compensation and Professional Liability. Vendor coverage shall be primary and non-contributory. A waiver of subrogation shall apply in favor of the Town of Hamden on all policies except Professional Liability.

X. To the fullest extent permitted by law, the vendor shall defend, indemnify and hold the Town of Hamden and Hamden Board of Education harmless from and against any and all claims, losses, expenses, judgements, injuries to persons and/or property resulting out of, and alleged to result from or arise out of the performance of this contract and resulting from and alleged to result from the bidder's negligence.

ITEM IX AND X MUST APPEAR ON THE FACE OF THE INSURANCE CERTIFICATE IN THE SECTION ENTITLED "DESCRIPTION OF OPERATION

#### **Occupational Safety and Health Administration Requirements; Safety Compliance:**

According to Connecticut General Statutes, Section 31-53b (a) each contract entered into on or after July 1, 2007, for the construction, remodeling, refinishing, refurbishing, rehabilitation, alteration or repair of any public building project by the state or any of its agents, or by a political subdivision of the state or any of its agents, where the total cost of all work to be performed by all contractors and subcontractors in connection with the contract is at least one hundred thousand dollars (\$100,000.00) shall contain a provision requiring that, not later than thirty days after the date such contract is awarded, each contractor furnish proof to the Labor Commissioner that all employees performing manual labor on or in such public building , pursuant to such contract, have completed a course of at least ten hours in duration in construction safety and health approved by the federal Occupational Safety and Health Administration or, in the case of telecommunications employees, have completed at least ten hours of training in accordance with 29 CFR 1910.268. The contractor shall familiarize itself with all aspects of state law and any applicable regulations pertaining to these requirements in order to ensure full compliance. Moreover, contractor shall be solely responsible for full and timely compliance with all federal, state and local safety standards, rules and regulations.

**INDEMNITY/HOLD HARMLESS**: The contractor's and subcontractor's insurance policies will be endorsed to provide for the Town of Hamden and Hamden BOE to be named as an additional insured. To the fullest extent permitted by law, the contractor will defend, indemnify and save harmless the Town of Hamden and Hamden BOE from all claims, expenses, judgments, suits and actions <u>related</u> to injuries

to and/or damage to the property as a result of, arising from or alleged to arise from the activities of the contractor, its servants and agencies acting for the contractor and from performance of the Project.

**CERTIFICATE OF INSURANCE**: The contractor, prior to the start of any work under this contract, shall provide the Town's Purchasing Office with a certificate of insurance to conform to the following:

- a. Form(s) acceptable to the Town of Hamden.
- b. Insurance provided by insurance companies authorized to write coverage in the State of Connecticut.
- c. Policy dates must cover the term of this contract.
- d. Certificate will provide for at least 30 days' notice to the Town of Hamden prior to cancellation.
- e. All additional insured certificates are to list the Town of Hamden.

Under no circumstances shall the contractor begin work until (1) the contract for same shall have been signed by all parties, (2) the required bonds have been furnished by contractor and approved by the Town, (3) the required certificates of insurance have been filed with and approved by the Town's Purchasing Office and (4) the Contractor has been duly instructed in writing by the Town to proceed with the work. If the contractor commences the work before the provisions referred to in this paragraph are fulfilled, the Town, in its sole option, may cancel or terminate the contract without penalty or liability chargeable to the Town.

**LICENSURE:** At the time of the bid submissions, bidders shall possess the necessary license(s) to perform the work that is the subject of this invitation to bid.

**NON-RESIDENT CONTRACTORS:** Out of state contractors must post a bond with the Connecticut Department of Revenue Services. The non-resident contractor must receive a Connecticut tax registration number by completing and submitting form REG-1. Non-resident contractors are directed to familiarize themselves and achieve full compliance with applicable requirements, including Form AU-766.

**NON-DISCRIMINATION AND AFFIRMATIVE ACTION:** The contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the state of Connecticut: and the contractor further agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved. The following principles and requirements of Equal Opportunity and Affirmative Action, as incorporated herein, will be incorporated into "Equal Opportunity - Non-Discrimination Clause" to be included in all bid documents, purchase orders, leases and contracts. The principles of Affirmative Action are addressed in the 13th, 14th and 15th Amendments of the United States Constitution, Civil Rights Act of 1964, Equal Pay Act of 1963, Title VI and VII of the 1964 United States Civil Rights Act, Presidential Executive Orders 11246, 11375, 11478 (nondiscrimination under federal contracts), Act 1, Section 1 and 20 of the Connecticut Constitution, Governor Grasso's Executive Order Number 11, Governor O'Neill's Executive Order Number 9, the Connecticut Fair Employment Practices Law (Sec. 46a-60-69) of the Connecticut General Statutes, Connecticut Code of Fair Practices (46a-70-81), Deprivation of Civil Rights (46a-58 (a)(d)), Public Accommodations Law (46a-63-64), Discrimination against Criminal Offenders (46a-80), definition of blind (46a-51(1)), definition of

Physically Disabled (46a-51 (15)), definition of Mentally Retarded (46a-51-13), cooperation with the Commission on Human Rights and Opportunities (46a-77), Sexual Harassment (46a-60 (a)-8), Connecticut Credit Discrimination Law (360436 through 439), Title 1 of the State and the Local Fiscal Assistance Act 1 1972. Every contract to which the State is party must contain the nondiscrimination and affirmative action provisions provided in the Connecticut General Statutes Section 4a-60a.

Sec. 4a-60. (Formerly Sec. 4-114a). Nondiscrimination and affirmative action provisions in awarding agency, municipal public works and quasi-public agency project contracts. (a) Every contract to which an awarding agency is a party, every quasi-public agency project contract and every municipal public works contract shall contain the following provisions:

(1) The contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the state of Connecticut; and the contractor further agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved;

(2) The contractor agrees, in all solicitations or advertisements for employees placed by or on behalf of the contractor, to state that it is an "affirmative action-equal opportunity employer" in accordance with regulations adopted by the Commission on Human Rights and Opportunities;

(3) The contractor agrees to provide each labor union or representative of workers with which such contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment;

(4) The contractor agrees to comply with each provision of this section and sections 46a-68e and 46a-68f and with each regulation or relevant order issued by said commission pursuant to sections 46a-56, 46a-68e, 46a-68f and 46a-86; and

(5) The contractor agrees to provide the Commission on Human Rights and Opportunities with such information requested by the commission, and permit access to pertinent books, records and accounts, concerning the employment practices and P.A 15-5 amended Subsecs. (a) and (c) by replacing references to the state or political subdivision of the state with references to awarding agency, amended Subsecs. (a)(2), (a)(3) and (f) to (h) by changing "commission" to "Commission on Human Rights and Opportunities", amended Subsec. (a)(4) by adding reference to Sec. 46a-86, amended Subsecs. (a) to (d) and (h) by adding references to municipal public works contracts and quasi-public agency project contracts, amended Subsec. (c) by adding references to commission re provision of representation or documentation, amended Subsec. (d) by deleting former Subdiv. (2) re quasi-public agency and redesignating existing Subdivs. (3) to (6) as Subdivs. (2) to (5), and made technical and conforming changes throughout.

Sec. 4a-60a. Provisions re nondiscrimination on the basis of sexual orientation required in awarding agency, municipal public works and quasi-public agency project contracts. (a) Every contract to which an awarding agency is a party, every contract for a quasi-public agency project and every municipal public works contract shall contain the following provisions:

(1) The contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of sexual orientation, in any manner prohibited by the laws of the United States or of the state of Connecticut, and that employees are treated when employed without regard to their sexual orientation;

(2) The contractor agrees to provide each labor union or representative of workers with which such contractor has a collective bargaining agreement or other contract or understanding and each vendor with which such contractor has a contract or understanding, a notice to be provided by the Commission on Human Rights and Opportunities advising the labor union or workers' representative of the contractor's commitments under this section, and to post copies of the notice in conspicuous places available to employees and applicants for employment;

The successful bidder also agrees to comply with all provisions of the Town's Charter and Code of Ordinances –"Town of Hamden, Chapter 110 "Business Transactions with Town". The contractor shall cooperate fully with the Connecticut Commission on Human Rights and Opportunities ("the Commission") and shall submit periodic reports of employment and subcontracting practices to the Commission in such a form, in such a manner, and at such time as may be prescribed by the Commission.

**SET ASIDES:** If this Project is funded in whole or in part by State of Connecticut funds, Public Act 15-5 (§§58-71 and 88) requires that, effective with all contracts executed after October 1, 2015, all solicitations for municipal public works contracts funded in whole or in part with State funds state in the notice of solicitation that the contract must comply with the set asides mandated by Public Act 15-5. The set aside requirements include a requirement that 25% of the total value of contracts in excess of \$50,000.00 be set aside for exclusive bidding for "small contractors," as defined by Section 58 (a) (1), and 25% of such amount (that is, 6.25% of the total value), be set aside for "minority business enterprises," as defined by Section 58(a) (4). For contracts in excess of \$50,000.00, bidders must have obtained Commission approval of their Affirmative Action Plan prior to contract execution. BIDDERS ARE EXPRESSLY DIRECTED TO REVIEW PUBLIC ACT 15-5, SECTIONS 58-71 AND 88, TO FAMILIARIZE THEMSELVES WITH THE REQUIREMENTS OF SUCH LAWS. BIDDERS SHALL BE DIRECTLY AND SOLELY RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF P.A. 15-5, SECTIONS 58 THROUGH 71 AND 88. THE TOWN ALSO DIRECT BIDDERS' ATTENTION TO THE SECTIONS 63 AND 64 (NON-DISCRIMINATION REQUIREMENTS) AND 66-68 (AFFIRMATIVE ACTION REQUIREMENTS).

Regardless of whether P.A. 15-5 is applicable to this Project, the contractor shall provide reasonable technical assistance and training to minority business enterprises to whom work is subcontracted to promote the participation of such concerns, to make a good faith effort to award a reasonable proportion of all subcontractors to such enterprises, and undertake such other reasonable activities or efforts as the Commission may prescribe to ensure the participation of minority business enterprises as contractors and subcontractors. The contractor shall include a provision in all subcontracts with minority business enterprises requiring the minority business enterprise to provide the Commission with such information on its structure and operations as the Commission finds necessary to make an informed determination as to whether the minority business enterprise is owned and operated by members of a minority group.

The contractor shall maintain full and accurate data, such as contract monitoring reports, for a period of three (3) years from the date of substantial completion of the project or for such longer period as is required by the law then in effect with regard to records retention. The contractor shall not discharge, discipline, or otherwise discriminate against any person who has filed a complaint, testified, or assisted in any proceeding with the Commission.

The contractor shall make available for inspection and copying any supporting data requested by the Commission and make available for interview any agent, servant, or employee having knowledge of any matter concerning the investigation of a discriminatory practice complaint of any matter relating to a contract compliance review.

**CLAYTON ACT**: The contractor or subcontractor offers and agrees to assign to the public purchasing body all right, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act, 15 U.S.C. 15 or under Chapter 624 of the General Statutes of Connecticut arising out of the purchase of services, property or intangibles of any kind pursuant to a public purchase contract or subcontract. This assignment shall be made and become effective at the time the public purchasing body awards or accepts such contract, without further acknowledgment by the parties.

**AWARD TO OTHER THAN THE APPARENT LOW BIDDER:** The Town of Hamden reserves the right to award the work to a bidder other than the one which submitted the lowest price if it deems such action to be in the best interest of the Town of Hamden.

**WAGE RATES:** Workers employed in the various occupations on this named project shall be required to receive the minimum rates established by the State of Connecticut Labor Department Division of Regulations of Wages.

**PRICES**: Prices quoted for merchandise, supplies, or equipment shall be the net prices delivered into the Town of Hamden.

Town of Hamden reserves the right to award separate items to separate bidders. Bidders may indicate exceptions to this.

Bidders must include Federal ID number or Social Security number to be considered for bid approval.

#### **DAVIS-BACON ACT - PREVAILING RATES OF WAGES**

If this Project is subject to the Connecticut Prevailing Wage law, C.G.S. §31-53 *et seq.*, the Town of Hamden shall require the contractor to make payment of prevailing rates of wages in accordance with the wage section of the Davis-Bacon Act, Town of Hamden, Hamden Code, S 97.35 and State Statute 31-53, Part III. State Contracts, and shall institute such investigations and periodic monitoring procedures as deemed necessary to determine compliance with labor standard provisions and the Federal requirements of the Act as amended.

#### AS PER THE TOWN OF HAMDEN AFFIRMATIVE ACTION RESOLUTION:

It is in the best interest of the Town to encourage minority and/or female business enterprise. Where two substantially similar Hamden bids are submitted, preference may be given to the minority and/or female contractor.

#### **RESERVED RIGHTS OF TOWN:**

The Town of Hamden reserves the right to accept or reject any or all bids or proposals; to waive any technicality in a bid or proposal or part thereof submitted, and to accept the bid deemed to be in the best interest of the Town of Hamden. Further, the Town reserves the right to split bids and quotations among two or more bidders.

The Town reserves the right to reject any bid submitted by a joint venture if the Town determines that any entity to the joint venture fails to satisfy the Town's requirements (i.e., bonding, insurance, qualifications, responsibility).

**PREQUALIFICATION REQUIREMENT:** The Connecticut Department of Administrative Services' Contractor Prequalification Program (C.G.S §4a-100) requires all contractors to prequalify before they can bid on a contract or perform work pursuant to a contract for the construction, reconstruction, alteration, remodeling, repair or demolition of any public building or any other public work by the state or a municipality, estimated to cost more than \$500,000 and which is funded in whole or in part with state funds, If this requirement is applicable to the project that is the subject of this invitation to bid, bidders shall provide their bid update statement with their bid.

#### TIME OF COMPLETION AND LIQUIDATED DAMAGES

Bidders understand and acknowledge that timely completion of the Project is essential. Failure of the Contractor to achieve substantial completion of the Project within the calendar days stated herein will result in the Owner and the public incurring damages, additional costs and inconveniences that would be impossible or extremely difficult to accurately quantify at the time. Therefore, the bidder and the Town agree that, if the Contractor fails to satisfactorily complete the Project hereunder within the time specified or within any extension of time that may have been allowed, there shall be deducted from any monies due or that may become due the Bidder,

the sum of \_\_\_\_\_\_\_(\$\_\_\_\_\_) for each and every calendar day, including Saturdays, Sundays and legal holidays, that the Project remains incomplete. This sum shall not be imposed as a penalty, but as liquidated damages due Owner from Contractor by reason of the damages incurred, inconvenience and additional costs and expenses to the public together with other problems suffered as a result of any such delay thereby occasioned.

#### DISCREPANCY IN BID FORM:

In the event of any discrepancy between the amount written in numerical figures and the amount stated in written words, the amount written in words will be controlling.

### The Town of Hamden hereby notifies all bidders that the Town's contract with the successful bidder shall contain the following provision:

Payment to Vendor shall be withheld by the Town when any real or personal property taxes, sewer assessment fees, sewer use charges, fines, interest, penalties, **police or fire extra duty, police vehicle use fees**, or lien fees imposed, assessed or otherwise levied by the Town of Hamden and due from/payable by Vendor are delinquent.

For purposes of this Contract, a tax, fee, charge, or fine shall be deemed delinquent if it remains unpaid, in whole or in part, for a period of thirty (30) days following the date upon which payment of such tax, fee, charge, or fine was due, together with any accrued interest and penalties.

The Town expressly reserves the right, in its sole discretion, to set off against its account payable to Vendor and apply any sums due to Vendor by Town pursuant to this Contract to any delinquent real or personal property taxes, sewer assessment fees, sewer use charges, fines, interest, penalties, or lien fees imposed by the Town of Hamden and due from/payable by Vendor.

#### TOWN OF HAMDEN LEGISLATIVE COUNCIL

#### ORDINANCE AMENDING CONSTRUCTION CONTRACTS ORDINANCE

WHEREAS, the Town of Hamden adopted a local prevailing wage ordinance requiring contractors working on town public works projects to pay laborers and mechanics wages based upon the wages established by the State of Connecticut Department of Labor to be prevailing for the corresponding classes or laborers and mechanics on projects of a similar character to the contract work in town; and

WHEREAS, the threshold for local public works projects covered by the prevailing wage ordinance has not increased since the adoption of the ordinance; and

WHEREAS, the Town wishes to amend its ordinance so that the Town's threshold for prevailing wages is 90% of that set by the Connecticut General Statutes.

NOW THEREFORE BE IT ORDAINED that Section 97.35 (A) of the Hamden Code of Ordinances is hereby amended and restated as set forth below:

#### **CONSTRUCTION CONTRACTS**

#### 97.35: WAGES TO BE STATED IN CONTRACT.

(A) The advertised specification for every public works project by the Town of Hamden that is 90% or more of the amount set forth by the Connecticut General Statues, as may be amended, for new construction and/or that is 90% or more of the amount set forth by the Connecticut General Statutes, as may be amended, for remodeling, refinishing, refurbishing, rehabilitation, alteration or repair work, and which requires or involves the employment of mechanics, laborers or workmen employed upon the work contracted to be done, shall contain a provision stating the minimum wages to be paid various classes of laborers, mechanics and workman shall be based upon the wages established by the State through its Department of Labor to be prevailing for the corresponding classes of mechanics, laborers or workmen employed on projects of a character similar to the contract work in the town.

(B) Every contract based upon these specifications shall contain a stipulation that the contractor or his subcontractor shall pay all mechanics, laborers or workmen employed directly upon the site of the work, unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account, the full amount accrued at time of payment, computed at wage rates not less than those stated in the advertised specifications, regardless of any contractual relationship which may be alleged to exist between the contractor or subcontractor and such laborers, mechanics and workmen, and that the scale of wages to be paid shall be posted by the contractor in a prominent and easily accessible place at the site of the work.

(C) Every contract based upon these specifications shall further stipulate that there may be withheld from the contractor so much of accrued payments as may be considered necessary by the Town to pay to laborers, mechanics and workmen employed by the contractor or any subcontractor on the work difference between the rates of wages required by the contract to be paid laborers, mechanics or workmen on the work and the rates of wages received by such laborers, mechanics or workmen and not refunded to the contractor, subcontractor or other agents.

(D) Every contract based upon these specifications shall contain the further provision that in the event it is found by the Town that any laborer, mechanic or workmen employed by the contractor or any subcontractor directly on the site of the work covered by the contract has been or is being paid a rate of wages less than the rate of wages required by the contract or be paid as aforesaid the Town may, by written notice to the contractor, terminate the contract, terminate the contractor's right to proceed with the work or such part of the work as to which there has been a failure to pay said required wages and to prosecute the work to completion by contract or otherwise, and the contractor and his sureties shall be liable to the town for any excess cost occasioned the town thereby.

#### MISCELLANEOUS REQUIREMENTS:

**Questions/Requests for Information:** All Questions shall be submitted in writing only and e-mailed to <u>purchasing@hamden.com</u> at least <u>seven (7)</u> days prior to the bid opening date. Bidders shall not attempt or engage in any ex parte or verbal communications with Town personnel prior to the bid opening deadline.

**All Applicable Codes to Be Met:** All construction shall meet all applicable Building and Fire Codes, as well as ADA requirements.

**Pre-Bid Meeting(s):** Failure to attend a mandatory pre-bid meeting may be deemed, by the Town, grounds for rejection of your bid.

Deliveries: All deliveries are inside deliveries.

Provision of Bid Packets, Submission of Bids: Bid packets will be mailed upon request.

Bid packets will not be faxed.

Bid proposals must be mailed back or delivered to:

Hamden Government Center Finance Department 2750 Dixwell Avenue Hamden, CT 06518.

Please include one original and two copies of your bid unless otherwise specified.

#### ALL ENVELOPES MUST BE MARKED PROPERLY WITH BID #, BID DATE, AND BID TITLE ONLY.

**Ownership of Documents** – All qualification statements, proposals and bids submitted by bidders are to be the sole property of the Town and subject to the provisions of the Connecticut General Statutes (re: Freedom of Information).

**Ownership of Subsequent Products** – Any work product, whether acceptable or unacceptable, developed under a contract awarded as a result of this invitation to bid is to be the sole property of the Town unless stated otherwise in the invitation to bid or contract.

**Timing and Sequence** – Timing and sequence of events resulting from this invitation to bid will ultimately be determined by the Town.

**No Oral Agreements** – The Town, its agencies and employees, shall not be responsible for any alleged oral agreement or arrangement made by a bidder with any agency or employee of the Town or District.

**Rejection for Default or Misrepresentation** – The Town reserves the right to reject the bid of any bidder that is in default of any prior contract or for misrepresentation.

**Assigning, Transferring of Agreement** – Bidders are prohibited from assigning, transferring, conveying, subletting or otherwise disposing of this agreement, their rights, title or interest therein or their power to execute such agreement by any other person, company, or corporation without the prior consent and approval in writing by the Town.

**Cost of Preparing Qualification/Proposal Statements** – The Town shall not be responsible for any expenses incurred by any bidder in preparing and submitting a bid.

Thank you.

Philip Goodwin Purchasing Agent

#### **GENERAL BID SPECIFICATIONS - PART B**

- 1. Nondiscrimination under Title VI of the Civil Rights Act of 1964. Contractor shall comply with the requirements of Title VI of the Civil Rights Acts of 1964 (PL 88-352), 42 U.S.C. Sec. 2000d et. Seq. and the Fair Housing Act (42 U.S.C. 3601-20) and Executive Order 11063 and the HUD regulations with respect thereto including the regulations under 24 CFR Part I. In the sale, lease, or other transfer of land acquired, cleared or improved with assistance provided under the Agreement, The contractor agrees and warrants that in the performance of the contract such contractor will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved, in any manner prohibited by the laws of the United States or of the state of Connecticut; and the contractor further agrees to take affirmative action to insure that applicants with job-related qualifications are employed and that employees are treated when employed without regard to their race, color, religious creed, age, marital status, national origin, ancestry, sex, gender identity or expression, intellectual disability, mental disability or physical disability, including, but not limited to, blindness, unless it is shown by such contractor that such disability prevents performance of the work involved.
- 2. Fair Housing Opportunities Under Title VIII of the Civil Rights Act of 1968 and Fair Housing Act (42 U.S.C. 3601-20). Contractor shall comply with the requirements of Title VIII of the Fair Housing Act as amended (PL 90-284). The CONTRACTOR shall provide for fair housing opportunities where possible. The CONTRACTOR is prohibited from discriminating in the sale or rental of housing, the financing of housing, or the provision of brokerage services, including in any way making unavailable or denying a dwelling to any person, because of race, color, religion, sex or national origin. Title VIII further requires programs and activities relating to housing and community development to be administered to affirmatively further fair housing.
- 3. **Prohibition Against Payments of Bonus or Commission.** The funds paid to Contractor shall not be used in the payment of any bonus or commission for the purpose of obtaining HUD approval of the application for such assistance, or HUD approval of applications for additional assistance, or any other approval or concurrence of HUD required under this AGREEMENT, Title I of the Housing and Community Development Act of 1974, as amended, or HUD regulations with respect thereto; it being understood, however, that reasonable fees or bona fide technical, consultant, managerial or other such services, are not hereby prohibited if otherwise eligible as program costs.
- 4. <u>"Section 3" Compliance in the Provision of Training Employment and Business</u> <u>Opportunities.</u> Every application, recipient, contracting party, contractor, and subcontractor shall incorporate, or cause to be incorporated, in all contracts, the following clause (referred to as a Section 3 clause):

a) The work to be performed under this contract is on a project assisted under a program providing direct Federal financial assistance from the Department of Housing and Urban Development and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 170lu. Section 3 requires that to the greatest extent feasible opportunities for training and employment be given lower income residents of the project area and contracts for work in connection with the project area and contracts for work in connection with the project area located in or owned in substantial part by persons residing in the area of the project.

 b) The parties to this contract will comply with the provisions of said Section 3 and the regulations issued pursuant thereto by the Secretary of Housing and Urban Development set Revised April 9, 2019 forth in 24 CFR Part 135, and all applicable rules and orders of the Department issued thereunder prior to the execution of this Contract. The parties to this contract certify and agree that they are under no contractual or other disability, which would prevent them from complying with these requirements.

c) The CONTRACTOR will send to each labor organization or representative of workers with which he has a collective bargaining agreement or other contract or understanding, if any, a notice advising the said labor organization or workers' representative of his commitments under this Section 3 clause and shall post copies of the notice in conspicuous places available to employees and applicants for employment or training.

d) The CONTRACTOR will include this Section 3 clause in every subcontract for work in connection with the project and will, at the direction of the applicant for or recipient of Federal financial assistance, take appropriate action pursuant to the subcontract upon a finding that the subcontractor is in violation of regulations issued by the Secretary of Housing and Urban Development, 24 CFR Part 135. The CONTRACTOR will not subcontract with any subcontractor unless the subcontractor has been found in violation of regulations under 24 CFR Part 135 and will not let any subcontract unless the subcontractor has first provided it with a preliminary statement of ability to comply with the requirements of these regulations.

e) Compliance with the provisions of Section 3, the regulations set forth in 24 CFR Part 135, and all applicable rules and orders of the Department issued thereunder prior to the execution of the Contract, shall be a condition of the Federal financial assistance provided to the project, binding upon the applicant or recipient for such assistance, its successors, and assigns. Failure to fulfill these requirements shall subject the applicant or recipient, its contractors and subcontractors, its successors, and assigns to those sanctions specified by the grant or loan agreement or contract through which Federal assistance is provided, and to such sanctions as are specified by 24 CFR Part 135.

- 5. **Prevailing Salaries.** The CONTRACTOR shall be solely responsible for the determination of staff classifications and employ staff in relation to its personnel practices and salary ranges, including fringe benefits, in accordance with the Agreement.
- 6. <u>Anti-Kickback Rules.</u> Salaries of architects, draftsmen, technical engineers, technicians, laborers and mechanics performing work under this Agreement shall be paid unconditionally, and not less often than once a week, without deductions as are mandatory by law or permitted by the applicable regulations issued by the Secretary of Labor pursuant to the Copeland "Anti-Kickback Act" (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR, Part 3). The CONTRACTOR shall comply with all applicable regulations of said "Anti-Kickback Act" and shall insert appropriate provisions in all subcontracts relative to the work under this Agreement; and CONTRACTOR shall take steps to insure compliance by subcontractors with such regulations at all times. CONTRACTOR shall be responsible for the obtaining and submission of the affidavits of subcontractors required thereunder, except that the Secretary of Labor may specifically provide for variations of, or exemptions from, the requirements thereof.

7. **Non-Discrimination in Employment.** During the performance of this Contract, the CONTRACTOR agrees as follows:

a) The CONTRACTOR shall not discriminate against any employee or applicant for employment because of race, creed, color, sex or national origin. The CONTRACTOR shall take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to their race, creed, color, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, transfer, recruiting or recruitment advertising, layoff, termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. The CONTRACTOR agrees to post in conspicuous places available to employees and applicants for employment notices to be provided, setting forth the provisions of this Non-Discrimination in Employment Clause.

b) The CONTRACTOR shall, in all solicitations or advertisements for employees placed by or in behalf of the CONTRACTOR; state that all qualified applicants will receive consideration for employment without regard to race, creed, color, sex, or national origin.

c) The CONTRACTOR shall comply with all provisions of Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity", as amended by Executive Order 11375 and Executive Order 12086, as supplemented in Department of Labor Regulations (41 (CFR, Part 60), and all of the rules, regulations and relevant orders of the President's Committee of Equal Employment Opportunity in effect as of the date of this Agreement; and the CONTRACTOR shall furnish all information and reports required herein, and shall on demand permit access to its books, records, and accounts, in its possession or control, by TOWN and the said Committee for purposes of investigation to ascertain compliance with such rules, regulations and orders.

d) The CONTRACTOR will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the Contract Compliance Officer advising the said labor union or workers' representative of the CONTRACTOR'S commitment under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

e) In the event the CONTRACTOR'S noncompliance with the non-discrimination sections of the contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the CONTRACTOR may be declared ineligible for further Government contracts or federally assisted construction contract procedures authorized in Executive Order 11246 of September 4, 1965, or by rule, regulations, or order of the Secretary of Labor, or as otherwise provided by law.

f) The Contractor will include the portion of the sentence immediately preceding paragraph (a) and the provisions of paragraph (a) through (g) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 25, 1965, as amended by Executive Order 11375 and 12086, so that such provisions will be binding upon each subcontractor or vendor. The CONTRACTOR will take such action with respect to any subcontractor or purchase order as the Department may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Department, the contractor may request the United States to enter into such litigation to protect the interest of the United States.

g) The CONTRACTOR further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 or September 24, 1965, as amended by Executive Orders 11375 and 12086, with a subcontractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon CONTRACTOR and subcontractors by the Department of the Secretary of Labor pursuant to Part II, subpart D of the Executive Order.

h) No person in the United States shall on the ground of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to the discrimination under any program or activity funded in whole or in part with funds made available under this title. Any prohibition against discrimination on the basis of age under the Age Discrimination Act of 1975, as amended, or with respect to an otherwise qualified handicapped individual as provided in Section 504 of the Rehabilitation Act of 1973, as amended, shall also apply to any such program or activity. Remedies described in Section 109 of the Housing and Community Development Act of 1974, as amended, as the regulations issued pursuant thereto, (24 CFR Section 570.601) shall apply, if failure to comply with this paragraph has been determined.

- 8. <u>Employment of Certain Persons Prohibited</u>. No person under the age of sixteen years and no person who at the time is serving sentence in a penal or correctional institution shall be employed on the work covered by this Contract.
- 9. Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970 and <u>Federal Implementing Regulations</u>. Contractor and Owners shall to the greatest extent practicable under state law comply with Sections 301 and 302 of Title III, (Uniform Real Property Acquisition Policy) of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and will comply with Sections 303 and 304 of Title III and HUD implementing instructions in 24 CFR Part 42 and 570.602 (b), comply with Title II (Uniform Relocation Assistance) of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and HUD implementing regulations at 24 CFR Part 42 and 570.602 (a).
- 10. **Political Activity Hatch Act and Section 109 of HCD Act.** CONTRACTOR shall comply with the provisions of the Hatch Act and Section 109 of the Housing and Community Development Act of 1974, as amended, and the regulations pursuant thereto (24 CFR 570.601). Under no circumstances shall the CONTRACTOR and/or other recipients, subcontractors, and sub recipients use TOWN funds or persons employed in administering TOWN programs for the purposes of conducting any political activity.
- 11. **Executive Orders 11063, 12259, and Title VIII**. CONTRACTOR will comply with Executive Order 11063 as amended by Executive Order 12259 and the implementing regulations in 24 CFR Part 107 and Title VIII of the Civil Rights Act of 1968 (Pub. L.90-284) as amended.
- 12. <u>**Historic Preservation**</u>. CONTRACTOR will comply with the National Historic Preservation Act of 1966 (PL 89-665), Preservation of Historic and Archaeological Data Act of 1974 (PL 93-291), Procedures for Protection of Historic and Cultural Properties, Advisory Council on Historic Preservation (36 CFR 800), and the HUD regulations with respect thereto.

13. CONTRACTOR will comply with HUD Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794 et. seq.) provides:

No otherwise qualified individual with handicaps . . . shall, solely by reason of his or her handicap be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financing assistance.

14. **No Conflict of Interest:** Bidder certifies, by submitting a bid, that no owner, employee or family member (defined for purposes of this invitation to bid as a spouse, parent, sibling or child) of an owner or employee of bidder is a current or former employee of the Town or its Board of Education.

Bidder further certifies that no owner or employee of bidder has any interest, direct or indirect, which is incompatible with the proper discharge of the proposed duties in the public interest or that would tend to impair Bidder's independent judgment or action in the performance of the proposed duties.

Bidder certifies that it does not have any past, present or currently planned interests which are an actual or potential organizational conflict of interest with respect to performing the work for Town under this invitation to bid.

Bidder hereby covenants and agrees that no employee, elected official or appointed official of the Town or its Board of Education has any interest in this Agreement or will directly or indirectly benefit therefrom.

#### 15. Compliance with Town Regulations

Bidder shall cause all persons performing work pursuant to the contract between bidder and the Town to comply with all Town and Board of Education requirements, including instructions pertaining to conduct and to building access and related requirements issued by the Town and District, respectively. All personnel shall wear readily visible identification in a form that is satisfactory to the Town. The Town may promulgate and modify from time to time rules and regulations relating to conduct as the Town, in its sole discretion, may determine, and the contractor shall cause all persons performing work to comply with any such requirements.

#### 16. Confidential Information

Bidder shall cause all persons under bidder's control who are providing services or materials under or through bidder's contract with the Town to preserve and protect all information of the Town and Hamden School District to which they may have access during the performance of work as confidential. Bidder expressly acknowledges that if the facilities that are the subject of the Project are school facilities or public buildings, the security and safety of the occupants, users and general public are of paramount importance and bidder shall observe and enforce appropriate security protocol to ensure the safety of users and occupants.

#### COMPLETE AND RETURN

BID #: BID TITLE

#### **BID FORM**

TO: Purchasing Agent Hamden Government Center 2750 Dixwell Avenue Hamden, CT 06518

I have received the bid documents entitled

and dated \_\_\_\_\_

I have received Addenda dated as follows:

I have considered and included the provisions of the bid documents noted above in my bid. I have examined the bid documents and I submit the following BID:

In submitting this bid, I agree:

- 1. To hold my bid open until 60 days after the date on which bids are due.
- 2. To enter into and execute a contract provided by the Town, without alteration by me, if awarded on the basis of this bid, according to the contract form provided by the Town of Hamden.
- 3. To accomplish the work in accord with the Bid Specifications and Contract Documents and to the extent that there is a conflict between the provisions of any bid documents, the order of precedence shall require me to provide the item or service that is of the greater value or benefit to the Town of Hamden.
- 4. To begin the work in strict accordance with the project schedule or the Notice to Proceed issued by the Town and to complete the work within \_\_\_\_\_\_calendar days following Owner's date of Notice to Proceed.
- 5. The undersigned submits a bid bond in the sum of \_\_\_\_\_\_\_dollars (\$\_\_\_\_\_\_) 5% of Base Bid, which sum is agreed shall become the sole and exclusive property of the Owner as liquidated damages to the Owner if the undersigned fails to execute a contract in conformity with the Bid Form and to furnish surety bonds and insurance policies in accordance with the General Conditions after due notification has been given.
- 6. I acknowledge that the Town of Hamden reserves the right to accept or reject any or all bids, alternates, options, or proposals; to waive any technical defect in a bid or part thereof submitted, and to accept the bid deemed by the Town to be in the best interest of the Town of Hamden.

Name	Title	Date
Contractor Tax ID#	Contractor License #	
Revised April 9, 2019		

**COMPLETE AND RETURN** 

Bid #: Bid TITLE:

#### NON-CONFLICT AFFIDAVIT OF RESPONDENTS

No Elected or Appointed Official, SBC member or other officer or employee or person whose salary is payable in whole or in part from the Town of Hamden OR Board of Education, nor any immediate family member thereof, is directly or indirectly interested in the Bid/Proposal, or in the supplies, materials, equipment, work or labor to which it relates, or in any profits thereof.

The undersigned further certifies that this statement is executed for the purpose of inducing the Town of Hamden to consider the statement of qualifications submitted herein.

State of Connecticut S.S. County of		
Subscribed and sworn before me thi	s day of	, 20
Legal Name of Respondent:		
Business Address:		
Signature and Title of Person		
By:	My Comm	nission Expires:

Notary Public

Date:

#### **COMPLETE AND RETURN**

#### BID #: BID TITLE:

#### NON-COLLUSIVE BID STATEMENT

The undersigned bidder, having fully informed itself regarding the accuracy of the statements herein, certifies that:

(1) The bid has been arrived at by the bidder independently and has been submitted without collusion with, and without any agreement, understanding, or planned common course of action with, any other vendor or bidder of materials, supplies, equipment, or services described in the invitation to bid, designed to limit independent bidding or completion, and

(2) The contents of the bid have not been communicated by the bidder or its employees or agents to any person not any employee or agent of the bidder or its surety on any bonds furnished with the bid and will not be communicated to any such person prior to the official opening of the bid.

The undersigned bidder further certifies that this statement is executed for the purposes of inducing the Town of Hamden to consider the bid and make an award in accordance therewith.

Legal Name of Bidder

Business Address

Signature and Title of Person Authorized to Sign

Printed Name

Date

BID #: BID TITLE:

#### **PRICE SHEET**

You are required to furnish the following information to the Town of Hamden:

(Print or type)		
Name and Title of Agent of Company (Print or type)		
Signature:	Date:	
Telephone:	_Email:	
Fax:	_ Federal I.D. Number:	
TASK 1A – Annual Stormwater Training: \$_		Annual Price
TASK 1B – Annual SPCC Training: \$	Ann	ual Price
TASK 2 – Semi-Annual Stormwater Monitori	ng with Visual Sample Collection	on:
Collection 1 (April 1 – September 30)	: \$	
Collection 2 (October 1 – March 31):	\$	
TASK 3 – Visual Stormwater Monitoring: \$		Annual Price
TASK 4 – Semi-Annual Stormwater Inspection	ons: \$	Annual Price
TASK 5 – Permit Renewal: \$	Annu	ual Price

The Town will compensate the awarded contractor upon delivery of each product.



September 18, 2018

Mark Austin, P.E. Town of Hamden 2750 Dixwell Avenue Hamden, CT 06518

## RE: 2018 QUARTERLY STORMWATER MONITORING REPORTING, DEPARTMENT OF PUBLIC WORKS, VOED AND TRANSFER STATION, HAMDEN, CT (HRP #HAM4063.WM)

Dear Mr. Austin:

Attached please find the Stormwater Monitoring Report (SMR) for the quarterly stormwater monitoring attempted by HRP Associates, Inc. (HRP) at the above mentioned facilities for the period covering April 1, 2018 through June 30, 2018. As indicated in the SMR, no qualifying quarterly samples were collected at the Transfer Station during the April 1, 2018 – June 30, 2018 monitoring period. Quarterly visual monitoring is also required under the General Permit at the three facilities (Department of Public Works, VOED and Transfer Station) but could not be conducted during the April 1, 2017- June 30, 2018 monitoring period. Though HRP monitored for storm events during this period, most rain events occurred outside of normal business hours when the facilities were closed.

During the current monitoring period (July 1, 2018- September 30, 2018), HRP will attempt to conduct quarterly visual monitoring at the three facilities along with quarterly sampling at the Transfer Station for iron.

The SMR for the sample collection attempt are included in Attachment 1. Please sign the "Statement of Certification" on page 3 of the SMR, make a copy for your records, and submit the signed SMR to CT DEEP to the address below by September 30, 2018:

Water Toxic Program Coordinator Bureau of Water Protection and Land Reuse CT Department of Energy and Environmental Protection 79 Elm Street Hartford, CT 06106-5127

If you have any questions or require additional information, please feel free to contact HRP at (860) 674-9570.

Sincerely,

Carrolyn H. Izzo

Project Geologist

Darin Lemire, PE Project Manager

Attachments cc: Joe Colello, Public Works Dept., 1125 Shepard Avenue, Hamden, CT 06514

## ATTACHMENT 1 Stormwater Monitoring Report (for submission to CT DEEP)





#### **Facility Information**

Permittee Name: Town of Hamden	Site Name: Hamden Landfill, Trans. Sta. & Recyc. Ctr							
Mailing Address: 2750 Dixwell Ave., Hamder	n, CT_06514							
Contact Person: Mark Austin	Title: Town Engineer							
Business Phone: (203) 287-7040 ext.: Email: MAustin@Hamden.com								
Site Address: 231 Wintergreen Ave., Hamden, CT 06514								
Receiving Water (name/basin): Wintergreen Brook (Basin No. 5304)								
Permit #: GSI 001681	Primary SIC: <b>4953</b>							
Discharges into an Impaired Waterbody: Ye	S NO X (If yes, complete the table on page 3 of this form)							

#### **Sample Information**

Sample Location: Outfall 001 (Not Sampled) Person Collecting Sample: No Sample	Collected
Date/Time Collected: No Sample collected Date of Previous Storm Event: No Sample	ole Collected
This report is for samples required: Semi-annually 🗌 Annually 🔲 Other 🛛	
Check here if the sample contains <b>snow or ice melt</b> :	
Check here if a benchmark exceedance is solely due to background or off site sources	see note below

#### **Monitoring Results**

*Parameter	Required Frequency	Results (units)	Benchmark	Effluent Limit	Benchmark Exceedance (see pg 4)	Test Method	Laboratory Name
Oil & Grease	Semi-annual	Exempt	5.0 mg/L	n/a			
Rainfall pH	Semi-annual	Exempt	n/a	n/a			
Sample pH	Semi-annual	Exempt	5-9 SU	*			
COD	Semi-annual	NA	75 mg/L	n/a			
TSS	Semi-annual	NA	90 mg/L	*			
TP	Semi-annual	NA	0.40 mg/L	n/a			
TKN	Semi-annual	NA	2.30 mg/L	n/a			
NO <sub>3</sub> -N	Semi-annual	Exempt	1.10 mg/L	n/a			
Total Copper	Semi-annual	NA	0.059 mg/L	n/a			
Total Zinc	Semi-annual	NA	0.160 mg/L	*			
Total Lead	Semi-annual	NA	0.076 mg/L	n/a			
24 Hr. LC <sub>50</sub>	Annual-Year 1&2	NA	n/a	n/a		NA	NA
48 Hr. LC <sub>50</sub>	Annual-Year 1&2	NA	n/a	n/a		NA	NA

\* See Additional Sector C Monitoring Section on page 3 of this form.

#### Exemptions

List here any parameter(s) that will not be sampled for the remainder of the permit term: <sup>see note below</sup> **O&G**, **pH**, **NO3-N** 

NOTE: Complete the "Data Tracking Table" (page 4 on this form) to show the parameter is eligible for the
monitoring exemption in Section 5(e)(1)(B)(iii) of the general permit. If you are discontinuing monitoring for
impaired water parameters (per Section 5(e)(1)(D)), or parameters that are present due to natural or
background levels or off site run-on (per Section 5(e)(1)(B)(V)), attach additional supporting information to this
form.

#### STORMWATER ACUTE TOXICITY TEST DATA SHEET

(required annually only during Year 1 and Year 2 of the permit)

Site Name: Hamden Landfill, Transfer Station and Recycling Center						
Date/Time Begin: Date/Time End:						
Sample Hardness:	Sample Conductivity:					
Test Species: Daphnia pulex < 24 hrs oldDilution Water Hardness:						

Effluent Dilution		umber of Organisms Dissolved Oxygen Temperature Surviving (mg/L) (°C)		ıre	pH (su)							
Hour	00	24	48	00	24	48	00	24	48	00	24	48
CONTROL 1												
CONTROL 2												
CONTROL 3												
CONTROL 4												
6.25% A												
6.25% B												
6.25% C												
6.25% D												
12.5% A												
12.5% B												
12.5% C												
12.5% D												
25% A												
25% B												
25% C												
25% D												
50% A											-	
50% B												
50% C												
50% D												
100% A												
100% B												
100% C												
100% D												

#### **REFERENCE TOXICANT RESULTS**

Test Species	Date	Reference Toxicant	Source	LC <sub>50</sub>
Daphnia pulex				

#### Additional Monitoring: Sector C – Landfills and Solid Waste Disposal Areas Only

Parameter	Required Frequency	Results (Units)	Benchmark	Effluent Limit	Benchmark Exceedance (see pg 4)	Test Method	Laboratory Name
Total Iron	Quarterly		1 mg/L	n/a			
Effluent S	amples*						
BOD	Annually for the entire permit term		n/a	140 mg/L			
TSS	Annually for the entire permit term		n/a	88 mg/L			
Ammonia	Annually for the entire permit term		n/a	10 mg/L			
Alpha Terpineol	Annually for the entire permit term		n/a	0.033 mg/L			
Benzoic Acid	Annually for the entire permit term		n/a	0.12 mg/L			
p-Cresol	Annually for the entire permit term		n/a	0.025 mg/L			
Phenol	Annually for the entire permit term		n/a	0.026 mg/L			
Total Zinc	Annually for the entire permit term		n/a	0.200 mg/L			
Sample pH	Annually for the entire permit term		n/a	6-9 mg/L			

\*Annual samples may be taken at the same time as one of the semi-annual samples for the general sampling parameters. An effluent limit applies to any single sample (not average of 4).

#### Additional Monitoring for Discharges to Impaired Waters (if applicable)

Parameter	Required Frequency	Results (units)	Test Method	Laboratory Name

#### **Statement of Certification**

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute."

Signature of Permittee

Mark Austin, P.E. Name of Permittee (print or type)

Signature of Preparer (if different than above)

Carrolyn Izzo, HRP Associates, Inc.

Name of Preparer (print or type)

Please send all completed forms to:

WATER TOXICS PROGRAM COORDINATOR BUREAU OF WATER PROTECTION AND LAND REUSE CT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION 79 ELM STREET HARTFORD, CT 06106-5127

Date

Town Engineer Title (if applicable)

9/17/2017 Date

Project Geologist Title (if applicable)

#### General Permit for the Discharge of Stormwater Associated with Industrial Activity, effective 10/1/2011 Data Tracking Sheet Sector C – Refuse Systems

Permittee Name: <b>Town of Hamden</b>	Permit #: GSI <u>001681</u>	
Site Name: Hamden Landfill, Transfer Station and Recycling	Center	
Site Address: Wintergreen Brook (Basin No. 5304)		
Sample Location: Outfall 001		
· · · · · · · · · · · · · · · · · · ·		

Enter the sample dates and the data reported for the four (4) most recent semi-annual or quarterly monitoring sample results at this discharge location in the chart below. To determine the average for the four samples add up each of the four results and then divide that number by 4. **Only monitoring collected under the current permit (effective 10/1/11,) can be used to earn the monitoring exemption.** 

#### Average = (Sample 1+ Sample 2 + Sample 3 + Sample 4) 4

		Samp	le Result				
Parameter Sample Date	1 11/16/17	2 1/12/18	3	4	Average	Benchmark**	Qualify for exemption?
O&G	Exempt	Exempt			Exempt	5.0 mg/L	Yes, previously
Sample pH*	Exempt	Exempt			Exempt	5-9 S.U.	Yes, previously
COD	430 mg/L	190 mg/L			310	75 mg/L	No
TSS*	400 mg/L	260 mg/L			330	90 mg/L	No
TP	0.90 mg/L	1.0 mg/L			0.95	0.4 mg/L	No
TKN	3.5 mg/ L	2.2 mg/L			2.85	2.30 mg/L	No
NO <sub>3</sub> -N	Exempt	Exempt			Exempt	1.10 mg/L	Yes, previously
Total Copper	<0.030 mg/L	<0.020 mg/L			<0.030	0.059 mg/L	No
Total Zinc*	0.11 mg/L	0.080 mg/L			0.095	0.16 mg/L	No
Total Lead	0.039 mg/L	0.035 mg/L			0.037	0.076 mg/L	No
Total Iron	10 mg/L	11 mg/L			10.5	1.0 mg/L	No

\*\*If the average of the four (4) most recent samples is less than the benchmark listed, your facility is no longer required to sample semi-annually or quarterly for that parameter for the rest of the permit (current permit expires 9/30/2016).

If the average of the four (4) most resent samples is equal to or greater than the benchmark listed, check the appropriate box on page 1. If so, you have exceeded the benchmark and must continue to sample this parameter semiannually until the average is below the benchmark. See Section 5(e)(1)(B) of the General permit for requirements when exceeding a benchmark.

If the sample result reported by the testing laboratory was below detection limit, for the purpose of averaging, use a value that is  $\frac{1}{2}$  the detection limit for that parameter in the formula above. For example, if the result for Oil & Grease was <2.0 mg/L, use a value of 1.0 mg/L for determining the average. Please refer to Section 5 e(1)B(iii) for a more detailed explanation.

\*Due to effluent limits, landfills and solid waste disposal areas within Sector C are required to monitor annually for nine parameters including sample pH, TSS and Zinc for the entire permit term. The pH of uncontaminated rainfall is also recommended to provide background information. See additional

monitoring for landfills and solid waste disposal areas within Sector C on page 2 of this form for this list of parameters.



# SPILL PREVENTION, CONTROL & COUNTERMEASURE (SPCC) PLAN

Town of Hamden Public Works Maintenance Garage (VOED Building) Hamden, Connecticut

Original Prepared:

August 2012

Revision(s):

March 2013

Prepared By:

HRP Associates, Inc. 197 Scott Swamp Road Farmington, Connecticut 06032

HRP #: HAM4063.WM

Issued On: June 19, 2018



This Spill Prevention Control and Countermeasure (SPCC) Plan was generated at the request of Town of Hamden Department of Public Works by HRP Associates, Inc. (HRP). It is the privileged property of Town of Hamden Department of Public Works and HRP., and is not to be distributed to or shared with anyone other than authorized personnel of Town of Hamden Department of Public Works, HRP Associates, Inc., and/or local, state, or federal regulatory or emergency response authorities. This SPCC plan has been certified by a Professional Engineer and an original copy has been retained by HRP Any changes or modifications made to this plan (other than non-technical amendments such as changes to phone numbers or names) by Town of Hamden Department of Public Works which are not certified by a Professional Engineer negate the Professional Engineer certification and may lead to a violation of the applicable SPCC regulations.



#### **TABLE OF CONTENTS**

PROFE	SSIONA	L ENGINEER CERTIFICATIONiv
GENER	AL FAC	ILITY INFORMATIONv
COMPL	IANCE	INSPECTION PLAN REVIEW PAGEvi
1.0	INTRO	DDUCTION 1
2.0	FACIL	ITY DESCRIPTION 2
	2.1 2.2	Facility Operations
3.0	RESPO	ONSIBILITIES, NOTIFICATIONS AND REPORTING
	3.1 3.2 3.3 3.4 3.5	Responsibilities5Initial Notifications5Regulatory and Response Notifications for All Spills63.3.1Connecticut Requirements63.3.2Spills Threatening to Reach Navigable Waters63.3.3Spills Threatening Human Health or the Sewer73.3.4Commercial Clean-Up Contractors7Federal Reporting8State Reporting9
4.0		GENCY PROCEDURES 10
5.0	PAST	SPILL EXPERIENCE 12
6.0	POTE	NTIAL SPILL PREDICTION AND CONTROLS
	6.1 6.2 6.3	Oil Capacity and Storage13Containment22General Practices236.3.1Oil Transfer Procedures236.3.2Dike Drainage256.3.3Recovered Clean-up Material Disposal256.3.4Vehicle Traffic266.3.5Drum and Container Handling26
7.0	INSPE	27 CTIONS
	7.1 7.2	Visual Inspections
8.0	SPILL	ABATEMENT EQUIPMENT AND MATERIALS
9.0	SECU	RITY



13.0	IMPL	EMENTATION SCHEDULE	35
	12.2	US EPA Requirements	
	12.1	Facility Modifications	34
12.0	SPCC	PLAN AMENDMENT	34
11.0	FACI	LITY RESPONSE PLAN	33
10.0	TRAI	NING	32

#### **FIGURES**

Figure 1	Site Location Map
Figure 2	Facility Diagram

#### **TABLES**

Table 1	Oil-Filled Operation Equipment Oil Storage
Table 2	Bulk Fuel Storage

Table 3 Integrity Testing

#### **APPENDICES**

- Appendix A SPCC Regulations 40 CFR 112
- Appendix B SPCC Rule Cross-Reference
- Appendix C Spill Reporting Form (Example)
- Appendix D Inspection Logs
- Appendix E Certification of the Applicability of the Substantial Harm Criteria Checklist
- Appendix F Training Roster
- Appendix G Photo Log of Oil Storage Locations
- Appendix H SPCC Plan Records
- Appendix I ConVault Onsite Integrity Testing Procedures



### PROFESSIONAL ENGINEER CERTIFICATION

I hereby certify that (i) I am familiar with the requirements of 40 CFR Part 112, (ii) my agent has visited and examined the facility, (iii) the plan has been prepared in accordance with good engineering practices including the consideration of applicable industry standards, (iv) procedures for required inspections and testing have been established, (v) and the Plan is adequate for the facility.

	Printed Name of Registered
	Professional Engineer
	HRP Associates, Inc.
	197 Scott Swamp Road, Farmington, CT 06032 860-674-9570
	Signature of Registered
	Professional Engineer
(Professional Engineer Seal)	
Date:	Registration No: State:

Note: This certification is contingent on meeting the action items listed in Section 13.0 of this plan. This certification shall in no way relieve Town of Hamden Department of Public Works of its duty to prepare and fully implement a SPCC Plan in accordance with 40 CFR 112.7, as required by 40 CFR 112.3(a), (b), and (c).



# **GENERAL FACILITY INFORMATION**

Name and Location of Facility:	Town of Hamden Public Works Maintenance Garage (VOED Building) 1255 Shepard Avenue Hamden, CT 06518
Type of Facility:	Municipal Government, Public Works Building
Telephone Number:	(203) 287-7044
Normal Operating Schedule:	7:00 am to 3:30 pm Monday through Friday
Name and Address of Owner/Operator:	Town of Hamden 2750 Dixwell Avenue Hamden, CT 06518
Designated Person Responsible for Spill Prevention at the Facility:	John Pucillo (203) 287-2626 (office) (203)796-2548
Date of Initial Operation of Facility:	1970
Oil Spill History:	None
Receiving Waters:	Unnamed Brook discharges to Shepard Brook

### **MANAGEMENT APPROVAL**

Town of Hamden VOED Building is committed to the prevention of discharges of oil to navigable waters and the environment, and maintains the highest standards for spill prevention control and countermeasures through regular reviews, updating and implementation of this SPCC Plan for its facility in Hamden, Connecticut. This SPCC Plan will be implemented as herein described. By signing this document, I certify that I am thoroughly familiar with this SPCC Plan.

-				

Authorized Facility Representative	ve: John Pucillo	

Title: Superintendent of Vehicle Maintenance



### **COMPLIANCE INSPECTION PLAN REVIEW PAGE**

In accordance with 40 CFR 112.5(b), a review and evaluation of this SPCC Plan is conducted at least once every five years. As a result of this review and evaluation, Town of Hamden VOED Building will amend the SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of review. Any amendment to the SPCC Plan shall be certified by a Professional Engineer\* (in accordance with 40 CFR 112.3(d) within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.

REVIEW DATE (at least every 5 years)	PLAN UPDATE REQUIRED (YES/NO)	DESCRIPTION OF REQUIRED REVISION	SIGNATURE CERTIFYING TO STATEMENT BELOW**	DATE OF AMENDMENT (if necessary)
10/2017	Yes	5 year review and update	⋈ will amend ⋈ will not amend Signature:	
			<ul> <li>will amend</li> <li>will not amend</li> <li>Signature:</li> </ul>	
			will amend will not amend Signature:	
			<ul> <li>will amend</li> <li>will not amend</li> <li>Signature:</li> </ul>	

# **CERTIFICATION STATEMENT**

\*A Professional Engineer's certification is required if (1) the site maintains oil in excess of 10,000 gallons, (2) the site has a single discharge exceeding 1,000 gallons or two discharges each exceeding 42 gallons within a twelve month period in the three years prior to the SPCC Plan self certification date, or (3) the SPCC Plan deviates from any requirements as allowed by 40 CFR 112.7(a)(2) and 112.7(d) except as provided in 40 CFR 112.6(c).

\*\*"I have completed a review and evaluation of the SPCC Plan for Town of Hamden VOED Building and will/will not amend the Plan as a result.



# 1.0 INTRODUCTION

The Oil Pollution Prevention Regulation in 40 Code of Federal Regulations (CFR) Part 112 was developed in order to (1) prevent oil discharges from reaching navigable waterways (defined to include, but not limited to: lakes, rivers, streams, and wetlands) and adjoining shorelines, and (2) to ensure effective response to oil discharges. Required under this rule is the development of a Spill Prevention Control and Countermeasure Plan (SPCC) for applicable owners, users and/or operators of facilities that could possibly discharge oil in harmful quantities into navigable waterways.

On January 14, 2010, the Environmental Protection Agency (EPA) put into effect a final rule amending the SPCC regulations. Under the SPCC requirements, owners or operators of facilities that "drill, produce, gather, store, use, process, refine, transfer, distribute, or consume oil and oil products" must prepare a SPCC if any of the following storage practices apply:

- greater than 1,320 gallons of oil is stored in above-ground containers/tanks, or
- greater than 42,000 gallons of oil is stored in underground containers/tanks provided the underground storage tank (UST) is not subject to the technical requirements of the UST regulations, 40 CFR Part 280 or 281.

Established under the SPCC regulations is a de minimis container size of 55 gallons. Only containers of oil (defined as "oil of any kind or in any form, including, but not limited to... petroleum, fuel, oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil") with a capacity of 55 gallons or greater are counted in the calculation of the 1,320-gallon threshold. All containers with a storage capacity of less than 55 gallons of oil exempt from the SPCC regulations. A complete copy of the SPCC regulations is included in Appendix A.

Town of Hamden VOED Building is required to prepare, maintain, and follow a SPCC plan since greater than 1,320 gallons of petroleum products are stored above-ground and the discharge of oil could potentially impact the Unnamed Brook from the onsite storm drainage system.



# 2.0 FACILITY DESCRIPTION

# 2.1 Facility Operations

The Town of Hamden VOED Building located in Hamden, Connecticut is comprised of a one story sheet metal building. Operations include storage, maintenance and washing of town-owned vehicles and equipment. The Town of Hamden VOED Building's total <u>above-ground</u> oil storage capacity is approximately 3,994 gallons and includes the following containers with capacities at or exceeding 55-gallons:

- (1) 500-gallon waste oil AST (Outside)
- (1) 275-gallon 1540 diesel oil AST (Fire Department Area)
- (2) 275-gallon hydraulic oil ASTs (Oil Storage Room)
- (1) 275-gallon Petro-Canada Supreme 5W-20 Motor oil (Oil Storage Room)
- (1) 275-gallon 1540 motor oil (Oil Storage Room)
- (1) 275-gallon automatic transmission fluid (Oil Storage Room)
- (2) 55-gallon Automatic Transmission oil drums (Oil Storage Room)
- (5) 55-gallon universal tractor fluid drums (Oil Storage Room)
- (2) 55 gallon waste antifreeze drums (potential for some oil) (center of building)
- (2) 55-gallon waste oil filters drum (center & east side of building)
- (2) 55-gallon hydraulic fluid drums (NE corner of building on wood pallet)
- (2) 226-gallon (approx.) hydraulic fluid old lift reservoirs (east wall of building)
- (1) 55-gallon waste oil drum (east side of building)
- (1) 55-gallon 30 weight compressor oil drum (Compressor Room)
- (1) 55-gallon transmission oil drum (Fire Department Area)
- (1) 55-gallon 5W-20 motor oil (Fire Department Area)
- (1) 55-gallon waste oil drum (Fire Department Area)
- (1) 309-gallon (41.25 cu ft) unibin for used speedy-dry (outside)
- Approximately 93 gallons Transformer oil in Transclosure

The EPA has determined that oil-filled motor vehicle tanks or "motive power containers" used solely to fuel the propulsion of a vehicle are not governed by SPCC rules per 40 CFR 112(d)(7). Additionally, not listed above are those containers located on-site that are in storage containers of less than 55-gallons. Although these containers are exempt from the SPCC regulations, any spill or release from these sources should be managed in accordance with this Plan.

With the exception of the oil/water separators, the Town of Hamden VOED Building currently has no underground storage tank[s] on site. Interior floor drains tie into two oil/water separators in series. The first one is an approximate 450-gallon (sand trap) sump in the floor inside the facility. It connects to a larger 1,000-gallon concrete oil/water separator, located outside below the pavement, that reportedly drains to the sanitary sewer and operates per the requirements of the CTDEEP's Vehicle Maintenance General Permit.

The oil/water separators purpose is multi-faceted. They are used partially for the collection of powerwashing water, which is reportedly conducted on an infrequent basis. They also provide secondary containment for potential releases of oil to the facility floor that reach the containment trench. Oil Water Separators used to comply with general secondary containment requirements of



section 112.7(c) and sized secondary containment requirements for bulk storage containers in 112.8(c) are not subject to bulk storage container requirements and do not count toward overall storage capacity at the facility. However, if being used to comply with secondary containment requirements it must (a) be sized to address the most likely oil discharge from any part of the facility and (b) be sized to contain the largest single bulk storage container with sufficient freeboard to contain precipitation.

In order to fulfill (a), the Town of Hamden VOED Building must demonstrate that the oil storage capacity of the two oil/water separators can contain a release from the vehicle fluid rack distribution dispensers (approx. 275 gallons), or provide the dispensers in this area with safeguards to prevent the dispensing of liquid by non-authorized personnel, such as the installation of an inline manual valve supplied with a lock. Only authorized personnel would have a key. The valve would be open and closed as needed throughout the work day. This would help prevent the dispensing of incorrect oil based products and to prevent spills.

In order to fulfill part (b), the Town of Hamden VOED Building must demonstrate that the oil storage capacity of the two oil/water separators can contain 226-gallons of oil (the largest single bulk container without secondary containment at this time), or provide secondary containment for all oil containing drums inside the facility, and have the hydraulic oil reservoirs for the lifts removed.

As a third option, the facility could install a valve that could close off the discharge from the trench to the oil water separators. The trench itself would have to provide enough storage capacity to fulfill (a) and/or (b) above.

A site location map has been provided in Figure 1. The location of each oil storage unit on-site is depicted in Figure 2. A photo log of representative oil storage locations at Town of Hamden VOED Building is included as Appendix G. Please note that Figures 1 and 2 have been provided at the end of the text for convenience to the reader and user of this SPCC Plan.

# 2.2 Drainage Pathways and Distance to Navigable Waters

The facility is broken up into three drainage areas (Drainage Area DA-1, DA-2, and DA-3). Runoff from DA-1, DA-2 and DA-3 are directed to three regulated outfalls identified as DSN001 through DSN003, which discharge to wooded wetlands south of the facility.

As shown on Figure 2, DA-1 is located in the eastern portion of the facility. Stormwater runoff from this area is collected in a couple of catch basins and perforated Reinforced Concrete Pipe (RCP). This area includes runoff collected from roof drains along eastern half of the building. The catch basins and roof drainage are connected to a manhole which conveys stormwater runoff to a riprap splash pad via a 21-inch RCP pipe (DSN001), which eventually discharges to an unnamed brook. The drainage area to DSN001 includes the following activities:

- A Scrap metal dumpster,
- An Oily waste solids dumpster/container,
- A cardboard dumpster,
- A Waste Oil Above Ground Storage Tank (AST)



- The facility's indoor oil storage loading/unloading area.
- A Vehicle Impoundment Area

DA-2 is located in the center portion of the facility and runoff from this area is collected in roof drains on the western half of the maintenance building. The roof drains are connected to a manhole which historically conveyed stormwater runoff to a riprap splash pad via a 12-inch RCP pipe (DSN002), which eventually discharged to an unnamed brook. The 12- inch RCP pipe was reportedly damaged therefore; this outfall is no longer accessible.

DA-3, which is on the western portion of the Facility, is broken up into three sub drainage areas (DA-3A, 3B, and DA-3C) as shown on Figure 2. The combined area discharges to a drainage swale via a 24-inch RCP Pipe (DSN003).

Runoff from DA-3A is collected by two catch basins located at the entrance to the facility. This drainage area includes a municipal solid waste (MSW) dumpster, facility loading bays, employee parking, and the pump-out area for the 1,000-gallon oil/water separator.

Runoff from DA-3B is collected by a series of interconnected catch basins, which the last catch basin in the system conveys stormwater runoff to a drainage swale via a 12-inch RCP pipe. This drainage swale is located between Shepard Avenue and the facility and flows from north to south where it is intercepted by a catch basin within the swale that is connected to the DA-3A drainage system. This drainage area includes facility loading bays (north and west side of garage), employee and municipal vehicle parking, and a loading dock, located on the north side of the building.

Runoff from DA-3C flows from an off-site area to the north and includes the drainage swale that DA-3B discharges too.

All the outfalls, with the exception of DSN002, receive off-site drainage from adjacent areas to the north. DSN003 also receives runoff from Shepard Avenue.

Facility drainage, based on a visual observation of site contours, is toward the south side of the property. It is estimated, based on a review of the Mount Carmel #80 USGS 7.5 Minute Topographic Quadrangle Map that drainage from the site would flow to an unnamed tributary of Shepard Brook, located approximately 1,000 feet south of the site.



# 3.0 **RESPONSIBILITIES, NOTIFICATIONS AND REPORTING**

### 3.1 Responsibilities

The duties of the Primary Emergency Coordinator and his/her alternate are to routinely inspect all storage and handling facilities and take corrective action when conditions warrant. In addition, the Primary Emergency Coordinator will participate in, set up and maintain necessary spill emergency procedures, recordkeeping; personnel training, SPCC Plan Reviews and amendments (if required), and reporting requirements.

In the event of an oil release, appropriate staff of Town of Hamden VOED Building shall carry out the procedures outlined herein under the direction of the Primary Emergency Coordinator or his/her alternates(s).

### 3.2 Initial Notifications

In the event of any emergency or occurrence related to the release or threatened release of petroleum products, the following persons shall be notified immediately:

Rank	Name	24-hour phone
Primary	John Pucillo	(203) 996-2548
Alternate	James Lafond	(203) 996-2534

The Primary Emergency Coordinator and his/her Alternate Emergency Coordinator have been chosen based on the following qualifications:

- Is on-site or on call at all times;
- Is familiar with the facility layout;
- Is knowledgeable of the locations and characteristics of the materials handled;
- Is familiar with all operations and activities at the facility;
- Is thoroughly familiar with emergency plans;
- Is knowledgeable of the locations of all records; and
- Has the <u>authority</u> to commit facility resources in the event of an emergency.

The Emergency Coordinators or designated Alternates will then notify the proper off-site authorities about the actual emergency, following their initial action at the site.

Town of Hamden VOED Building staff does not respond to major spills. Those identifying the spill will contact the Emergency Coordinator. If the spill is a small, incidental spill (employees can respond with materials available on site and there is no immediate threat to human health and the environment) trained response personnel will tend to the spill. If the spill is beyond the capacity of site resources, one of the commercial cleanup contractors will be contacted to provide a response.



# 3.3 Regulatory and Response Notifications for All Spills

The guidelines in this section apply to all spills: petroleum products, chemicals, and/or non-hazardous and hazardous waste.

#### 3.3.1 Connecticut Requirements

The Connecticut Department of Energy and Environmental Protection (CTDEEP) shall be notified immediately of any spill that poses a potential threat to human health or the environment

CTDEEP Emergency Response Unit, Hartford (24 hours)

Phone: (860) 424-3338

Within 24 hours of the spill, The Town of Hamden VOED personnel are required to report such facts such as:

- the location;
- the quantity and type of substance, material or waste;
- the date and the cause of the incident;
- the name and address of the owner; and
- the name and address of the person making the report and his relationship to the owner.

Note: Unless specifically requested, the CTDEEP does not require a written submission when reporting a spill. A copy of an example Spill Reporting form for internal use can be found in Appendix C.

#### 3.3.2 Spills Threatening to Reach Navigable Waters

In the event that a spill of <u>oil</u> in any amount (or enough to cause sheen) threatens to reach navigable waters, the National Response Center in Washington as well as local authorities shall be notified immediately:

Authorities	Phone Numbers
National Response Center (NRC)	(800) 424-8802
EPA Region I	(617) 424-8802
CT DEEP	(860) 424-3338

With any of the above notifications, Town of Hamden VOED Building personnel will be ready to report the following information immediately following the discovery of the event:

- Your name, location, organization, and telephone number;
- Name and address of the party responsible for the incident;
- Date and time of the incident;
- Location of the incident;
- Source and cause of the release or spill;
- Types of material(s) released or spilled;



- Quantity of materials released or spilled;
- Danger or threat posed by the release or spill;
- Number and types of injuries (if any);
- Weather conditions at the incident location;
- Any other information that may help emergency personnel respond to the incident.

*Navigable waters* of United States are defined in 40 CFR Part 110.1 to include interstate waterways or intrastate waterways including lakes, rivers and streams which may be utilized by interstate travelers for recreational purposes. *Navigable waters* also include lakes, rivers and streams from which fish or shellfish are taken. The complete definition may be found in Section 502(7) of the Federal Water Pollution Control Act. *Navigable waters* for the purpose of Town of Hamden VOED Building's response plan includes a spill that may enter the storm drainage system and/or may reach the unnamed brook.

#### 3.3.3 Spills Threatening Human Health or the Sewer

In the event the Emergency Coordinator or designated alternate also determines that the release of materials threatens human health outside the facility and evacuation may be necessary, the following additional authorities will be notified immediately:

Authority	Phone Numbers
CTDEEP Emergency Response	(860) 424-3338
Town of Hamden Police Department	911 or (203) 230-4000
Town of Hamden Fire Department	911 or (203) 407-5880
Hospital of Saint Raphael	(203) 789-3000

If the spill has discharged down the drain to local sewer authority, immediately contact:

Authority	Phone Numbers
Greater New Haven Water Pollution	203-466-5260
Control Authority	

### 3.3.4 Commercial Clean-Up Contractors

Should a spill contractor be needed, the Town of Hamden VOED Building personnel will contact one of the following contractors:

Contractor	Phone Numbers
Connecticut Tank Removal, Inc	(203) 384-6020
United Industrial Services	(203) 235-3753

The Town of Hamden VOED Building personnel should contact the above contractor and invite a representative to visit the facility in order to become familiarized with the site. This will enable the



contractor to promptly dispatch a well-equipped spill response team to the facility in the event of a spill.

# 3.4 Federal Reporting

After a spill or release of oil greater than 1,000 gallons or after two spills of oil greater than 42 gallons within any twelve-month period, or if the spill impacted a navigable waterway, the Emergency Coordinator will report the event(s) to the following agency within 60 days.

The Regional Administrator U.S. Environmental Protection Agency – Region I 5 Post Office Square – Suite 100 Boston, Massachusetts 02109-3912 Phone: (617) 918-1010

The EPA report will include:

- Name of the facility;
- Your name;
- Location of the facility;
- Maximum storage or handling capacity of the facility and normal daily throughput;
- Corrective action and countermeasures you have taken, including a description of equipment repairs and replacement;
- An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;
- The cause of the discharge, including a failure analysis of the system or subsystem in which the failure occurred;
- Additional preventive measures you have taken or contemplated to minimize the possibility of recurrence; and
- Such other information as the Regional Administrator may reasonably require pertinent to the Plan or spill event.

As required by EPA Federal Regulation 40 CFR 112.4(c), a copy of the EPA report will also be submitted to the CTDEEP Emergency Response Section at the following address:

The Connecticut Department of Energy and Environmental Protection Hazardous Materials Management Unit Oil and Chemicals Spills Section 79 Elm Street Hartford, Connecticut 06106-5127 (860) 424-3338

If 1,000 gallons or more of material is spilled to a navigable waterway, or there are two or more reportable spills (to the National Response Center) in a year, the EPA may conduct an inspection of



the site and review this Plan. Following the inspection and review, the EPA may require facility modifications and/or operational changes to minimize the possibility of future spills.

### 3.5 State Reporting

If the Town of Hamden VOED Building staff has determined that a reportable spill or release of petroleum products (or other virgin or waste chemicals) has occurred, the Emergency Coordinator must contact the CTDEEP within twenty-four (24) hours of the event to the following agency:

Connecticut DEEP Emergency Response Unit, Hartford (24 Hours)

Phone: (860) 424-3338

For all spills reported to the CTDEEP, the Town of Hamden VOED Building staff will submit written information in the form of a letter describing the details of the discharge or spill and supporting the adequacy of the response action within 30 days of the discovery of the reportable discharge or spill.

The documentation shall contain one of the following items:

- A statement that the discharge or spill response action has been completed and a description of how the response action was conducted. The statement shall include the initial report information outlined in Section 3.3 of this plan;
- A request for an extension of time to complete the response action, along with the reasons for the request. The request shall also include a projected work schedule outlining the time required to complete the response action. The executive director may grant an extension up to six months from the date the spill or discharge was reported. Unless otherwise notified by the appropriate regional manager or the Emergency Response Team, the Town of Hamden PWG shall proceed according to the terms of the projected work schedule; or
- A statement that the discharge or spill response action has not been completed nor is it expected to be completed within the maximum allowable six month extension. The statement shall explain why completion of the response action is not feasible and include a projected work schedule outlining the remaining tasks to complete the response action. This report will be mailed to:

The Connecticut Department of Energy and Environmental Protection Hazardous Materials Management Unit Oil and Chemicals Spills Section 79 Elm Street Hartford, Connecticut 06106-5127



### 4.0 EMERGENCY PROCEDURES

In the event of a spill or release, the emergency procedures outlined in the Emergency Procedures flow chart provided on the following page will be followed. A copy of the emergency procedure flow chart will be in or near the Primary Emergency Coordinator's office, as well as all of the alternates. If any employee discovers a spill or release, it will immediately be reported to the Primary Emergency Coordinator. If the Primary Emergency Coordinator or alternate determines that the spill or release cannot be handled by on-site personnel and/or may be a threat to either health or the environment, the listed professional spill response contractor (previously listed in Section 3.3) will be contacted.

The Primary Emergency Coordinator or Alternate is responsible for determining when a spill event has concluded or is under control sufficiently such that normal activities and personnel presence may be safely resumed.

<u>Only if the spill or release can be safely handled by on-site personnel, the following actions may be conducted:</u>

- While awaiting arrival of the Emergency Coordinator or designated Alternates, personnel shall commence containment activities immediately, if safe to do so, using spill response materials available on site. Containment activities may include up righting a spilled container, closing a valve, protecting a drain, or using spill response material to berm a spilled area.
- Following spill containment, trained personnel may begin absorbing the spilled material with absorbent material provided in the site spill kits.
- Used absorbent material will be collected and containerized for off-site disposal in containers such as 55-gallon drums. All equipment and manpower shall be utilized to remove spilled materials promptly and in a safe manner. All drums used to contain spilled waste will be transported to the waste storage area for eventual off-site disposal by a licensed transporter.



### SPILL AND/OR RELEASE FLOW CHART

CONTACT EMERGENCY COORDINATO	DR AND/OR SECONDARY	COORDINATOR:	
1) Emergency Coordinator – John		<u>24-hour phone</u> (203) 996-2548	
2) Alternate Emergency Coordinator – James Lafond		(203) 996-2534	
EMERGENCY COORDINATOR OF1)What Spilled2)Location of Spill3)Size and Extent of Spi4)Whether Any Personn			
YES	PERSONNI	EL INJURED?	NO
		INJURIES, EXTENT OF EMERGENCY, POS	SIBLE
		VATE INTERNAL FACILITY ALARMS AND/OR CO	
		PERSONNEL OF EVACUATION	JMMONICATIONS
IS THE SPILL AN INCIDENTAL RELE RELEASE BY EMPLOYEES IN THE IM	MEDIATE RELEASE AREA	BED, NEUTRALIZED, OR OTHERWISE CONTRO OR BY MAINTENANCE PERSONNEL UTILIZING NG THEIR HEALTH OR SAFETY??	DLLED AT THE TIME OF EQUIPMENT ON-HAND
YES		NO	
BEGIN CONTAINING SPILL, CLEAN-U		EMERGENCY COORDINATOR OR ALTER	NATE CONTACTS SPILL
MATERIAL, STORE PROPERLY FOR D	ISPOSAL.	CONTRACTOR:           Hamden Fire Department         911 or (203) 407-5	5880
		Hamden Police Department 911 or (203 230-40 CT DEEP Emergency Response (860) 424-3338	000
		CT Tank Removal Inc. (203) 384-6020	
		United Industrial Services (203) 235-3753	
		<u>l</u>	
HAS SPILL REACHED O		NAMED BROOK OR HAS ENTERED THE SOIL, V ZED TO THE AIR?	VATER OR
YES		NO	
EMERGENCY COORDINATOR OR A SECTION 3.3 OF SPCC PLAN AS A		Y CONTACT AGENCIES LISTED IN	
SPILL CONTAN	IINATED MATERIAL CLEA	NED-UP AND STORED PROPERLY FOR DISPOS	AL
REPORTING REQUIRE	MENTS MET (SECTION 3.4	II 4 AND 3.5) AND SPILL FORM (APPENDIX C) CC	OMPLETED
· ·			
	EVENT C	ONCLUDED	



# 5.0 PAST SPILL EXPERIENCE

In order to prepare a more complete and accurate plan, significant spills or releases, corrective action taken, and plans for preventing a recurrence have been taken into consideration.

In preparing this plan, no spills having occurred within the past five years were identified.

Any future spills will be documented using the Spill Form in Appendix C.



# 6.0 POTENTIAL SPILL PREDICTION AND CONTROLS

### 6.1 Oil Capacity and Storage

After a review of the Town of Hamden VOED Building campus, it was determined that all petroleum products are stored and managed at the facility within bulk storage and oil filled operational equipment. Provided in Tables 1 and 2, is a summary of the oil capacities and containment and control practices identified at the Town of Hamden VOED Building. At any one time, a total of approximately 3,994 gallons of fuel/oil is stored at the facility. Tables 1 and 2 describe the potential type of failure(s), the estimated amount of material which may be released, the probably flow direction if a spill should occur, and secondary containment measures in each area of concern.

# *Oil Filled Operational Equipment*

Oil filled operational equipment includes any oil storage container in which the oil is present solely to support the function of the apparatus or the device. While oil-filled equipment is not subject to the bulk storage container requirements, it must still meet the requirements for general secondary containment. General secondary containment may include:

- i. Dikes, berms, or retaining walls sufficiently impervious to contain oil;
- ii. Curbing
- iii. Culverting, gutters, or other drainage systems;
- iv. Weirs, booms, or other barriers;
- v. Spill diversion ponds;
- vi. Retention ponds; or
- vii. Sorbent materials.

Table 1 is a description of measures for the avoidance and/or containment of the release of materials from the facility associated with oil filled operational equipment. All oil reservoirs listed in Table 1 are compatible with the oil stored within.

TABLE 1 – OIL FILLED OPERATION EQUIPMENT OIL STORAGE POTENTIAL SPILL PREDICTION AND CONTROL SUMMARY Town of Hamden VOED Building, Hamden, Connecticut							
Area/Source	Total Volume (gal.)/ Source	Potential Type of Failure	Potential Spill Volume (gal.)	Flow Direction & Distance to Closest Stormwater Drain	Secondary Containment		
TRANSFORMER TH	RANSCLOSURE	(total 93 gallons)					
North side of building-3 overhead type transformers	(3) x 31 gal 93 gal total	Electrical Transformer Failure	93	Spill would flow into surrounding grass, nearest CB approx. 10ft away	A		
MISCELLAENOUS OIL FILLED OPERATIONAL EQUIPMENT (total 452 gallons)							
Former Hydraulic Lift Reservoirs	(2) 226- gallon (approx.)	Tank failure	226 gallons (approx.)	Inside building-spill would flow to containment trench to O/W Separator	A, B or containment trench		



	TABLE 1 – OIL FILLED OPERATION EQUIPMENT OIL STORAGE POTENTIAL SPILL PREDICTION AND CONTROL SUMMARY Town of Hamden VOED Building, Hamden, Connecticut							
Area/Source	Total Volume (gal.)/ Source	Potential Type of Failure	Potential Spill Volume (gal.)	Flow Direction & Distance to Closest Stormwater Drain	Secondary Containment			
Oil/Water Separators*	Oil/Water Separators*NASpill during pump out of oilTo be verifiedClosest storm drain is 60ft to the east, however drainageNA							
A         To be contain           B         Spill containe           C <sup>1</sup> Sized Second           C <sup>2</sup> Sized Second           C <sup>3</sup> Sized Second           D         Electronic Mode	Secondary Containment Legend       is to the west         A       To be contained by spill kit absorbent materials.         B       Spill contained by impervious nature of building's floor and walls         C <sup>1</sup> Sized Secondary containment via double-walled construction         C <sup>2</sup> Sized Secondary containment via constructed berm         C <sup>3</sup> Sized Secondary containment via spill pallet, containment trenches         D       Electronic Monitoring System							

\*Oil/Water separator volume not included in total oil storage

### <u>Bulk Fuel Storage</u>

Bulk fuel storage refers to any container ( $\geq$ 55 gallons capacity) used to store oil other than oil filled operational equipment. These containers are used for purposes including, but not limited to, the storage of oil prior to use, while being used, or prior to further distribution in commerce. These containers are subject to the more laborious bulk storage container requirements of 40 CFR 112.8 and 40 CFR 112.12 which include but are not limited to sized secondary containment, integrity testing, facility and dike drainage, and discharge avoidance.

Table 2 is a description of measures for the avoidance and/or containment of the release of materials from the facility associated with bulk fuel storage. All containers and drums listed in Table 2 are compatible with the oil stored within. Pipe supports (as applicable) are all designed to minimize abrasion and corrosion and to allow for expansion and contraction. Potential for abrasion and/or corrosion will be inspected monthly to ensure pipe integrity is maintained (see Section 7.0).



	TABLE 2 – BULK FUEL STORAGE POTENTIAL SPILL PREDICTION AND CONTROL SUMMARY Town of Hamden VOED Building, Hamden, Connecticut							
Area/Source	Total Volume (gal.)/ Source	Potential Type of Failure	Potential Spill Volume (gal.)	Flow Direction & Distance to Closest Storm Drain	Overflow Protection/ Discharge Avoidance	Secondary Containment Type and Capacity	Dike Draining Protocols	
ABOVE-GROUND	STORAGE TANK	S (total 2,150 gal	lons)		L	L		
Waste Oil	500	Tank failure	500	Spill would flow to the SE towards CB located 49'	Direct vision gauge.	A, C <sup>1</sup>	Secondary	
ConVault AST – outside SE side of building		Spill during transfer	50	away. Closest CB is 26' to the north	A large rectangular funnel/pan is used for adding oil to the tank. VOED personnel present	Doublewalled Concrete	containment area is protected from accumulating rainwater. See Section 6.3.2 as	
		Spill during small container emptying	55		during transfer to Vac Truck to ensure no spills	A	necessary	
1540 Diesel Oil AST - Fire	275	Tank failure	275	Tank located indoors	Tank equipped with	A, C <sup>2</sup> Tank located inside	Tank is located indoors	
AST - Fire Department Area		Spill during transfer	27.5		direct vision gauge and nozzle on delivery trucks have overfill protection	secondary containment berm >110%	indoors	
		Spill during small container filling	27.5		Ensure filling occurs within bermed area			
(2) Hydraulic Oil ASTs – Oil	(2) x 275	Tank Failure	275 each (550 total)	Tanks located indoors, however near overhead	Tanks equipped with overfill	A, C <sup>1</sup>	Tank is located indoors	
Storage Room		Spill during transfer	27.5 each (55 total)	door, spill could flow to the downgradient CB, 21' away, if door was open	whistles and direct vision gauge.			



	TABLE 2 – BULK FUEL STORAGE POTENTIAL SPILL PREDICTION AND CONTROL SUMMARY Town of Hamden VOED Building, Hamden, Connecticut						
Area/Source	Total Volume (gal.)/ Source	Potential Type of Failure	Potential Spill Volume (gal.)	Flow Direction & Distance to Closest Storm Drain	Overflow Protection/ Discharge Avoidance	Secondary Containment Type and Capacity	Dike Draining Protocols
		Pipe failure from pump dispenser system	275 each (550 total)	Spill would enter containment trench (connected to O/W separator) or be contained within the building		Spill would enter containment trench or be contained within the building	
5W-20 Motor Oil	275	Tank Failure	275	Tank located indoors, however near overhead	Tank equipped with overfill whistles and	A, C <sup>1</sup>	Tank is located indoors
AST – Oil Storage Room		Spill during transfer	25.5	door, spill could flow to the downgradient CB, 21' away, if door was open	direct vision gauge		Indoors
		Pipe failure from pump dispenser system	275	Spill would enter containment trench (connected to O/W separator) or be contained within the building		Spill would enter containment trench or be contained within the building	
1540 Motor Oil	275	Tank Failure	275	Tank located indoors,	Tank equipped with	A, C <sup>1</sup>	Tank is located
AST – Oil Storage Room		Spill during transfer	25.5	however near overhead door, spill could flow to the downgradient CB, 21' away, if door was open	overfill whistles and direct vision gauge		indoors



	TABLE 2 – BULK FUEL STORAGE POTENTIAL SPILL PREDICTION AND CONTROL SUMMARY Town of Hamden VOED Building, Hamden, Connecticut						
Area/Source	Total Volume (gal.)/ Source	Potential Type of Failure	Potential Spill Volume (gal.)			Secondary Containment Type and Capacity	Dike Draining Protocols
		Pipe failure from pump dispenser system	275	Spill would enter containment trench (connected to O/W separator) or be contained within the building		Spill would enter containment trench or be contained within the building	
Automatic	275	Tank Failure	275	Tank located indoors, however near overhead	Tank equipped with	A, C <sup>1</sup>	Tank is located indoors
Transmission Fluid AST – Oil Storage Room		Spill during transfer	25.5	door, spill could flow to the downgradient CB, 21' away, if door was open	overfill whistles and direct vision gauge		indoors
		Pipe failure from pump dispenser system	275	Spill would enter containment trench (connected to O/W separator) or be contained within the building		Spill would enter containment trench or be contained within the building	
MISCELLANEIOU	S DRUM, TOTES	AND CONTAINERS	6 (total 1299 gall	ons)			
(2) Automatic Transmission Oil Drums – Oil Storage Room	(2) x 55	Drum failure Spill during dispensing	55 each (110 total) 55 each (110 total)	Spill would be contained by containment pallet	Only active drums are open with a spigot attached. Oil is transferred to	A, C <sup>3</sup> Containment pallet	Drum(s) located indoors
			total)			1	



	TABLE 2 – BULK FUEL STORAGE POTENTIAL SPILL PREDICTION AND CONTROL SUMMARY Town of Hamden VOED Building, Hamden, Connecticut								
Area/Source	Total Volume (gal.)/ Source	Potential Type of Failure	Potential Spill Volume (gal.)			Secondary Containment Type and Capacity	Dike Draining Protocols		
		Spill during transfer	55 (110 total)	Nearest CB is 21' SE from room during unloading	smaller containers in this room over containment pallets.				
(5) Universal Tractor Fluid	(5) x 55	Drum failure	55 each (275 total)	Spill would be contained by containment pallet	Only active drums are open with a	A, C <sup>3</sup> Containment	Drum(s) located indoors		
Drums – Oil Storage Room		Spill during dispensing	55 each (275 total)	spigot attached. Oil is transferred to smaller containers	Oil is transferred to	pallet			
		Spill during transfer	55 (275 total)	Nearest CB is 21' SE from room during unloading.	in this room over containment pallets.				
(2) Waste Antifreeze	(2) x 55	Drum failure	55 each (110 total)	Spill would flow towards containment trench	Only active drums are open with a	A, B or containment	Drum(s) located indoors		
(potential for trace amounts of oil) Drums – Maintenance Area in Building		Spill during transfer/filling	55 (110 total)	(connected to O/W separator) or be contained within the building	large funnel attached.	trench			
(2) Waste Oil Filter Drums –	(2) x 55	Drum failure	<55 each (<110 total)	Spill would flow towards containment trench	Drums shall be covered prior to	A, B or containment	Drum(s) located indoors		
Maintenance Area in Building		Spill during transfer	<55 each (<110 total)	(connected to O/W separator) or be contained within the building	transfer to shipping area	trench			
(2) Hydraulic Fluid Drums –	(2) x 55	Drum failure	55 each (110 total)	Spill would flow towards containment trench	Drums shall remain closed and on	A, B or containment	Drum(s) located indoors		



	TABLE 2 – BULK FUEL STORAGE POTENTIAL SPILL PREDICTION AND CONTROL SUMMARY Town of Hamden VOED Building, Hamden, Connecticut							
Area/Source	Total Volume (gal.)/ Source	Potential Type of Failure	Potential Spill Volume (gal.)	Flow Direction & Distance to Closest Storm Drain	Overflow Protection/ Discharge Avoidance	Secondary Containment Type and Capacity	Dike Draining Protocols	
Maintenance Area in Building		Spill during transfer	55 each (110 total)	(connected to O/W separator) or be contained within the building	wood pallets until use	trench		
(2) Waste Oil Drums –	(2) x 55	Drum failure	55 each (110 total)	Spill would flow towards containment trench	Drums shall be covered prior to	A, B or containment	Drum(s) located indoors	
Maintenance & Fire Dept. Areas in Building		Spill during transfer/filling	55 each (110 total)	(connected to O/W separator) or be contained within the building	transfer to shipping area	trench		



	TABLE 2 – BULK FUEL STORAGE POTENTIAL SPILL PREDICTION AND CONTROL SUMMARY Town of Hamden VOED Building, Hamden, Connecticut								
Area/Source	Total Volume (gal.)/ Source	Potential Type of Failure	Potential Spill Volume (gal.)	Flow Direction & Distance to Closest Storm Drain	Overflow Protection/ Discharge Avoidance	Secondary Containment Type and Capacity	Dike Draining Protocols		
Compressor Oil	55	Drum Failure	55	Spill would be contained within walls of Compressor	Drum Reportedly	A,B	Drum located indoors		
Drum - Compressor Room		Spill during Transfer	55	Room	not used- recommend removing from Site		indoors		
Unibin-Used/Oily	309 gallon	Container Failure	309		Employees can visually see product	A, Container is	Container is		
Speedy Dry	(41.25 cu ft)	Spill During Transfer	309		level	liquid tight	covered		
		Drum Failure	55	On spill containment pallet	Oil dispensing to				
Transmission Oil	55	Spill during dispensing	55		occur from drum on containment pallet	А, В, С <sup>3</sup>	Drum located		
Drum – Fire Dept. Area	55	Spill during Transfer	55	Spill would flow towards containment trench (connected to O/W separator) or be contained within the building		, , , , C	indoors		
		Drum Failure	55	On spill containment pallet	Oil dispensing to				
5W-20 Motor Oil	55	Spill during dispensing	55		occur from drum on containment pallet	A, B, C <sup>3</sup>	Drum located		
Drum – Fire Dept. Area		Spill during Transfer	55	Spill would flow towards containment trench (connected to O/W separator) or be contained within the building			indoors		



	TABLE 2 – BULK FUEL STORAGE POTENTIAL SPILL PREDICTION AND CONTROL SUMMARY Town of Hamden VOED Building, Hamden, Connecticut							
Area/Source	Area/SourceTotal Volume (gal.)/ SourcePotential Type of FailurePotential Spill Volume (gal.)Flow Direction & Distance to Closest 							
ATo be containedBSpill containedC1Sized SeconedC2Sized SeconedC3Sized SeconedDElectronic NedEInadequate	Source     Avoidance     Capacity       Secondary Containment Legend     A     To be contained by spill kit absorbent materials.       B     Spill contained by impervious nature of building's floor and walls       C <sup>1</sup> Sized Secondary containment via double-walled construction       C <sup>2</sup> Sized Secondary containment via constructed berm       C <sup>3</sup> Sized Secondary containment via spill pallet       D     Electronic Monitoring System							
F Either remo	ve these Drums fr	om the facility or pla	ce them on Spill Con	tainment Pallets to prevent spi	illage in accordance with	n the Implementation	on Schedule.	



### 6.2 Containment and Control Measures

The petroleum storage locations identified within Tables 1 and 2 are further described below in regards to its methods of containment

# 1. Electrical Transformer Reservoirs

Three overhead type transformers are located inside the facility owned steel cabinet called a transclosure. Each transformer has 31 gallons of dielectric fluid for a total of 93 gallons. The transclosure is situated on a concrete pad. Being an oil filled operational equipment as outlined in Section 6.1, preventive methods implemented for transformers will include having sorbent material readily available as outlined in Section 7.0 and conducting periodic inspections as outlined in Section 7.1.

### 2. Miscellaneous Oil-Filled Operational Equipment Reservoirs

Two old hydraulic lift reservoirs are located inside the facility with oil capacities greater than 55 gallons. Being oil filled operational equipment as outlined in Section 6.1, preventive methods implemented for transformers will include having sorbent material readily available as outlined in Section 7.0 and conducting periodic inspections as outlined in Section 7.1. The building walls and containment trench in the floor function as containment in the event of a tank rupture.

3. Above-Ground Storage Tanks

- The 500-gallon Waste Oil AST consists of a double-walled construction and is situation on a concrete pad. The tank is equipped with an overfill protection valve and a product level gauge. The fill ports should be locked unless in active use and keys should only be signed out to authorized personnel. If a spill or release occurs during transfer, the spill will be contained by the fact that storm drains in the vicinity will be protected during transfers as outlined in Section 6.3.1., and the adjacent spill kit. Town of Hamden VOED Building personnel oversee all oil transfers.
- One 275-gallon single walled 1540 diesel oil AST is located in the garage area and is used by the Fire Department. The tank is situated within a secondary containment concrete block berm and is equipped with a direct vision gauge. In, addition the delivery truck is equipped with an overfill protection nozzle. The approximate dimensions of the bermed area were 7.25' x 4.5' x 2', providing more than 110% secondary containment capacity.
- Five 275-gallon double walled ASTs are located in the Oil Storage Room used by the Town of Hamden VOED Building personnel. The tanks are equipped with direct vision gauges, spill/overfill protection whistles and locked fill ports. The Town of Hamden VOED Building employees oversee all oil transfers and a spill kit is located in the vicinity of the tanks. In addition, these ASTs are connected to hoses/piping that distribute the motor and hydraulic oils. In the event of a failure of one of these hoses, the spill would be contained by the walls of the building or the containment trench in the floor.



### *4. Miscellaneous Drums, Totes and Containers*

The majority of the various bulk storage oil containing drums located throughout the facility are stored on plastic spill containment pallets and all are stored inside the building. A release from any of these drums would be contained within the secondary containment and/or the walls of the building or the containment trench in the floor. The containment trench is connected to the two oil-water separators, and the sanitary sewer. Dispensing from drums occurs over secondary containment pallets. Spill kits and speedy dry are located throughout the facility. Funnels on used oil drums shall be fitted with covers.

# 6.3 General Practices

### 6.3.1 Oil Transfer Procedures

### a. AST Loading/Unloading Areas

The loading of Waste Oil and the unloading of various oils in the ASTs located inside the facility occurs via tanker trucks. Approximately once a year the accumulated oil is pumped from the two oil/water separators by vacuum tanker trucks for off-site disposal. In accordance with 40 CFR Part 112.7 (c), procedures utilized by the facility to prevent or control an oil spill in transfer areas include:

### Before the Loading/Unloading Begins

- The vendor chocks the wheels of the delivery truck and visually checks all hoses for leaks and wet spots;
- Facility personnel ensure that all applicable drainage valves are locked in the closed position and check the tank for any signs of a leak;
- Facility personnel will ensure that internal and external valves on the receiving tank are open along with the pressure relief valves.
- Facility personnel will confirm the type of oil and the quantity of which will be transferred;
- Facility personnel will visually confirm the ability of the tank to accept the agreed upon quantity;
- Facility personnel will ensure spill control equipment is readily available, place pigs/socks/berms in appropriate locations to contain a small spill from the truck, and place a spill mat over nearby stormwater catch basins.

#### Loading/Unloading Process

- Facility personnel and the vendor will remain at the tank/transfer area for the entire transfer process;
- The vendor will shut off the delivery truck engine prior to making connections. Do not restart the engine during the loading/unloading process unless the truck engine is used to operate a pump;
- The vendor will ensure all valves are in proper positions and begin the transfer;
- The vendor will monitor the flow meters to determine the rate of flow;



- Facility personnel will monitor the tank volume to prevent overflow; and
- Facility personnel and vendor will periodically inspect all systems hoses and connections.

### After the Loading/Unloading Process

- Facility personnel will visually check the volume delivered;
- The vendor will ensure all valves are in proper positions and disconnect the hose;
- Facility personnel and vendor will check the transfer area for any signs of a spill;
- Facility personnel will return the spill control equipment to its storage location; and
- The vendor will prepare to depart.

A delivery and pump/out log should be used to ensure supervision of the entire unloading operation and minimize any releases. The following information should be recorded on the logs:

- Date and time of delivery (start, end);
- Quantity in tank;
- Quantity delivered;
- Inspection comments; and
- Employee present.

Mobile on-site vehicle fueling "*wet-hosing*" operations are not specifically exempt from the secondary containment requirements of the 40 CFR Part 112.7(c), and therefore are subject to the facility oil transfer procedures discussed above. Mobile on-site vehicle fueling does not occur at this facility.

### b. Oil Drum Transfer Areas

In accordance with 40 CFR Part 112.7 (c), procedures utilized by the facility to prevent or control an oil spill during drum transfer operation of various virgin oils, waste antifreeze or waste oil filters include:

- The vendor chocks the wheels of the waste hauler truck;
- Spill mats are placed over nearby catchbasins;
- Facility personnel and the vendor ensure that the drums are in good condition and there are no signs of drips, leaks or spills prior to loading into the truck;
- Facility personnel will confirm the quantity of drums which will be transferred; and
- Facility personnel will ensure spill control equipment is readily available.
- Facility personnel and the vendor will be present for the entire transfer process;
- Facility personnel and the vendor will ensure no damage has been done to the drums and there are no signs of leaks or spills;
- The vendor will prepare to depart.
- c. Waste Oil Transfer to the AST

In accordance with 40 CFR Part 112.7 (c), procedures utilized by the facility to prevent or control an oil spill during waste oil transfer from drums to waste oil tank include:



- Spill mats are placed over nearby catchbasins;
- Facility personnel and the vendor ensure that the drums are in good condition and there are no signs of drips, leaks or spills prior to moving drums to the door near the AST;
- Drums will stay inside the facility during transfer;
- Facility personnel will ensure spill control equipment is readily available;
- Facility personnel will check the site gauge to ensure there is adequate capacity for the waste oil;
- Facility personnel will unlock the AST fill port and ensure not clogged;
- Facility personnel will inspect the explosion proof pump and associated hoses to ensure in good working condition with no potential for leaks;
- The pump and hose will be connected and facility personnel will ensure secured tightly;
- During transfer, the site gauge will be monitored
- Facility personnel will disconnect the hose in a manner as to not create spills to the ground;
- The fill port will be closed and locked when transfer is complete;
- Facility personnel will be present for the entire transfer process; and
- Facility personnel will ensure there are no signs of leaks or spills.

# 6.3.2 Dike Drainage

The facility does not maintain any diked ASTs which are subject to storm water collection and drainage, however if the facility maintains any diked areas requiring drainage in the future, the outlined procedure below will be used.

- Trained Town of Hamden VOED Building personnel visually inspect the contained rainwater for evidence of an oily sheen or film, color, sludge or deposits.
- If there is any evidence of an oily sheen or film, discoloration, or oily sludge or deposits, Town of Hamden VOED Building personnel will <u>NOT</u> drain the accumulated liquid to the ground but will contact an outside contractor to vacuum the contained fuel/oil/water mixture and dispose in accordance with the resulting waste stream determination.
- If the containment area is drained to the ground, Town of Hamden VOED Building personnel will monitor the entire draining event (i.e. not leave that dike or containment area while the dike is being drained). Additionally, all drain lines will be securely closed and locked after the event.

# 6.3.3 Recovered Clean-up Material Disposal

Town of Hamden VOED Building personnel will typically use absorbent mats, absorbent socks, and granular loose absorbent material to contain any minor spills or releases.

Waste Absorbent material will be cleaned-up and disposed of using the following procedure:



- 1. Contain the clean-up material into a dedicated storage container as soon as a spill is absorbed, but no later than the end of the day in which the spill occurred.
- 2. The dedicated drum will be labeled with the words "Oil Absorbent Material" or other words as appropriate.
- 3. Conduct a waste stream determination to determine if material is hazardous or nonhazardous waste, document results with facility waste profiles.
- 4. The used clean-up material will then be disposed of properly based on the outcome of the waste stream determination and profile.
- 5. Shipping records for used materials that is transported off-site will be maintained in Town of Hamden VOED Building's waste files.

# 6.3.4 Vehicle Traffic

Loading/unloading of oil or drums would occur at the rear of the facility, or on the north side of the building, both areas away from vehicle traffic. The 500-gallon ConVault AST is encased in concrete, protected by bollards and located behind the facility, outside the path of vehicle traffic. The transformer is located on the north end of the facility up on a curbed, grassed area, outside the path of vehicle traffic.

### 6.3.5 Drum and Container Handling

The following precautions will be taken during drum and container handling:

- Keep the container closed at all times, except when adding or removing oil; and
- Use appropriate transport devices such as a dolly, a specifically designed handcart, forklift with appropriate attachments, etc.
- Mobile drums that are used throughout the facility for used oil should be placed in a plastic secondary containment overpack bucket/drum.



# 7.0 INSPECTIONS

### 7.1 Visual Inspections

On a monthly basis, Town of Hamden VOED Building personnel will inspect its oil storage areas. A written record of the inspections will be kept. An SPCC Inspection Log (Appendix D), will be completed and signed by the inspector as part of each monthly inspection.

At a minimum, Town of Hamden VOED Building personnel will inspect all tanks for deterioration (e.g. corrosion), leaks, tank supports and foundations, and condition of secondary containment, where applicable. In addition to the tank, the associated above-ground piping will be inspected for damage, including the condition of the piping system including all valves, flanges, etc. Containers and drums will be checked for proper labeling and signs of deterioration or leakage. Any sign of rust, corrosion, or leakage constitutes an unsatisfactory condition requiring appropriate preventive maintenance. Any container or drum label deficiencies will be corrected immediately. The containment areas will also be inspected for cracks or other forms of deterioration.

Town of Hamden VOED Building personnel will also verify the adequate supply of spill containment and abatement materials. See Section 8.0 for a detailed list of spill abatement equipment and materials that will be maintained on-site.

All inspection logs will be made a part of the SPCC and maintained on-site for at least three (3) years. Any problems will be reported to the Emergency Coordinator and corrected as soon as possible.

### 7.2 Integrity Testing

Each container with a capacity of 55 gallons or greater (e.g. 55-gallon drum, tank, etc.), which is not an oil-filled electrical, operating, or manufacturing equipment, is considered to be a bulk storage container and is therefore regulated under 40 CFR 112.8(c)(6). Each above-ground bulk storage container will be tested for integrity on a regular schedule and when material repairs are made.

The Steel Tank Institute (STI) provides industry standards regarding integrity testing guidance for shop-built tanks and portable containers. The guidance categorizes ASTs from 1-3 based on a spill or release risk level, with 1 being the lowest risk and 3 being the highest risk for a spill or release. For instance, a double-walled, shop-built tank in contact with the ground that maintains a Continuous Release Detection Method (CRDM) and is less than 5,000 gallons is considered a Category 1 tank. Category 1 tanks are recommended by STI to have periodic inspections conducted by the owner or designated employee.

The integrity testing requirement does <u>not</u> apply to oil-filled electrical operating and manufacturing equipment, 55-gallon drums which are not reused on-site, or USTs subject to 40 CFR 280. Re-use of portable containers is subject to STI SP001 standards. Under STI SP001, portable containers must either discontinue to be used for oil storage or be DOT tested and recertified per the following schedule: plastic portable container – every 7 years; steel portable container – every 12 years; stainless steel portable container – every 17 years. For 55-gallon drums and 275-gallon



plastic totes, it is more practical to replace the drums/totes than to conduct any type of integrity testing beyond visual inspection. Any sign of compromised integrity visually observed should be remedied by replacing the questionable drum. While awaiting replacement, the drum/tote should be placed within a secondary containment over-size drums or bermed area.

The regulations allow deviations from this requirement where "you provide equivalent environmental protection by some means of spill prevention, control, or countermeasure" 40 CFR Part 112.7(a)(2). The life expectancy of a typical shop built bulk storage container is approximately twenty years, after which it is past its nominal useful life. Although a rigorous testing program could justify leaving tanks past their life expectancy in-place, the cost of such testing is likely to be more than the expense of replacing the tank.

For the steel tank, several standards exist for integrity testing, including the following:

- API Standard 653 "Tank Inspection, Repair, Alteration, and Reconstruction."
- API Recommended Practice 575 "Inspection of Atmospheric and Low Pressure Tanks".
- STI Standard SP001-00 "Standard for Inspection of In-Service Shop Fabricated Aboveground Tanks for Storage of Combustible and Flammable Liquids."

Only certified inspectors should be used for the integrity testing.

ConVault® tanks are unique among above-ground tanks in that they are double walled, equipped with a polyethylene liner within the interstitial space and have a 4-6'' concrete encasement that forms the secondary containment double wall. In addition, the interstitial space is equipped with a leak detection system that would indicate any failure of the primary inner steel tank. The concrete encasement is resistant to ballistic and vehicle impact as well as fire. All of these features provide environmental protection equivalent to the integrity testing techniques listed in 40 CFR 112.8(c)(6).

Based on these criteria, Town of Hamden VOED Building will perform integrity testing on the following bulk storage tanks as outlined below:

TABLE 3 – INTEGRITY TESTING STEEL TANK INSTITUTE AST CATEGORIES								
Location	Description	Installation Date	AST Category <sup>1</sup>	Integrity Testing Implementation				
Outside E of building	500-gallon Used Oil ConVault AST	1997	1	Visual monthly and annual inspection by facility personnel (as per checklist in Appendix D)*				
Inside Garage- Fire Dept. Area	275-gallon 1540 diesel oil AST	2005	1	Visual monthly and annual inspection by facility personnel (as per checklist in Appendix D)				

<sup>1 2011,</sup> Steel Tank Institute, Standard for the Inspection of Above-ground Storage Tanks, 5th Ed., Steel Tank Institute.



	TABLE 3 – INTEGRITY TESTING STEEL TANK INSTITUTE AST CATEGORIES							
	Location	Description	Installation Date	AST Category <sup>1</sup>	Integrity Testing Implementation			
	Oil Storage Room(5) 275-gallon various Petroluem Oil ASTs20061Visual monthly and annual inspection by facility personnel (as per checklist in Appendix D)							
	Inside Garage Area	Re-used 55 gallon drums	Varies	NA	Visual monthly inspections (as per checklist in Appendix D). Dispose of drums prior to end of useful life @10 years			
<u>ST</u>	TI Category Explanation <sup>1</sup>							
1	Secondary Containment and Continuous Release Detection Method (CRDM)							
2	Secondary Containment							
3	No secondar	y containment or Release	e Prevention Barrie	er (RPB), or one	or the other			

\*In addition, ConVault requires some items be checked on a weekly basis as part of the ConVault warranty. See Appendix I for ConVault specific maintenance checklists.

The routine integrity testing procedure will consists of monthly visual inspection by designated facility personnel. Visual inspections consist of evaluating each of the above listed tanks and drum storage areas in accordance with the Inspection Logs, provided in **Appendix D**. Observations are to be recorded on the Inspection Logs during the time of visual inspection, and a record of the logs made a part of this SPCC Plan.

Non-destructive integrity evaluation is not specifically required on the 55-gallon storage drums that will not be reused. Most storage drums are elevated on plastic spill pallets, and have all sides visible. Any drum leaks would be readily detected by facility personnel before they can cause a discharge to navigable waters or adjoining shorelines. However, per this SPCC Plan the facility is required to conduct monthly visual inspections of the various drums storage areas as outlined in the Monthly SPCC Plan Inspection Logs.



# 8.0 SPILL ABATEMENT EQUIPMENT AND MATERIALS

Town of Hamden VOED Building personnel will maintain spill control equipment for all of the oil storage areas on-site. The following materials, or their equivalents, will be provided:

- Absorbent material (i.e. Speedy-dry, pads and booms)
- Shovel/broom
- "Attack Pack" Spill Kit hanging from ConVault AST
- Temporary disposal bag or drum

The Public Works VOED Building personnel should procure catch basin mats in accordance with the implementation schedule at the end of this report. The catch basin mats are to be used when there is a potential for a spill in the vicinity of a catch basin, (i.e. during loading/unloading).

Spill control equipment will be stored in locations which are accessible to all employees and located near oil storage locations. Town of Hamden VOED Building personnel will inspect the spill control equipment periodically to ensure that they are maintained in working order and spill abatement materials are replenished as needed.

The Town of Hamden VOED Building will maintain spill control equipment in the following areas on campus:

- On ConVault AST
- In Oil Storage Room
- In Compressor Room
- Near Waste Antifreeze and Used Oil Filter Drums
- Inside door on east side of the facility

Commercial clean-up contractors who could be contacted by the Town of Hamden VOED Building if their assistance is needed are as follows:

Firm	Phone Number
Connecticut Tank Removal, Inc	(203) 384-6020
United Industrial Services	(203) 235-3753



### 9.0 <u>SECURITY</u>

Town of Hamden VOED Building will maintain the following security measures in place at the facility:

- 1. The Town of Hamden VOED Building is locked when it is not in operation. Locking the building prevents access to the oil storage containers located in the maintenance garage.
- 2. The master flow and drain valves and any other valves that will permit direct outward flow of the tank's content to the surface should be securely locked in the closed position when in non-operating or non-standby status.
- 3. Motion sensor lighting is mounted on the exterior walls of the building. The lighting at the facility is adequate to assist in the observation or identification of any possible security breaches or spills. The lighting at the facility is also adequate to assist in the prevention of discharges due to acts of vandalism.



### 10.0 TRAINING

EPA Regulation 40 CFR Part 112.7(f) requires that annual training be provided for all "oil handling" personnel to assure an understanding of the SPCC Plan. Personnel at the Town of Hamden VOED Building whose duties involve the daily management, use, inspection or maintenance of oil storage, transfer, process or treatment equipment will be trained in the contents of this SPCC Plan. This training will highlight those portions of the SPCC as they relate to facility operations, including, but not limited to, known discharges or failures, malfunctioning components, and recently developed precautionary measures. The training will include the following:

- Operation and Maintenance of equipment to prevent the discharge of oil;
- Discharge procedure protocols;
- Applicable pollution control laws, rules and regulations;
- General facility operations;
- Contents of the facility SPCC plan; and
- Review of any spills or releases in the last year.

All current and new hires of "oil handling" personnel shall be trained by the Town of Hamden VOED Building prior to beginning work. This training includes a detailed and complete review of the facility's SPCC Plan and its standard operating procedures. Annual refreshers of this training will be given to all facility employees. Sign-in sheets (example in Appendix F) for each training session may be maintained in Appendix H of this SPCC.

The Emergency Coordinator, also the Designated Person Responsible for spill prevention at the facility (page ii), will approve the SPCC and certify that he/she is thoroughly familiar with the Plan. As such, the Emergency Coordinator is qualified to conduct training of oil handling personnel or may opt to designate to another qualified individual thoroughly familiar with this plan to conduct such training.



#### 11.0 FACILITY RESPONSE PLAN

The Town of Hamden VOED Building is not required to prepare and submit a Facility Response Plan defined under 40 CFR Part 112.20 for the following reasons:

- 1. This facility does not transfer oil over water to or from vessels with a total oil facility storage capacity greater than or equal to 42,000 gallons.
- 2. The facility does not have a total oil storage capacity greater than or equal to 1,000,000 gallons.

Since the Town of Hamden VOED Building does not meet the substantial harm criteria, the Town of Hamden VOED Building must only complete a Certification of Harm Determination Form and maintain the form as part of their SPCC Plan. The Certification form, to be completed, is included in Appendix E.



#### 12.0 SPCC PLAN AMENDMENT

#### 12.1 Facility Modifications

This SPCC Plan, under 40 CFR 112.5, will be amended whenever there is a change in facility design, construction, operation or maintenance which material affects the facility's potential for a discharge of oil to navigable waters of the United States or adjoining shorelines. These plan amendments will be prepared within six (6) months and fully implemented as soon as possible, but not later than six (6) months following the plan's amendment. Emergency response issues will be reviewed when:

- 1. The plain fails during an emergency;
- 2. It becomes evident that emergency contacts are not equipped to handle situations; or
- 3. There are personnel changes (i.e. emergency coordinator or alternate).

#### 12.2 US EPA Requirements

The Environmental Protection Agency Regional Administrator may require amendments to the Plan whenever the facility has: 1) discharged more than 1,000 U.S. gallons into or upon the navigable waters in the U.S.; 2) discharged oil in quantities larger than 42 gallons, as defined in 40 CFR Part 112.1(b), into or upon the navigable waters of the U.S. in two spill events, occurring within any twelve month period.

#### 12.3 5-Year Revisions

Regardless of facility changes, the SPCC Plan will also undergo a complete review and evaluation at least once every five (5) years. As a result of this review, the plan will be updated within six (6) months to include more effective prevention and control technology, if such technology is identified as having the ability to significantly reduce the likelihood of spills, and has been field proven at the time of the review. All technical amendments to this plan shall be certified by a Professional Engineer in accordance with 40 CFR 112.3(d). Non-technical amendments include changes to phone numbers or names. These amendments will be made as the change occurs, initialed, and dated by Town of Hamden VOED Building personnel.

All 5-year SPCC plan reviews will be documented at their completion in the SPCC Plan Review Log on page iii at the beginning of this plan. The person responsible for the 5-year review will attest to the certification statement with their signature, include the date of the review and indicate whether a revision to the plan is necessary, as well as date of the revision, if applicable.



#### 13.0 IMPLEMENTATION SCHEDULE

The Town of Hamden VOED Building will fully implement this SPCC Plan and be compliant with the SPCC regulations by following the implementation schedule presented below. Town of Hamden VOED Building will complete the far right column at the time that each item is implemented. Failure to implement these actions may negate the PE signature associated with this SPCC Plan.

Action Item Number	Action Item	Corresponding Section in SPCC Plan	Proposed Implementation Date	Actual Implementation Date and Signature
1	Post the spill response flow chart in the following offices and associated spill kits: ( <i>names of emergency coordinators or alternates</i> )	4.0	September 2018	
2	Ensure appropriate employees are familiar with and following oil transfer procedures, including covering storm drains during transfers to the ASTs	6.3.1	September 2018	
3	Ensure that all oil-filled drums are stored on secondary containment pallets. Mobil waste oil drums should be placed in large plastic overpack drums.	6.2	September 2018	
4	Conduct monthly inspections	7.1 and Appendix D	On-going	
5	Initiate integrity testing schedule	7.2 and Appendix D	On-going	
6	Maintain spill response material on site in appropriate locations. Spill kit hanging on Waste Oil AST needs to be replaced	8.0	September 2018	
7	Conduct training of all oil handling personnel in the contents of this plan	10.0	Upon certification of SPCC and annually thereafter	
8	Amend the Plan within 6 months within changes to facility design, construction, operation, or maintenance that affect the potential for oil discharge to a navigable waterway.	12.1	AS needed	
9	Perform a complete review and evaluation of the SPCC Plan at least once every five years.	12.3	March 2022	
10	Remove any accumulated oil and/or debris in spill pallet or other containment areas as well as fill containment sumps.	6	As needed	
11	Ensure the starter control on the 275-gallon diesel AST filling pump is locked in the "off" position and accessible only to authorized personnel when not in use. Ensure that filling of smaller containers occurs over the bermed containment area.	9.0	September 2018	
12	Purchase Catch basin mats	8.0	September 2018	

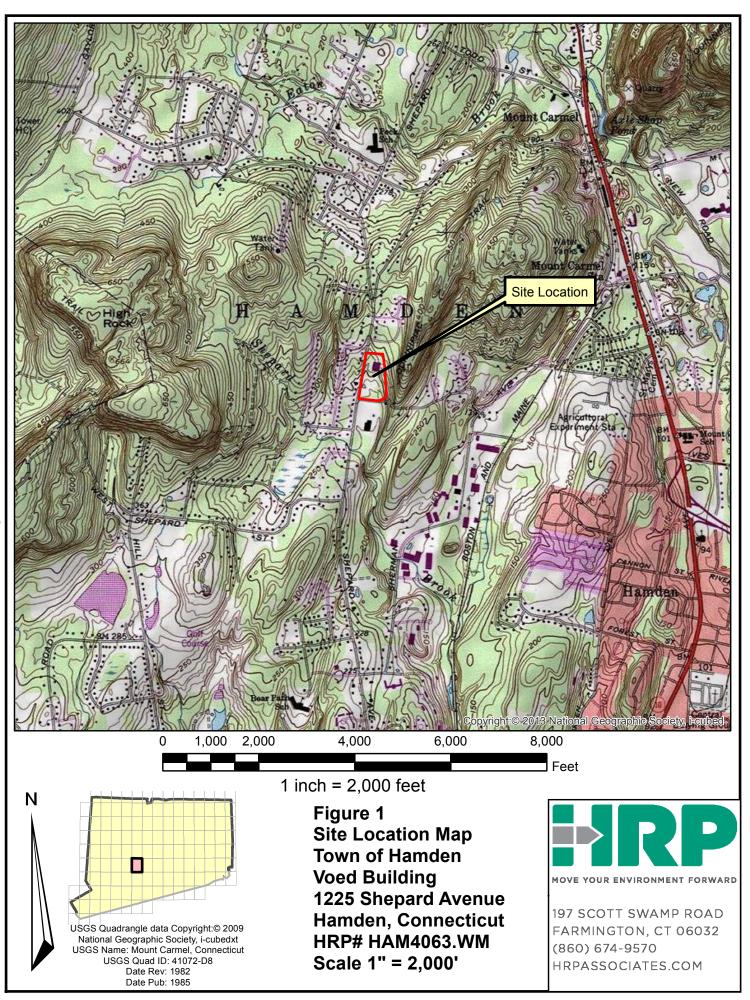


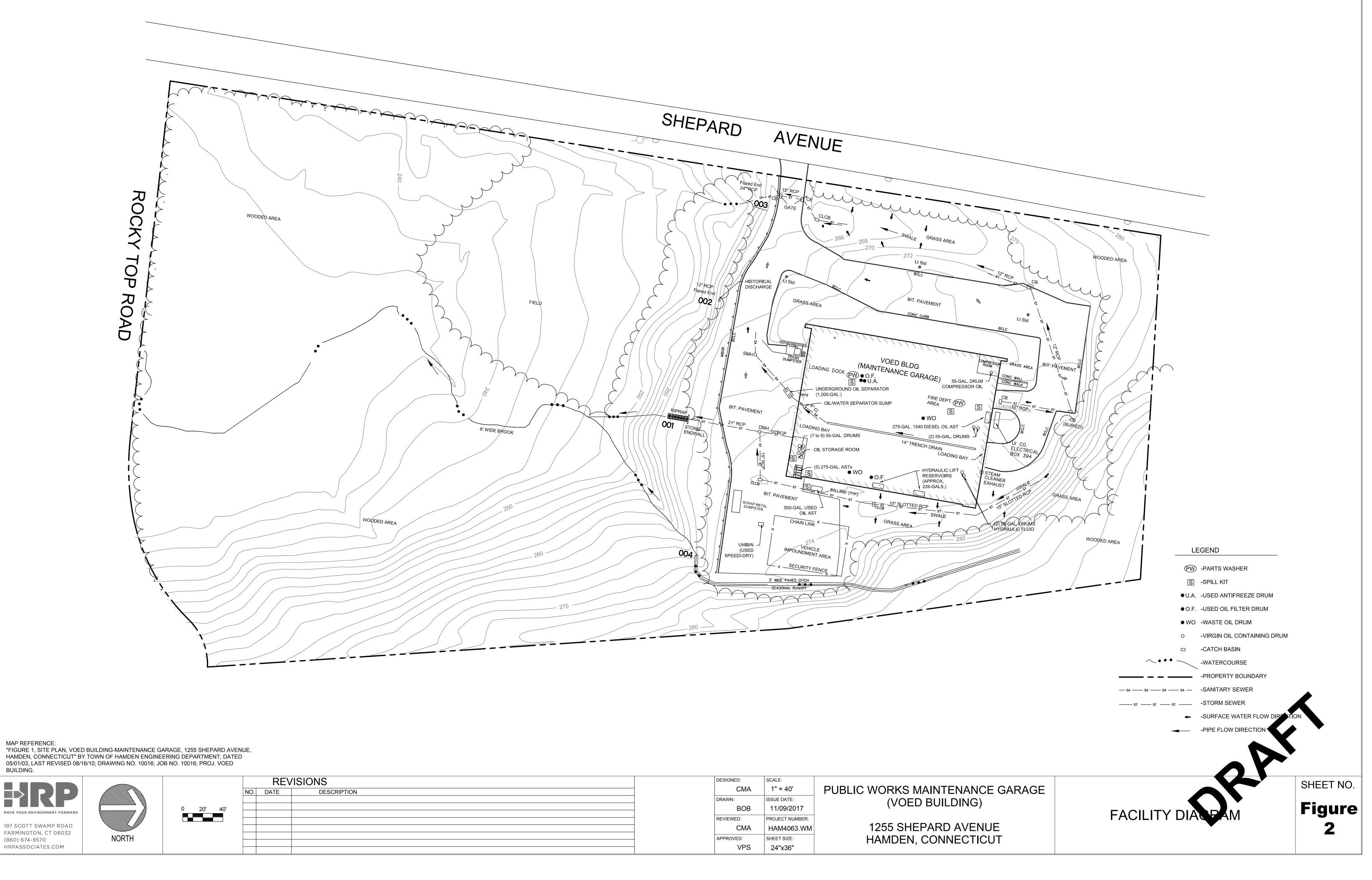
Action Item Number	Action Item	Corresponding Section in SPCC Plan	Proposed Implementation Date	Actual Implementation Date and Signature
13	Replace re-used drums every 12 years	7.2	As needed	
14	Vehicle exhaust covers in the floor need to be replaced.		September 2018	
15	Properly dispose of oil and remove old hydraulic lift reservoir boxes if no longer in use, or provide/verify secondary containment. If empty, label as indicated in implementation item #18		September 2018	
16	Verify oil/water separator construction and/or complete implementation measures for secondary containment listed in the report	2.1	September 2018	
17	Provide lids/covers to funnels on-top of used oil drums	6.2	September 2018	
18	Empty tanks must be labelled as "Permanently Closed" with a closure date. All piping shall be disconnected and fill & vent ports closed and locked. If the emergency generator on-site becomes active and the tank filled with oil, the generator and tank will need to be added to this plan.		September 2018	



# FIGURES









(860) 674-9570

D	
	NORTH

		REVISIONS		DESIGNED:	SCALE:	
	NO.	DATE DESCRIPTION		CMA	1" = 40'	PUBLIC WORKS MAINTE
				DRAWN:	ISSUE DATE:	(VOED BUIL
0 20' 40'				BOB	11/09/2017	
				REVIEWED:	PROJECT NUMBER:	
				CMA	HAM4063.WM	1255 SHEPARD
				APPROVED:	SHEET SIZE:	HAMDEN, CONN
				VPS	24"x36"	,

## APPENDIX A SPCC Regulations



## APPENDIX B SPCC Regulatory Cross Reference



	Town of Hamden VOED Building SPCC Plan Regulatory Cross Reference		
SPCC Rule Section	Description	Facility SPCC Plan	Visually Confirmed in Field
112.3(d)	Except as provided in § 112.6, a licensed Professional Engineer must review and certify a Plan for it to be effective to satisfy the requirements of this part.	i	NA
112.3(d)(1)	By means of this certification the Professional Engineer attests:	i	NA
112.3(d)(1)(i)	That he is familiar with the requirements of this part:	i	NA
112.3(d)(1)(ii)	That he or his agent has visited and examined the facility:	i	NA
112.3(d)(1)(iii)	That the Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part;	i	NA
112.3(d)(1)(iv)	That procedures for required inspections and testing have been established; and	i	NA
112.3(d)(1)(v)	That the Plan is adequate for the facility.	i	NA
112.3(d)(1)(vi)	That, if applicable, for a produced water container subject to § $112.9(c)(6)$ , any procedure to minimize the amount of free-phase oil is designed to reduce the accumulation of free-phase oil and the procedures and frequency for required inspections, maintenance and testing have been established and are described in the Plan.	NA	NA
112.4(a)	Notwithstanding compliance with § 112.3, whenever your facility has discharged more than 1,000 U.S. gallons of oil in a single discharge as described in § 112.1(b), or discharged more than 42 U.S. gallons of oil in each of two discharges as described in § 112.1(b), occurring within any twelve month period, submit the following information to the Regional Administrator within 60 days from the time the facility becomes subject of this section:	§3.4	NA
112.4(a)(1)	Name of the facility;	§3.4	NA
112.4(a)(2)	Your name;	§3.4	NA
112.4(a)(3)	Location of the facility;	§3.4	NA
112.4(a)(4)	Maximum storage or handling capacity of the facility and normal daily throughput;	§3.4	NA
112.4(a)(5)	Corrective action and countermeasures you have taken, including a description of equipment repairs and replacements;	§3.4	NA
112.4(a)(6)	An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;	§3.4	NA
112.4(a)(7)	The cause of such discharge as described in § 112.1(b), including a failure analysis of the system or subsystem in which the failure occurred;	§3.4	NA
112.4(a)(8)	An additional preventive measures you have taken or contemplated to minimize the possibility of recurrence; and	§3.4	NA
112.4(a)(9)	Such other information as the Regional Administrator may reasonably require pertinent to the Plan or discharge.	§3.4	NA
112.4(d)	Amendment of Spill Prevention Control and Countermeasure Plan (SPCC) by Regional Administrator.		
112.5(a)	SPCC amendments due to changes in facility design.	iii	NA
112.5(b)	Perform a review and evaluation of SPCC Plan at least once every five years. The owner/operator must document completion of the review and evaluation, and must sign a statement as to whether he will amend the SPCC Plan. The following will suffice: "I have completed review and evaluation of the SPCC Plan for (name of facility) on (date), and will (will not) amend the Plan as a result.	iii	NA
112.5(c)	Obtain Professional Engineers certification for any technical amendments in accordance with 11-2.3(d).	iii	NA
112.7(a)(1)	Include a discussion of your facility's conformance with the requirements listed in 40 CFR 112.7.		
112.7(a)(2)	Comply with all applicable requirements listed in this part. Except as provided in § 112.6, your Plan may deviate from the requirements in paragraphs (g), (h)(2) and (3), and (i) of this section and the requirements in subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§ 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.9(d)(3), 112.10(c), 112.12(c)(2), and 112.12(c)(11), where applicable to a specific facility, if you provide equivalent environmental protection by some other means of spill prevention, control, or countermeasure. Where your Plan does not conform to the applicable requirements in paragraphs (g), (h)(2) and (3), and (i) of this section, or the requirements of subparts B and C of this part, except the secondary containment requirements in paragraphs (g), (h)(2) and (3), and (i) of this section, or the requirements of subparts B and C of this part, except the secondary containment requirements in paragraph (c) and (h)(1) of this section, and §§ 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), and 112.12(c)(11), you must state the reasons for nonconformance in your Plan and describe in detail alternate methods and how you will achieve equivalent environmental protection. If the Regional Administrator determines that the measures described in your Plan do not provide equivalent environmental protection, he may require that you amend your Plan, following the procedures in § 112.4(d) and (e).	§6.3.1	V



	Town of Hamden VOED Building SPCC Plan Regulatory Cross Reference		
SPCC Rule Section	Description	Facility SPCC Plan	Visually Confirmed in Field
112.7(a)(3)	Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each fixed oil storage container and the storage area where mobile or portable containers are located. The facility diagram must identify the location of and mark as "exempt" underground tanks that are otherwise exempted from the requirements of this part under § 112.1(d)(4). The facility diagram must also include all transfer stations and connecting pipes, including intra-facility gathering lines that are otherwise exempted from the requirements of this part under § 112.1(d)(11). You must also address in your Plan:	Figures 1 and 2, Table 1	V
112.7(a)(3)(i)	The type of oil in each fixed container and its storage capacity. For mobile or portable containers, either provide the type of oil and storage capacity for each container or provide an estimate of the potential number of mobile or portable containers, the types of oil, and anticipated storage capacities	Table 1	$\checkmark$
112.7(a)(3)(ii)	(ii) Discharge prevention measures including procedures for routine handling of products (loading, unloading, and facility transfers, etc.);	§6	$\checkmark$
112.7(a)(3)(iii)	(iii) Discharge or drainage controls such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge.	§6	$\checkmark$
112.7(a)(3)(iv)	(iv) Countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor);	§3	$\checkmark$
112.7(a)(3)(v)	(v) Methods of disposal of recovered materials in accordance with applicable legal requirements; and	§6.3.3	$\checkmark$
112.7(a)(3)(vi)	(vi) Contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with whom you have an agreement for response, and all appropriate Federal, State, and local agencies who must be contacted in case of discharge as described in § 112.1(b).	§3 & 4	$\checkmark$
112.7(a)(4)	Unless you have submitted a response plan under 40 CFR 112.20, provide information and procedures in your SPCC Plan to enable a person reporting a discharge to relate information on the exact address or location and phone number of the facility	§3 & 4	$\checkmark$
112.7(a)(5)	Unless you have submitted a response plan under 40 CFR 112.20, organize portions of the SPCC Plan describing procedures you will use when a discharge occurs in a way that will make them readily usable in an emergency and include appropriate supporting materials as appendices.	§3 & 4	$\checkmark$
112.7(b)	Where experience indicates a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of a discharge), include in your Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure.	Table 1	V
112.7(c)	Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in § 112.1(b), except as provided in paragraph (k) of this section for qualified oil-filled operational equipment, and except as provided in § 112.9(d)(3) for flowlines and intra-facility gathering lines at an oil production facility. The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank, will not escape the containment system before cleanup occurs. In determining the method, design, and capacity for secondary containment, you need only to address the typical failure mode, and the most likely quantity of oil that would be discharged. Secondary containment may be either active or passive in design. At a minimum, you must use one of the following prevention systems or its equivalent:	§6	~
112.7(c)(1)	<ul> <li>For onshore facilities:</li> <li>(i) Dikes, berms, or retaining walls sufficiently impervious to contain oil;</li> <li>(ii) Curbing or drip pans;</li> <li>(iii) Sumps and collection systems;</li> <li>(iv) Culverting, gutters, or other drainage systems;</li> <li>(v) Weirs, booms, or other barriers;</li> <li>(vi) Spill diversion ponds;</li> <li>(vii) Retention ponds; or</li> <li>(viii) Sorbent materials.</li> </ul>	§6	$\checkmark$
112.7(c)(2)	For offshore facilities: (i) Curbing or drip pans; or (ii) Sumps and collection systems.	NA	NA



	Town of Hamden VOED Building SPCC Plan Regulatory Cross Reference		
SPCC Rule Section	Description	Facility SPCC Plan	Visually Confirmed in Field
112.7(d)	<ul> <li>When installation of structures or equipment, as outlined in 112.7(c) and (h)(1) and 40 CFR 112.8(c)(2), (c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2) and 112.14(c) is not practicable, clearly explain why such measures are not practicable; for bulk storage containers, conduct periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping, unless you have submitted a response plan under 40 CFR 112.20 provide the following in your SPCC Plan:</li> <li>Provide an oil spill contingency plan described in 40 CFR 109; and</li> </ul>	§6.2 §13	~
	2. Provide a written commitment of manpower, equipment, and materials to control and remove harmful quantity of oil discharged.		
112.7(e)	Conduct inspections and tests required by this part in accordance with written procedures that you or the certifying engineer developed for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of three years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.	§7	$\checkmark$
112.7(f)	Personnel, training, and discharge prevention procedures		
112.7(f)(1)	At a minimum, train your oil-handling personnel in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rule, and regulations; general facility operations; and, the contents of the facility SPCC Plan.	§10	$\checkmark$
112.7(f)(2)	Designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management.	§10	$\checkmark$
112.7(f)(3)	Schedule and conduct discharge prevention briefings for your oil handling personnel at least once a year to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges as described in § 112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures.	§10	~
112.7(g)	Security (excluding oil production facilities). Describe in your Plan how you secure and control access to the oil handling, processing and storage areas; secure master flow and drain valves; prevent unauthorized access to starter controls on oil pumps; secure out-of-service and loading/unloading connections of oil pipelines; and address the appropriateness of security lighting to both prevent acts of vandalism and assist in the discovery of oil discharges.	§9	~
112.7(h)	Facility tank car and tank truck loading/unloading rack (excluding offshore facilities).		
112.7(h)(1)	Where loading/unloading rack drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank car or tank truck loading/unloading racks. You must design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.	§6	$\checkmark$
112.7(h)(2)	Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle break interlock system in loading/unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.	§6	$\checkmark$
112.7(h)(3)	Prior to filling and department of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.	§6	$\checkmark$
112.7(i)	If a field-constructed above-ground container undergoes a repair, alteration, reconstruction or a change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe, or has discharged oil or failed due to brittle fracture failure or other catastrophe, evaluate the container of risk of discharge or failure due to brittle fracture or other catastrophe, and as necessary, take appropriate action.	7.0	~
112.7(j)	In addition to the minimal prevention standards listed under this section, include in your Plan a complete discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in this part or any applicable more stringent State rules, regulations, and guidelines.	NA	$\checkmark$
112.8(b),	Facility Drainage (for onshore facilities, except oil production)		
112.8 (b)(1)	Restrain drainage from diked storage areas by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to ensure no oil will be discharged.	6.3.2	$\checkmark$



	Town of Hamden VOED Building SPCC Plan Regulatory Cross Reference		
SPCC Rule Section	Description	Facility SPCC Plan	Visually Confirmed in Field
112.8 (b)(2)	Use valves of manual, open-and-closed design, for the drainage of diked areas. You may not use flapper-type drain valves to drain diked areas. If your facility drainage drains directly into a watercourse and not into an on-site wastewater treatment plant, you must inspect and may drain uncontaminated retained stormwater, as provided in paragraphs (c)(3)(ii), (iii), and (iv) of this section.	6.3.2	$\checkmark$
112.8 (b)(3)	Design facility drainage systems from undiked areas with a potential for a discharge (such as where piping is located outside containment walls or where tank truck discharges may occur outside the loading area) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.	6.3	$\checkmark$
112.8 (b)(4)	If facility drainage is not engineered as in paragraph (b)(3) of this section, equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge retain oil in the facility.	6.3	$\checkmark$
112.8 (b)(5)	Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift" pumps and permanently install at least one of the pumps. Whatever techniques you use, you must engineer facility drainage systems to prevent a discharge as described in § 112.1(b) in case there is an equipment failure or human error at the facility.	NA	$\checkmark$
112.8 (c)	Bulk Storage Containers (for onshore facilities, except oil production)		
112.8 (c)(1)	Bulk storage containers. (1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature.	6.1	$\checkmark$
112.8 (c)(2)	Construct all bulk storage tank installations (except mobile refuelers and other non-transportation- related tank trucks) so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.	§6	V
112.8 (c)(3)	<ul> <li>Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you: <ul> <li>(i) Normally keep the bypass valve sealed closed.</li> <li>(ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in § 112.1(b).</li> <li>(iii) Open the bypass valve and reseal it following drainage under responsible supervision; and</li> <li>(iv) Keep adequate records of such events, for example, any records required under permits issued in accordance with §§ 122.41 (j)(2) and 122.41 (m)(3).</li> </ul> </li> </ul>	6.3.2	V
112.8 (c)(4)	Protect any completely buried metallic storage tank installed on or after January 10, 1974 from corrosion by coatings or cathodic protection compatible with local soil conditions. You must regularly leak test such completely buried metallic storage tanks.	NA	$\checkmark$
112.8(c)(5)	Do not use partially buried or bunkered metallic tanks for the storage of oil, unless you protect the buried section of the tank from corrosion. You must protect partially buried and bunkered tanks from corrosion by coatings or cathodic protection compatible with local soil conditions.	NA	$\checkmark$
112.8(c)(6)	Test or inspect each above-ground container for integrity on a regular schedule and whenever you make material repairs. You must determine, in accordance with industry standards, the appropriate qualifications for personnel performing tests and inspections, the frequency and type of testing and inspections, which take into account container size, configuration, and design (such as containers that are: shop-built, field-erected, skid-mounted, elevated, equipped with a liner, double-walled, or partially buried). Examples of these integrity tests include, but are not limited to: visual inspection, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or other systems of non-destructive testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices satisfy the recordkeeping requirements of this paragraph.	7.3	V



SPCC Rule Section	SPCC Plan Regulatory Cross Reference Description	Facility SPCC Plan	Visually Confirmed in Field
112.8(c)(7)	Control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.	NA	$\checkmark$
112.8(c)(8)	Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices: (i) High liquid level alarms with an audible or visual signal at a constantly attended		
	operation or surveillance station. In smaller facilities, an audible air vent may suffice.		
	(ii) High liquid level pump cutoff devices set to stop flow at a predetermined container content level.	Table 1 and	$\checkmark$
	<ul> <li>(iii) Direct communication between tank gauger and pumping station.</li> <li>(iv) Fast response system for determining liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers.</li> </ul>	§6	
	(v) You must regularly test liquid level sensing devices to ensure proper operation.		
112.8(c)(9)	Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in § 112.1(b).	NA	$\checkmark$
112.8(c)(10)	Promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. You must promptly remove any accumulations of oil in diked areas.	§4 §6	$\checkmark$
112.8(c)(11)	Position or locate mobile or portable oil storage containers to prevent a discharge as described in § 112.1(b). Except for mobile refuelers and other non-transportation-related tank trucks, you must furnish a secondary means of containment, such as a dike or catchment basin, sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.	§6	$\checkmark$
112.8(d)(1)	Facility Transfer Operations, Pumping, and Facility Process (onshore facilities, except oil production)		
112.8(d)(1)	Provide buried piping that is installed or replaced on or after August 16, 2002, with a protective wrapping and coating. You must also cathodically protect such buried piping installations or otherwise satisfy the corrosion protection standards for piping in part 280 of this chapter or a State program approved under part 281 of this chapter. If a section of buried line is exposed for any reason, you must carefully inspect if for deterioration. If you find corrosion damage, you must undertake additional examination and corrective action as indicated by the magnitude of the damage.	NA	$\checkmark$
112.8(d)(2)	Cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby service for an extended time.	NA	$\checkmark$
112.8(d)(3)	Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.	§6	$\checkmark$
112.8(d)(4)	Regularly inspect all above-ground valves, piping, and appurtenances. During the inspection you must assess the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. You must also conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement.	§7	√
112.8(d)(5)	Warn all vehicles entering the facility to be sure that no vehicle will endanger above-ground piping or other oil transfer operations.	§6.3.4	$\checkmark$



	Town of Hamden VOED Building SPCC Plan Regulatory Cross Reference						
SPCC Rule Section	Description	Facility SPCC Plan	Visually Confirmed in Field				
Appendix C to Part 112	<ul> <li>Appendix C to Part 112 – Substantial Harm Criteria</li> <li>Section 2.1 A non-transportation-related facility with a total oil storage capacity greater than or equal to 42,000 gallons that transfers oil over water to or from vessels must submit a response plan to EPA.</li> <li>Section 2.2 Any facility with a total oil storage capacity greater than or equal to 1 million gallons without secondary containment sufficiently large to contain the capacity of the largest above-ground oil storage tank within each area plus sufficient freeboard to allow for precipitation must submit a response plan to the EPA. Secondary containment structures that meet the standard of good engineering practice for the purposes of this part include berms, dikes, retaining walls, curbing, culverts, gutters, or other drainage systems.</li> <li>Section 2.3 A facility with a total oil storage capacity greater than or equal to 1 million gallons must submit its response plan if it is located at a distance such that a discharge from the facility could cause injury (as defined by 40 CFR 112.2) to fish and wildlife sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (59 FR 14713, March 29, 1994) and the applicable Area Contingency Plan. Facility owners or operators must determine the distance at which an oil spill could cause the appropriate formula presented in Attachment C-III to this appendix or a comparable formula.</li> <li>Section 2.4 A facility with a total oil storage capacity greater than or equal to 1 million gallons must submit its response plan if it is located at a distance such that a discharge from the facility would shut down a public drinking water intake, which is analogous to a public water system as described at 40 CFR 143.2(c).</li> </ul>	Appendi x E	~				

The following sections of the SPCC Rules do not apply to the facility:

- 112.9 SPCC Plan requirements for onshore oil production facilities.
- 112.10 SPCC Plan requirements for onshore oil drilling and work over facilities.
- 112.11 SPCC Plan requirements for offshore oil drilling, production, or work over facilities.
- 112.12 SPCC Plan requirements for animal, vegetable, & seed oils.



### APPENDIX C Spill Reporting Form



#### REPORT OF PETROLEUM DISCHARGE, SPILLAGE, OR RELEASE

When d	id the incic	lent occur? Date	Time	e
Where o	lid the inci	dent occur?		
How did	l the incide	ent occur?		
		uch spilled? Is there a report? (reference the List of Lists)	table quantity (RQ) associated	d with the material and was
	-	spill and any affected water spill was contained to preven	bodies or areas of the envir It a release.	onment. If fully contained,
address	and teleph	none number (if not part of To	time of the incident? Pleas own of Hamden Public Works his spill or note "NA" if report	(VOED) Building).
Date	Time	Person Making Notification	Agency Notified	Notes From Conversation/Notification
		Ť		

What actions are being taken, or are proposed, to prevent reoccurrence of an incident of this type?



Were there any injuries as a result of this incident? If so, list the names of exposed individuals, their addresses, phone numbers, and describe their injuries.

What is the appropriate advice regarding medical attention necessary for exposed individuals?

Are there any known or anticipated health risks, acute or chronic, associated with the release of this chemical or medical advice that should be communicated?

What waste was generated as a result of clean-up activities and how was it disposed (provide waste classification and name of waste vendor)

I hereby affirm that the foregoing statement is true to the best of my knowledge.

Signature	Title			Date
Print Name				Telephone Number
Street Address/P.O. Box		City/Town	State	Zip

This form may be reproduced or computerized as long as it contains all of the information requested and is on an  $8-1/2" \times 11"$  white paper, black type format. For serious incidents the questions may be answered in a narrative format which must include the preparer's affidavit.



### APPENDIX D Inspection Logs



		-		LAN INSPEC Building, Hamde								
Inspection Date: Inspector Name/Title:												
Inspection Time: Signature:												
OIL-FILLED OPERATIONAL EQUIPMENT												
Location / Description Free of Le		aks or Spills	Condition (no supports ar	tained in Good corrosion, sturdy nd foundations)	Problems Identified	Corrective Actions Taken & Date						
	Acceptable	Unacceptable	Acceptable	Unacceptable								
Transformers		1 7			1							
North side of building												
Equipment												
Hydraulic Oil Lift Reservoirs- East side of building												



				_	_		N INSP ding, Har			t		
Inspection Date	e:					Ins	pector Nam	e/Title:				
Inspection Time	e:					Sigi	nature:					
				BU	LK FUEI	STORA	GE CON	TAINER	S			
SecondaryTankContainmentLocation/MaintainedDescription(complete dikedraining log asnecessary)		<b>ainment</b> atained lete dike ag log as essary)	Fill and Drain Valves Securely Locked		Free of Leaks or Spills (check for presence of liquid in interstice)		Containers and piping in Good Condition (no corrosion, sturdy supports and foundations)		Level Indicator Functional/Overf ill Protection		Problems Identified (enter work order as necessary)	Corrective Actions Taken & Date
ABOVE-GROU	Acceptable	• • •	Acceptable		Acceptable	Unacceptable	Acceptable	Unacceptable	Acceptable	Unacceptable		
ConVault Waste Oil AST- outside east wall of building												
275-gallon 1540 diesel oil AST-Fire Dept. Area												
(5) 275 gallon fuel oil ASTs – Lube Room												
(7) 55-gallon drums – Oil Storage Room												



				-	_		N INSP ding, Har			:		
Inspection Date	2:					Ins	pector Nam	ne/Title:				
Inspection Time	e:					Sig	nature:					
				BUI	LK FUEI	STOR	GE CON	TAINER	s			
Secondary       Tank     Containment       Location/     Maintained       Description     (complete dike       draining log as     necessary)       Acceptable     Unacceptable		Fill and Drain Valves Securely Locked		Free of Leaks or Spills (check for presence of liquid in interstice)		Containers and piping in Good Condition (no corrosion, sturdy supports and foundations)		Functio	ndicator nal/Overf otection	Problems Identified (enter work order as necessary)	Corrective Actions Taken & Date	
(2) 55-gallon drums waste antifreeze- Maintenance Area	Ассертале	опассертале	Acceptable	Unacceptable	Acceptable	Unacceptable		Unacceptable	Acceptable	Unacceptable		
(2) 55-gallon drums of waste oil- Maintenance & Fire Dept. Area												
(2) 55-gallon drums of used oil filters- Maintenance Area												
(2) 55-gallon drums of hydraulic fluid – Maintenance Area												
41.25 cu ft Used speedy dry Unibin												



Inspection Dat	ANNUAL INTEGRITY INSPECTION LOG Town of Hamden VOED Building, Hamden, Connecticut Inspection Date:																						
Inspection Time: Signature:																							
Container ID	Containment structure in satisfactory condition?	Drainage pipes/valves within containment fit for continued service.	Evidence of tank settlement or foundation washout	Cracking or spalling of foundation	Tank supports in satisfactory condition	Water able to drain away from tank	Grounding strap secured and in good condition	Evidence of paint failure	Any damage evident to the tank shell?	Flanged connection bolts tight and fully engaged with no sign of wear or corrosion	Standing water on tank	Vents free of obstructions	Emergency vent operable? Lift as required	Insulation damaged or missing	Are there noticeable areas of moisture on the insulation	Mold on insulation	Is the insulation sufficiently protected from water intrusion	Has the tank liquid level sensing device been tested to ensure proper operation	Does the tank liquid level sensing device operate as required	Are overfill prevention devices in proper working condition	Are tank grounding lines in good condition	Is electrical wiring for control boxes/lights in good condition	Comments
500-gallon Used Oil ConVault AST																							
275-gallon 1540 diesel oil AST																							
275-gal Fuel Oil AST-1																							
275-gal Fuel Oil AST-2																							
275-gal Fuel Oil AST-3																							
275-gal Fuel Oil AST-4																							
275-gal Fuel Oil AST-5																							



	DIKE DRAINING LOG Town of Hamden VOED Building Hamden, Connecticut										
Date	Dike or Secondary Containment Location	Name of VOED Personnel Making Assessment	Visual Indication of Oily Sheen or Film? (yes/no)*	Visual Indication of Discoloration? (yes/no)*	Dike Drained to Ground or Pumped & Hauled by Contractor?	If Drained Start and End Time	d to Ground** Return Drain Valve to Closed & Locked Position	If Pumped & Hauled, Indicate Name of Contractor Used			

\*If answer "yes" to any of the questions, the contents of the dike or secondary containment area must be pumped and hauled off site

\*\*If contents are drained to the ground, VOED personnel must be present during the entire draining activity, ensuring all drain valves are properly closed and locked after the draining event.



## APPENDIX E

### Certification of the Applicability of the Substantial Harm Criteria Checklist



#### **CERTIFICATION FOR FACILITIES THAT DO NOT POSE SUBSTANTIAL HARM**

Facility	Name:	Town of Hamden VOED Building		
Facility	Address:	1255 Shepard Avenue, Hamden, Connecticut		
			<u>YES</u>	<u>NO</u>
1.		have a maximum storage capacity greater than or equal and do the operations include over water transfers of oil s?		Х
2.	million (1,000,00 each above-grou	have a maximum storage capacity greater than or equal to one 0) gallons and is the facility without secondary containment for nd storage area sufficiently large to contain the capacity of the und storage tank within the storage area?		Х
3.	million (1,000,00 using the appro- considered accep	have a maximum storage capacity greater than or equal to one 0) gallons and is the facility located at a distance (as calculated priate formula in Attachment C-III or an alternative formula <sup>1</sup> table by the RA) such that a discharge from the facility could in environmentally sensitive area as defined in Appendix D?		х
4.	million (1,000,000 using the appropriation of the second s	have a maximum storage capacity greater than or equal to one 0) gallons and is the facility located at a distance (as calculated priate formula in Attachment C-III or an alternative formula <sup>1</sup> table by the RA) such that a discharge from the facility would ic drinking water intake <sup>2</sup> ?		Х
5.	million (1,000,000	have a maximum storage capacity greater than or equal to one 0) gallons and within the past 5 years, has the facility experienced in any amount greater than or equal to 10,000 gallons?		х

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.

John Pucillo Name (please type or print) Superintendent of Vehicle Maintenance Title (please type or print)

Signature

Date

<sup>1</sup> If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

 $^{2}$  For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).



## APPENDIX F Training Roster



SPCC Plan Training Roster Town of Hamden VOED Building Hamden, Connecticut										
Date:	Training Conducted By:									
Employee Name	Type of Training (Circle One)	Employee Signature								
	Initial / Refresher									
	Initial / Refresher									
	Initial / Refresher									
	Initial / Refresher									
	Initial / Refresher									
	Initial / Refresher									
	Initial / Refresher									
	Initial / Refresher									
	Initial / Refresher									
	Initial / Refresher									
	Initial / Refresher									
	Initial / Refresher									
	Initial / Refresher									
	Initial / Refresher									
	Initial / Refresher									
	Initial / Refresher									
	Initial / Refresher									
	Initial / Refresher									
	Initial / Refresher									
	Initial / Refresher									

By signing this form, each employee acknowledges that he/she has received SPCC Plan training and has an understanding of all material presented, including his/her responsibilities with regard to spill prevention and response at Town of Hamden Public Works (VOED) Building. Completed Training Rosters may be maintained in Appendix F of the SPCC Plan.



### APPENDIX G Photo Log of Oil Storage Locations







### APPENDIX H SPCC Plan Records



### APPENDIX I ConVault Onsite Integrity Testing Procedures





Above Ground Fuel Storage Solutions

# **Onsite Integrity Testing Procedures**

Onsite Inspection & Testing Recommendations to Meet Requirements of EPA SPCC Regulations

Release Date: January 31, 2014



#### The ConVault System

ConVault is an above ground, fuel and oil storage system manufactured for the purpose of above ground storage. The purpose of this testing procedure document is to aid ConVault owners and engineers in complying with the requirements of the Spill Prevention Control and Containment regulations for integrity testing or inspection as found at 40 CFR 112.8(c)(6) in effect as of January 14, 2010.

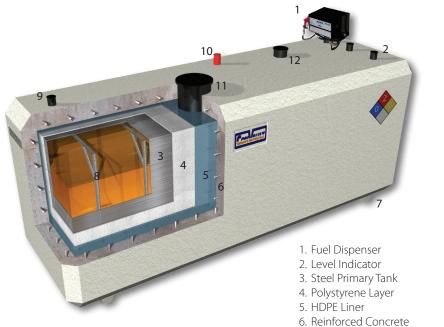
The ConVault system includes:

1. **Primary containment**: Inner shop fabricated steel tanks built in accordance with UL 142 Standard. The tank is pressure tested for 24 to 48 hours after fabrication process, again pressure tested during the precasting process, and also prior to shipment of the tank.

2. **Secondary containment**: Consists of a high density polyethylene (HDPE) liner. This secondary containment is vacuum tested prior to shipment of the tank.

3. **Encasement** inner steel tank and the HDPE liner are encased on all sides in 6" thick reinforced concrete. The entire system is elevated upon 4" to 6" high integral concrete legs.

The ConVault above ground fuel storage system is manufactured and tested in accordance with the UL 2085 Standard.



- 7. Support Legs
- 8. Internal Bracing
- 9. Atmospheric Vent
- 10. Leak Detector Tube
- 11. Overfill Containment
- 12. Emergency Vent

ConVault is thus a three layered containment system; Primary steel tank, secondary HDPE liner and exterior concrete layer acting as a dam or dike. The integrity of each layer will be addressed in the following steps.



**Note regarding Steel Tank Institute Standard Inspection Guidelines STI SP001**: STI SP001 requirements are not prepared or issued with inspection criteria that are readily applicable to other AST manufacturers especially to the concrete tanks. The STI SP001 should make a notation to say: Inquire with the manufacturer of the tank before utilizing SP001 to inspect your ConVault tank. Some portions of STI SP001 are applicable to the inspection of ConVault, such as inspection frequency. A copy of the STI SP001 Standard can be found at:

#### www.steeltank.com/Publications/STISPFAStore/tabid/487/Default.aspx

In no case should a pressure test be performed on the secondary containment. Serious damage to the tank system may result from pressure testing.

Refer to manufacturer's drawings and specifications to confirm the configuration of your tank. If you do not have drawings and specifications please contact the supplier or, manufacturer or call 1-888-965-3227.

- Testing of ConVault tanks may be completed by qualified personnel following this testing methodology. If you require assistance sourcing a qualified testing professional please call 1-800-965-3227 or visit www.convault.com.
- Testing should proceed only after reviewing all previous test records and any documentation detailing modifications, repairs, and visible or known damage to the tank.
- ConVault tank systems feature a nameplate which will provide the Underwriters Laboratory listing serial number. Include this number in the documentation of inspections.
- This testing procedure will not apply or may not be adequate if:
  - The ConVault has been moved from its original location;
  - The ConVault has sustained known or apparent trauma or impact;
  - Products incompatible with the inner steel tank have been put into the ConVault.



#### **Test Protocol**

- 1. Examine the area under and around the ConVault (pavement, drip pan, soil) for signs of movement or settlement that could lead to system performance problems.
- 2. Examine the area under and around the ConVault for signs of spills and if any are found, document the location relative to the ConVault tank.
- 3. Examine the exterior (sides and bottom) of the ConVault noting any cracks and/or damage to the concrete outer layer.
- 4. During the inspection of the ConVault exterior pay particular attention to any signs of fuel or oil leaks that may manifest as staining on the exterior of the concrete or dirt, dust or soil that may adhere to spilled fuel or oil. Document the location and nature of any signs of fuel or oil on the exterior (sides and bottom).
- 5. Fuel or oil spills on the side of a ConVault emanating from the top of the tank will be addressed in later sections of this document.
- 6. If fuel or oil is found in specific areas of the side or bottom of the ConVault the owner/user should be notified immediately.
  - i. Inquire as to the time frame the owner/user first noticed the spill.
  - ii. Note whether any fuel or oil has accumulated on the surface under the ConVault which can be specifically related to the location of fuel or oil present on the exterior (side and bottom). If any fuel or oil is noted on the surface under the ConVault, the owner/user should be notified immediately and the owner/user should take immediate steps to notify any appropriate governing authorities.

### If no evidence of leakage is noted on the exterior of the concrete containment layer then the inspection report indicate so.

- 7. Examine the top of the ConVault. Note: Examination of the top of the ConVault may involve persons walking on top of the tank and appropriate safety precautions should be implemented to insure the safety of the inspector from falls or injury related to tripping upon hardware. If appropriate a second person should be utilized to assist.
- 8. While inspecting the top of the tank, first locate and note the location, configuration, condition and types of any plumbing, meters and dispensing equipment.
  - i. Minor fuel spillage on top of the ConVault is not uncommon and may make it difficult to determine the actual

source of leaks. Any leaks directly related to the plumbing, meters, dispensing equipment or other hardware used to load or dispense fuel should be noted. Rust or other deterioration should also be noted.

- ii. Closely inspect the interfaces between the steel connections protruding from concrete. Note any areas that should be resealed to prevent the introduction of rain water into the system.
  - a. Consult with the tank manufacturer or call 1-800-965-3227 for recommendations.

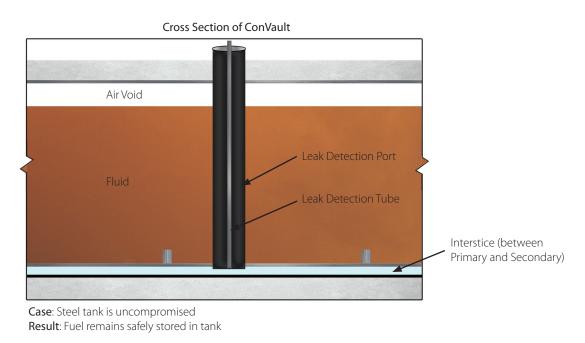
iii. Note the condition of the concrete surface. The surface should be relatively clean and smooth without cracks, holes or other deteriorations. A functioning layer of sealant (waterproof) paint should be present across the entire surface of the concrete top.

a. Use only recommended products to re-coat the top of the ConVault after thoroughly cleaning with bio-degreaser and light pressure cleaning.



#### Test Protocol (cont.)

- 9. Inspection of the primary steel tank
  - i. At this point the inspector should locate and note the leak detection port.
  - ii. The integrity of the inner steel primary tank is accomplished by checking for fluid between the steel tank and the HDPE liner. See below.



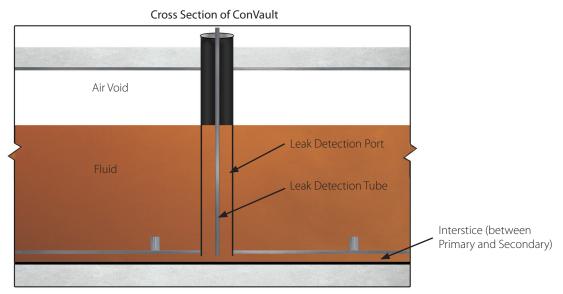
The inspector should obtain a clean wood or plastic inspection (non-pointed) rod of sufficient length to reach the full depth of the inner steel tank. With the inspection port cap opened, insert the rod to the bottom of the tube.

iii. Withdraw the inspection rod and visually examine it.

a. If the rod is dry and there is no liquid present then the primary steel tank is not leaking and the ConVault is suitable for continued use .

See next page if the rod is wet.





Case: Steel tank has been breached Result: Fuel is trapped by liner and is easily detected with probe

- b. If the rod is wet then the inspector must determine the nature of the liquid, water or fuel.
  - 1. If the liquid on the inspection rod is water then rainwater has entered the system due to inspection port cap being left off or water has entered the system due to a gap between the concrete outer layer and plumbing on top of the tank.

- The water should be extracted from the tank interstice. Consult with ConVault or the manufacturer of your ConVault or call 1-800-965-3227 for recommendations as to water removal techniques.

- c. If the rod is wet and smells of fuel or oil or has a sheen then:
  - 1. The owner/user should be notified immediately.
  - 2. It is possible that fuel or oil was introduced into the interstice through the inspection port. The fuel or oil should be extracted from the interstice. At this point and after complete extraction of the fuel or oil the rod should be re-introduced into the inspection port to check for the presence of fuel or oil. If the interstice contains fuel, after pumping out the fuel, the fuel entrapped in the secondary containment will flow down and fuel might be seen in the leak detector tube again. In this case, the best way of insuring the integrity of the primary tank is a pressure or vacuum test, using the ConVault testing manual: www.convault.com/testingmanual.pdf
  - 3. The inner steel primary containment tank may have leaked and the tank should be tested to determine if primary has failed.
    - At this point, the owner/user should contact the installer or manufacturer of the ConVault or call1-800-695-3227 for recommended next steps.



### Industry Standard Requirements for Tank Inspection Frequency

For the sake of consistency, the standard for testing frequency for ConVault fuel and oil containment systems should be consistent with the requirements of STI SP001 which is detailed below and is normally a function of the size of the tank and it's Category per SP001 Standard.

### **Tank Categories**

The tank categories and inspection schedule from SP001 are to be utilized for ConVault tanks.

Among other factors, owners should take a number of aspects into consideration such as the tank leak detection system, and that the monitoring equipment is in good working condition.

Based on many considerations, the SP001 standard classifies tanks into three categories. Depending on the risk a tank system poses to the environment if kept in service it is ranked as a category 1, 2 or 3 tank. Category 1 tanks pose the least amount of risk and category 3 the highest.

See **Table 5.4** of the standard, reproduced here, for examples of tank configuration and AST category. Please note that if the AST bottom plate, other than its legs or supports, is in contact with the ground or a concrete slab, it is prone to corrosion and increased susceptibility to leakage. Shop Fabricated Tanks in contact with the ground or a concrete base are almost always vertical tanks. Such tanks are placed in Category 2 or 3. ASTs which are elevated, have a leak detection system, have spill control and have no part of the tank in contact with the ground (other than legs or supports) are classified as category 1 tanks.

	Tank Configuration	Tank has CRDM	AST Category
	AST in contact with ground	No	2 or 3
ConVault	Elevated tank w/ spiill control & no part of AST in contact w/ ground	Yes	1
	Vertical tank w/ RPB & spill control	Yes	1
	Vertical tank w/ double bottom & spill control	Yes	1
	Double-wall AST	Yes	1
	AST w/ secondary containment dike/berm	Yes	1

### Table 5.4: Example Tank Configurations and AST Category

CRDM: Continuous Release Detection Method – or Leak Detection System RPB: Release Prevention Barrier

### **Inspection Type and Frequency**

The SP0001 standard requires different inspection types and different inspection intervals based on the tank size, tank category, and the risk it poses. The tank inspection intervals from SP001 are to be followed for ConVault tanks.

In Table 5.5 of SP0001 (see next page), those portions pertaining to shop fabricated tanks up to 30,000 gallons have been highlighted showing inspection schedules for the different AST categories.



### Industry Standard Requirements for Tank Inspection Frequency (cont.)

*In Table 5.5 use the following designations:* 

P - Periodic AST inspection

- E Formal External Inspection by Certified Inspector
- L Leak test by owner's designee I Formal Internal Inspection by Certified Inspector

() indicates maximum inspection interval in years. For example; E (5) indicates formal external inspection every 5 years.

SP001 Table 5.5: Insp	pection Schedules	ConVault ↓		
Shop Fabricated	AST Size (US Gallons)	Category 1	Category 2	Category 3
	0-1100 (0-4,164 liters)	Р	Р	P, E & L (10)
Shop Fabricated ASTs	1,101 - 5,000 (4,168 - 18,927 liters)	Р	P, E & L (10)	P, E & L (5), I (10) or P, L (2), E(5)
	5,001 - 30,000 (18,931 - 113,562 liters)	P, E (20)	P, E (10), I (20) or P, E (5), L(10)	P, E & L (5), I (10) P, E & L (5), E(5)
	30,001 - 50,000	P, E (20)	P, E & L (5), I (15)	P, E & L (5), I (15)
Portable Container	S	Р	Р	P*

\*Owners shall either discontinue use of portable container for storage or have the portable container DOT (Department of Transportation) tested and recertified per following schedule (refer to Section 9.0): Plastic containers – every 7 years; steel portable container – every 12 years Stainless Steel container – every 17 years



### **Periodic Inspection Requirements**

ConVault tanks of 5,000 gallons or less capacity are CATEGORY 1 TANKS. Owners of ConVault ASTs of this size are NOT required to employ Certified AST Inspectors to inspect their tanks to comply with the standard's requirements, but can be in compliance with the standard by inspecting the tanks themselves or having their employees inspect them. ConVault tanks larger than 5000 gallons, are also self-inspected and only require inspection by a Certified Inspector after 20 years of service.

### What qualifications are required for the owner to self-inspect his tank, and how does the owner need to know what to inspect?

Section 4 of the SP001 standard defines the qualifications of the Owner's Inspector as follows: "Periodic inspections are to be performed by an owner's inspector. The personnel performing these inspections shall be knowledgeable of storage facility operations, the type of AST and its associated components, and characteristics of the liquid stored".

Section 6 of the standard STI SP001 explains what is meant by the PERIODIC AST INSPECTION – and what needs to be inspected and kept in the owner's AST records. These are simple and straight-forward tasks which can be performed by any competent owner or his employees. The standard makes it very easy to know what to do and what to check for by providing a check list in the standard's Appendix C. The first section requires filling in information about the owner and the ID of the tank. The second section is the SP001 Monthly Inspection Checklist which consists of 9 easy to check, Yes or No questions such as; is there water in primary or secondary containment, are there visible signs of leakage around the tank, concrete pad, or ground, are all tank openings properly sealed, etc. The third section is the SP001 Annual Inspection Checklist which contains 27 questions with Yes or No answers and a space for comments. It should be noted that the Periodic Inspection must be performed in addition to the Formal External Inspections.

Simply put, the periodic inspection requirements are visual, documented inspections conducted by an owner's inspector, to assess the general AST conditions, as best as possible, without suspending AST operations or removing the AST from service.

ConVault strongly encourages the use of the Monthly and Annual Inspection Checklists provided in SP001, and, in fact, requires some of these items be checked on a weekly basis as part of the ConVault warranty.

See Pages 10-12 for a ConVault specific Maintenance Checklist.

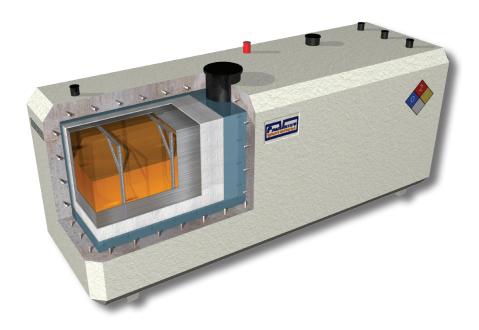
### A copy of ConVault's weekly/monthly/yearly checklist is available online at http://www.convault.com/pdfdoc/checklist.pdf.



### Summary

- As an owner of a ConVault you are NOT required to employ Certified Inspectors or a registered Professional Engineer to perform inspections on ConVault ASTs up to 5,000 gallons for most installations .
- For ConVault ASTs from 5,001 to 12,000 gallons you will need an External Inspection by a Certified Inspector once every 20 years for most installations.
- Monthly and yearly inspections by the tank owner or a designated employee are required by SP001, and Inspection Checklists are provided in Appendix C of the document.
- ConVault requires that the interstice be checked on a weekly basis using the inspection port and rod method described on Page 4.
- A newly installed ConVault AST will meet all the requirements of the SP001 checklists.

### Visit: www.epa.gov/emergencies/docs/oil/spcc/integrity-testing-factsheet.pdf if you have any questions regarding the EPA Spill Prevention, Control and Countermeasure Plan (SPCC) Program





### Maintenance Checklist

Inspection Date\_

Inspector

Note: This checklist is designed for general use. Some items may not apply. All equipment inspections and maintenance should be documented. You are **encouraged** to make copies of this checklist. See the corresponding maintenance procedures and your owner's manual for corrective actions and more details.

### Weekly Maintenance:

- □ 1. Check leak detector for indication of fluid in interstice. (This is required by warranty.) If checked with a stick gauge, ensure the stick is clean and dry before insertion.
- $\Box$  2. Check for leaks on the pumps, filters, hoses, nozzles, joints and fittings.
- □ 3. Check nipples, spill containment and manholes for paint or powder coating decay (required by warranty). Check piping and fitting for rust.
- $\Box$  4. Check pump meter and reset button.
- □ 5. Check fuel gauge for proper operation. If you have a Kruger At-A-Glance Gauge, check the clear cap for weathering or cracks.
- $\Box$  6. Check spill containment for debris.
- $\Box$  7. Check for small cracks in concrete.
- $\square$  8. Check readability of signs and decals.

### **Monthly Maintenance:**

- $\Box$  9. Check for water in the primary tank bottom under the fuel (required by warranty).
- □ 10. Visually check the tank, including under the tank for any signs of leakage as required by the Environmental Protection Agency 40 CFR 112.
- 11. Check leak detector tube cap for corrosion and proper operation. If a Kruger manual leak indicator is installed, remove the red ring and clear cap and check to see that the red indicator moves up and down about 1 inch freely. Also, check for weathering or cracks in the clear cap. If electronic leak detection is installed, check it by using the test button.
- $\Box$  12. Check all nozzles, hoses and fittings for wear and tear.
- □ 13. Check trigger mechanism on nozzle for metal fatigue or mechanical failure.
- $\Box$  14. Check pump motor for signs of over-heating or excessive wear.
- □ 15. Check body of tank for cleanliness, need of paint, or rusting where applicable. Check signs and decals for need of replacement. Check slab and supports of unit for structural soundness.
- 16. Check grounding wires to see that they are properly attached to the tank terminals and grounding rod.

### **Other Periodic Maintenance:**

- □ 17. Replace the dispenser filter at least every six (6) months or as needed (mark the date replaced on the filter).
- $\Box$  18. Check fuel for bacterial infestation or microbial growth.
- $\Box$  19. Have a qualified person periodically check all electrical wiring.
- □ 20. Check the emergency relief vent at least once a year by lifting the top cap and releasing it to ensure freedom of movement.
- $\Box$  21. At least once a year, remove the leak detection device and check for proper operation.
- $\Box$  22. At least once a year, check the calibration of the fuel gauge.
- □ 23. Follow the pump manufacturer's recommendation for frequency and procedures of maintenance.
- □ 24. Document significant storage events per 40 CFR 112 and your state regulations.



### Maintenance Procedures

Please note that item numbers on this sheet corresponds with the item numbers on the Maintenance Checklist. Most of the maintenance requirements and procedures are also covered in the Convault owner's manual.

### Weekly Checks:

- 1. If leak detector indicates fluid in the interstice, remove any devices and determine what the fluid is. Call your Convault representative.
- 2. If leaks are detected, contact the appropriate authorities as necessary. Tighten, repair as necessary, replace components, or contact your installer or service company.
- 3. If paint or powder coating deterioration occurs on nipples, spill containment or manholes, clean to bare metal, prime with a good quality zinc based primer, and repaint. If corrosion is severe, contact your Convault representative as soon as practical.
- 4. If dispenser meter is not working or will not reset, call your service company or installer.
- 5. If the fuel gauge fails to operate properly, repair/replace it, or call your service company before the next delivery. (It is the owner/operator's responsibility to prevent the overfilling of the tanks. The gauge is part of the required system to prevent overfilling.) If the Kruger cap has deteriorated, it could be allowing rainwater into the primary tank and should be replaced.
- 6. Keep spill containment clear of debris at all times. A contaminated spill containment will cause the fuel to be contaminated when any spill is released through the drain into the primary tank. Materials such as rags or paper products used to clean the spill containment must be disposed of properly, as they will usually contain fuel from the spill containment.
- 7. If there are small cracks in the concrete, fill and repair them. If you have questions, call your local Convault representative.
- 8. If signs or decals lose visibility, order replacements from your local Convault representative before the next time the tank is filled.

### Monthly:

- 9. If there is water in the tank it will collect at the bottom, under the fuel. Water in the tank will cause increased corrosion. If you discover water in the primary tank it must be removed. One method is to pump it out with a "Thief Pump", a small pump that pulls the water from the bottom 1/8" of the tank. Check tank openings for possible water entry points. If you find that you are pumping out more than one half gallon of water for every 1000 gallons of product stored, see your fuel dealer, or call your Convault representative. Also consult item (I) in the maintenance section of the owner's manual.
- 10. If you detect leakage, determine what the liquid is, if possible, and call your Convault representative and appropriate authorities as necessary.
- 11. If there are problems with the leak detector tube or lock, clean and lubricate them as necessary. See item (G) in the maintenance section of the owner's manual. If the Kruger leak indicator does not function properly, remove it and repair or replace it. Due to ultraviolet radiation, the clear cap on the Kruger leak indicator will deteriorate over time. If it has deteriorated, it could be allowing rainwater into the interstitial area and should be replaced. New caps and rings or entire units can be purchased from Kruger, your service company, or your Convault representative. Kruger now offers a guard, which will prolong the life of the cap. If electronic leak detection test fails, call your service company.



- 12. If nozzles, hoses or fittings exhibit signs of wear and tear, repair/replace as necessary or call your service company.
- 13. If trigger mechanism on nozzle exhibits signs of metal fatigue or mechanical failure, replace nozzle or call your service company.
- 14. If pump motor shows signs of overheating or excessive wear, repair as necessary or contact your service company.
- 15. Clean, paint, and repair problem areas as necessary. Order replacements signs or decals from your local Convault representative If the slab is cracking or settling, contact your local Convault representative <u>and</u> your slab installer. If you have questions, call your local Convault representative.
- 16. If grounding wires are not attached properly, make appropriate changes or call your installer or your service company.

### **Other Periodic Maintenance:**

- 17. Filters can be purchased from your Convault representative or local service company. The date can be scratched on with a sharp object, or written with a permanent marker.
- 18. If bacterial infestation is detected, consult item (H) in the maintenance section of the owner's manual.
- 19. Repair as necessary. Wiring (other than intrinsically safe items) in a class 1 area requires special sealing to prevent explosions.
- 20. If the emergency relief vent exhibits signs of motion restriction, promptly call your installer, your service company, or your Convault representative. Proper operation of this device is critical as most injuries and fatalities that happen in conjunction with fuel fires are due to improper, non-functional emergency relief vents or emergency relief vents replaced with normal pipe caps.
- 21. Most leak detection devices use a float. By removing the device from the leak detector tube and turning it upside down (simulating a floating situation) you can easily check for movement of the float and proper mechanical or electronic indication. If the leak detection device fails to operate properly, call your installer or your service company.
- 22. The fuel gauge can be checked by "sticking" the tank and comparing it to the gauge reading. Some gauges are more accurate than the stick. If the gauge reading varies substantially from the stick reading, contact the gauge manufacturer or service company. If your stick reads in inches only and you need a calibration chart, contact your Convault representative.
- 23. Pump maintenance requirements vary by manufacturer. If you have questions, contact your installer, local service company, or the manufacturer of the equipment.
- 24. If you have a warranty or environmental problem down the road, documentation will be very helpful. We recommend that you keep a copy of the "Maintenance Checklist" with items marked for every maintenance inspection. Notes about problems and corrections can be written on the back of the sheet and used for future reference. Many sites are now required to have a SPCC plan for emergencies on file. If you need a recommendation for companies that do this, please call your Convault representative. The name, phone number and location of your local representative can be obtained from the Convault web site by clicking on "Local Distributor" and your state or country at http://www.convault.com.









February 12, 2018

Mr. Mark Austin, P.E. Town of Hamden 2750 Dixwell Avenue Hamden, CT 06518

### RE: JANUARY-MARCH 2018 QUARTERLY AND SEMI-ANNUAL STORMWATER MONITORING REPORTING, DEPARTMENT OF PUBLIC WORKS GARAGE, VOED BUILDING, AND TRANSFER STATION, HAMDEN, CT (HRP #HAM4063.WM)

Dear Mr. Austin:

Attached please find the Stormwater Monitoring Reports (SMRs) and visual inspection forms for quarterly and semi-annual monitoring conducted by HRP Associates, Inc. (HRP) at the above mentioned facilities for the period covering January through March 2018.

HRP collected samples and performed visual monitoring on January 12, 2018 at three Town facilities referenced above. This sampling event also satisfies the October 1, 2017 through March 31, 2018 semiannual monitoring requirement. Semi-annual sampling performed in November 2017 will fulfill the "catch up" sampling required by the CT DEEP for the previously missed period (April 1 through September 30, 2017).

Semi-annual chemical analysis is no longer required for the remainder of the permit term from any of the outfalls located at the VOED facility. Therefore, there are no corresponding SMRs for this facility. The SMRs for sample collection at the Transfer Station and the Public Works Garage are included in Attachment 1. Please sign the "Statement of Certification" on page 3 of the SMRs, make a copy for your records, and submit the signed SMRs to CT DEEP to the address below by April 5, 2018:

Water Toxic Program Coordinator Bureau of Water Protection and Land Reuse CT Department of Energy and Environmental Protection 79 Elm Street Hartford, CT 06106-5127

Supplemental data for this sample event (sample collection information and the laboratory report), required to be maintained by the Town of Hamden, is included in Attachments 2 and 3. A copy of the signed SMRs should be filed along with the data provided in Attachment 2 of this report. The quarterly visual sampling reports are included as Attachment 3.

Mr. Mark Austin February 12, 2018 Page 2

If you have any questions or require additional information, please feel free to contact HRP at (860) 674-9570.

Sincerely,

Curryn & dago

Carrolyn H. Izzo Project Geologist

Attachments cc: Joe Colello, Public Works Dept., 1125 Shepard Avenue, Hamden, CT 06514

Correre M. Quer

Correne M. Auer, P.E. Senior Project Engineer

Vipin June i

Vipin Sumani, P.E. Project Manager

January-March 2018 Quarterly And Semi-Annual Stormwater Monitoring Reporting Department of Public Works Garage, VOED Building, and Transfer Station, Hamden, CT

## ATTACHMENT 1 Stormwater Monitoring Report (for submission to CT DEEP)

HRP



### General Permit for the Discharge of Stormwater Associated with Industrial Activity, effective 10/1/2011 Stormwater Monitoring Report Form Sector G - Municipal or Federal Facilities

### Facility Information

Permittee Name: <u>Town of Hamden</u>	Site Name: Hamden PWG
Mailing Address: 2750 Dixwell Ave., Hamden, C	CT 06518
Contact Person: Mark Austin	Title: Town Engineer
Business Phone: 203-287-7040 ext.:	Email: MAustin@Hamden.com
Site Address: 1125 Shepard Ave., Hamden, CT	
Receiving Water (name/basin): Mill River (Basin	1 No. 5302)
Permit #: GSI 001682 Primary SI	IC: <u>9199</u>
Discharges into an Impaired Waterbody: Yes	NO (If yes, complete the table on page 3 of this form)

### Sample Information

Sample Location: Outfall 001	_Person Collecting Sample: C. Izzo, HRP Assoc.			
Date/Time Collected: 1/12/18 / 13:55	Date of Previous Storm Event: 12/25/2017			
This report is for samples required: Semi-annu	ally 🛛 Annually 🔲 Other 🔲			
Check here if the sample contains snow or ice melt:				
Check here if a benchmark exceedance is solely	/ due to background or off site sources			

### Monitoring Results

-Parameter  -	Required Frequency	Résults (Units)	Benchmark	Benchmark Exceedance (see pg 4)	-rTest-Method	Laboratory Name
Oil & Grease	Semi-annual	NA	5.0 mg/L			
Rainfall pH	Semi-annual	NA	n/a			
Sample pH	Semi-annual	N/A	5-9 SU		······	
COD ·	Semi-annual	280 mg/L	75 mg/L		EPA 410.4	CTL PH0547
TSS	Semi-annual	250 mg/L	90 mg/L		SM 26540D	CTL PH0547
TP	Semi-annual	1.1 mg/L	0.40 mg/L	$\boxtimes$	EPA 365.1	CTL PH0547
TKN	Semi-annual	1.5 mg/L	2.30 mg/L		EPA 351.2	CTL PH0547
NO <sub>3</sub> -N	Semi-annual	Exempt	1.10 mg/L			
Total Copper	Semi-annual	NA	0.059 mg/L			· ·
Total Zinc	Semi-annual	NA	0.160 mg/L			
Total Lead	Semi-annual	NA	0.076 mg/L		· .	
24 Hr. LC <sub>50</sub>	Annual-Year 1&2	NA	n/a			· ·
48 Hr. LC <sub>50</sub>	Annual-Year 1&2	NA	n/a			

\* See Additional Sector G Monitoring Section on page 3 of this form for Federal or Municipal facilities with incidental solid deicing material storage only.

#### Exemptions

List here any parameter(s) that will not be sampled for the remainder of the permit term: see note below O&G, pH, NO3-N, Total Cu, Total Zn, Total Pb

**NOTE:** Complete the "Data Tracking Table" (page 4 on this form) to show the parameter is eligible for the monitoring exemption in Section 5(e)(1)(B)(iii) of the general permit. If you are discontinuing monitoring for impaired water parameters (per Section 5(e)(1)(D)), or parameters that are present due to natural or background levels or off site run-on (per Section 5(e)(1)(B)(V)), attach additional supporting information to this form.

BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE DEEP-PED-SMR-SECTOR.G.NOT.CTDOT-014 1 of 4

### STORMWATER ACUTE TOXICITY TEST DATA SHEET

(required annually only during Year 1 and Year 2 of the permit)

Site Name: Hamden PWG	
Date/Time Begin:	Date/Time End:
Sample Hardness:	Sample Conductivity:
Test Species: Daphnia pulex < 24 hrs old	Dilution Water Hardness:

Effluent Dilution	Numbe	er of Org Survivin	anisms g	Diss	olved Ox (mg/L)	kygen	T	emperat (°C)	ure		pH (su)	
Hour	00	24	48	00	24	48	00	24	48	00	24	48
CONTROL 1										1		
CONTROL 2												<u> </u>
CONTROL 3						1		1				
CONTROL 4							1					
6.25% A							1	1	}			<u> </u>
6.25% B							1			<b> </b>		
6.25% C												
6.25% D												
12.5% A												
12.5% B											· · · · · · · · · · · · · · · · · · ·	<u>.</u>
12.5% C											-	
12.5% D			,									
25% A												
25% B				· ·			•				· ·	
25% C					10							
25% D												
50% A				. ]								
50% B												·
50% C								· ·				
50% D										i		
100% A			I	·	1							
100% B												
100% C												
100% D												

### REFERENCE TOXICANT RESULTS

Test Species	Date 23-22 Reference Toxicant 21-2 Source LC50
Daphnia pulex	

BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE DEEP-PED-SMR-SECTOR.G.NOT.CTDOT-014 2 of 4 2 of 4

### Additional Monitoring: Sector G

### For Federal or Municipal facilities with incidental solid deicing material storage only:

Parameter	Required Frequency	Results (units)	Benchmark-	Test Method	Laboratory Name
Chloride	Semi-annual Years 1&2 only		n/a		
Cyanide	Semi-annual Years 1&2 only		n/a		

### Additional Monitoring for Discharges to Impaired Waters (if applicable):

Parameter	Frequency	Results (units)	Test Method	Laboratory Name
· · ·				

### **Statement of Certification**

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute."

aud

Signature of Permittee

Mark Austin, P.E. Name of Permittee (print or type)

Curtyn & afzo

Signature of Preparer (if different than above)

Carrolyn Izzo, HRP Associates, Inc. Name of Preparer (print or type) 220-2017

Date

Town Engineer Title (if applicable)

2/8/2017 Date

Project Geologist Title (if applicable)

Please send all completed forms to:

WATER TOXICS PROGRAM COORDINATOR BUREAU OF WATER PROTECTION AND LAND REUSE CT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION 79 ELM STREET HARTFORD, CT 06106-5127

BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE DEEP-PED-SMR-SECTOR.G.NOT.CTDOT-014 3 of 4

Rev. 01/24/2013

### General Permit for the Discharge of Stormwater Associated with Industrial Activity, effective 10/1/2011 Data Tracking Sheet Sector G-Municipal or Federal Facilities

Permittee Name: Town of Hamden

Permit #: GSI 001682

Site Name: Hamden PWG

Site Address: 1125 Shepard Avenue, Hamden, CT

Sample Location: Outfall 001

Enter the sample dates and the data reported for the 4 most recent semi-annual sample results at this discharge location in the chart below. To determine the average for the four samples add up each of the four results and then divide that number by 4. **Only monitoring collected under the current permit** (effective 10/1/11,) can be used to earn the monitoring exemption.

#### Average = (Sample 1+ Sample 2 + Sample 3 + Sample 4) 4

		Sample Result         4           11/16/17         1/12/18         4							
Parameter		2	3	STATE 2	Selection of the des		Qualify for:		
Sample Date	11/16/17	1/12/18		A CONTRACTOR OF	Average	Benchmark*	exemption?		
O&G	N/A	N/A			CONTRACTOR AND A CONTRACT OF	5.0 mg/L	<u>125-10-101 -00-100-5</u>		
Sample pH	N/A	N/A				5-9 S.U.			
COD	120	280			150	75 mg/L	No		
TSS	92	250			171	90 mg/L	No		
TP	0.23	1.1	-		0.67	0.40 mg/L	No		
TKN	1.6	1.5			1.55	2.30 mg/L	No		
NO <sub>3</sub> -N	N/A	N/A				1.10 mg/L			
Total Copper	N/A	N/A				0.059 mg/L			
Total Zinc	N/A	N/A				0.160 mg/L			
Total Lead	N/A	N/A				0.076 mg/L			

\*If the average of the 4 most recent samples is less than the benchmark listed, your facility is no longer required to sample semi-annually for that parameter for the rest of the permit (current permit expires 9/30/2016). If your facility qualifies for an exemption from monitoring for sample pH, your facility is also exempt from monitoring rainfall pH for the remainder of the permit.

If the average of the four (4) most resent samples is equal to or greater than the benchmark listed, check the appropriate box on page 1. If so, you have exceeded the benchmark and must continue to sample this parameter semiannually until the average is below the benchmark. See Section 5(e)(1)(B) of the General permit for requirements when exceeding a benchmark.

If the sample results reported by the testing laboratory were below detection limit, for the purpose of averaging, use a value that is  $\frac{1}{2}$  the detection limit for that parameter in the formula above. For example, if the result for Oil & Grease was <2.0 mg/L, use a value of 1.0 mg/L for determining the average. Please refer to section 5 e(1)B(iii) for a more detailed explanation.

.....



#### General Permit for the Discharge of Stormwater Associated with Industrial Activity, effective 10/1/2011 Stormwater Monitoring Report Form Sector G - Municipal or Federal Facilities

### Facility Information

Permittee Name: Town of Hamden	Site Name: Hamden PWG
Mailing Address: 2750 Dixwell Ave., Hamden, C	
Contact Person: Mark Austin	Title: Town Engineer
Business Phone: 203-287-7040 ext.:	Email: MAustin@Hamden.com
Site Address: 1125 Shepard Ave., Hamden, CT	
Receiving Water (name/basin): Mill River (Basin	No. 5302)
Permit #: GSI 001682 Primary SI	C: <u>9199</u>
Discharges into an Impaired Waterbody: Yes	No 🛛 (If yes, complete the table on page 3 of this form)
Sample Information	

### Sample Information

Sample Location: Outfall 003	Person Collecting Sample: C. Izzo, HRP Associates									
Date/Time Collected: 1/12/18 / 14:10 Date of Previous Storm Event: 12/25/201										
This report is for samples required:	Semi-annually Annually D Other									
Check here if the sample contains snow or ice melt:										
Check here if a benchmark exceedar	ice is solely due to background or off site sources									

### **Monitoring Results**

• Parameter	Required Frequency	Résults (Units)	Benchmark	Benchmark Exceedance (see pg 4)	:∽Test:Method⊦	Laboratory Name
Oil & Grease	Semi-annual	ND<2.0	5.0 mg/L			
Rainfall pH	Semi-annual	6.59	n/a			
Sample pH	Semi-annual	8.15	5-9 SU			
COD	Semi-annual	490 mg/L	75 mg/L			
TSS	Semi-annual	880 mg/L	90 mg/L			
TP	Semi-annual	0.72 mg/L	0.40 mg/L			
TKN	Semi-annual	1.2 mg/L	2.30 mg/L			
NO <sub>3</sub> -N	Semi-annual	ND<0.55	1.10 mg/L		SM 4500-NO3 F	CTL PH0547
Total Copper	Semi-annual	0.070 mg/L	0.059 mg/L			· ·
Total Zinc	Semi-annual	0.36 mg/L	0.160 mg/L			
Total Lead	Semi-annual	0.041 mg/L	0.076 mg/L			
24 Hr. LC <sub>50</sub>	Annual-Year 1&2	N/A	n/a			
48 Hr. LC <sub>50</sub>	Annual-Year 1&2	N/A	n/a			

\* See Additional Sector G Monitoring Section on page 3 of this form for Federal or Municipal facilities with incidental solid deicing material storage only.

#### Exemptions

List here any parameter(s) that will not be sampled for the remainder of the permit term: see note below

**NOTE:** Complete the "Data Tracking Table" (page 4 on this form) to show the parameter is eligible for the monitoring exemption in Section 5(e)(1)(B)(iii) of the general permit. If you are discontinuing monitoring for impaired water parameters (per Section 5(e)(1)(D)), or parameters that are present due to natural or background levels or off site run-on (per Section 5(e)(1)(B)(V)), attach additional supporting information to this form.

BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE DEEP-PED-SMR-SECTOR.G.NOT.CTDOT-014 1 of 4

### STORMWATER ACUTE TOXICITY TEST DATA SHEET (required annually only during Year 1 and Year 2 of the permit)

 Site Name: NA (CTL No. 12204)

 Date/Time Begin:
 Date/Time End:

 Sample Hardness:
 Sample Conductivity:

 Test Species: Daphnia pulex < 24 hrs old</td>
 Dilution Water Hardness:

Effluent Dilution		er of Org Survivin	ganisms g	Diss	solved O (mg/L)	xygen	T	emperat (°C)	ure		pH (su)	
Hour	<u>00</u>	24	48	00	24	48	00	24	48	00	24	48
CONTROL 1			]			1		<u> </u>			<u> </u>	+0
CONTROL 2							1		<u> </u>			
CONTROL 3							-					
CONTROL 4						<u> </u>	1				1	
6.25% A									L	1		<u> </u>
6.25% B				· .			<u> </u>					
6.25% C	•							· · · · · · · · · · · · · · · · · · ·				
6.25% D						<u> </u>				······································	<u>.</u>	<u> </u>
12.5% A			·								1	
12.5% B										· · · · · · · · · · · · · · · · · · ·		
12.5% C					· ·	······ ····						
12.5% D					,							
25% A												
25% B					1							
25% C		· .	· · ·			······································					-	
25% D												
50% A		.										
50% B												
50% C						·····						·
50% D											· · · · · · · · · · · · · · · · · · ·	
100% A		[								<u></u>	 	
100% B												
100% C		· · · · ·										
100% D												

### **REFERENCE TOXICANT RESULTS**

Test Species	Date	A Reference To	ourcelstation	LC.
Daphnia pulex				
8				1

BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE DEEP-PED-SMR-SECTOR.G.NOT.CTDOT-014 2 of 4

.

### Additional Monitoring: Sector G

### For Federal or Municipal facilities with incidental solid deicing material storage only:

Parameter	Required Frequency	Results (units) =	Benchmark	Test Method Laboratory Name
Chloride	Semi-annual Years 1&2 only		n/a	
Cyanide	Semi-annual Years 1&2 only		n/a	

### Additional Monitoring for Discharges to Impaired Waters (if applicable):

Parameter	Frequency	Results (units)	Test Method	Laboratory.Name
			· ·	· · · · · · · · · · · · · · · · · · ·

### **Statement of Certification**

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute."

Signature of Permittee

Mark Austin, P.E. Name of Permittee (print or type)

auchon & afze

Signature of Preparer (if different than above)

Carrolyn Izzo, HRP Associates, Inc. Name of Preparer (print or type) 2-20-2018

Date

Town Engineer Title (if applicable)

2/8/2018 Date

Project Geologist Title (if applicable)

Please send all completed forms to:

WATER TOXICS PROGRAM COORDINATOR BUREAU OF WATER PROTECTION AND LAND REUSE CT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION 79 ELM STREET HARTFORD, CT 06106-5127

BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE DEEP-PED-SMR-SECTOR.G.NOT.CTDOT-014 3 of 4

#### General Permit for the Discharge of Stormwater Associated with Industrial Activity, effective 10/1/2011 Data Tracking Sheet Sector G-Municipal or Federal Facilities

Permittee Name: Town of Hamden

Permit #: GSI 001682

Site Name: Hamden PWG

Site Address: 1125 Shepard Ave., Hamden, CT

Sample Location: Outfall 003

Enter the sample dates and the data reported for the 4 most recent semi-annual sample results at this discharge location in the chart below. To determine the average for the four samples add up each of the four results and then divide that number by 4. **Only monitoring collected under the current permit** (effective 10/1/11,) can be used to earn the monitoring exemption.

#### Average = (Sample 1+ Sample 2 + Sample 3 + Sample 4)

		Sample	e Result					
Parameter		2	3	4	Average	Benchmark*	Qualify for	
Sample Date	11/16/17	1/12/18			Avelaye		rexemption?	
O&G	22	ND<2.0			12	5.0 mg/L	No	
Sample pH	7.4	8.15			7.78	5-9 S.U.	No	
COD	150	490			320	75 mg/L	No	
TSS	76	880			438	90 mg/L	No	
TP	0.29	0.72			0.51	0.40 mg/L	No	
TKN	1.6	1.2		1	1.4	2.30 mg/L	No	
NO <sub>3</sub> -N	0.42	ND<0.05			0.24	1.10 mg/L	No	
Total Copper	ND<0.03	0.070			0.10	0.059 mg/L	No	
Total Zinc	0.16	0.36	-		0.26	0.160 mg/L	No	
Total Lead	0.014	0.041			0.028	0.076 mg/L	No	

\*If the average of the 4 most recent samples is less than the benchmark listed, your facility is no longer required to sample semi-annually for that parameter for the rest of the permit (current permit expires 9/30/2016). If your facility qualifies for an exemption from monitoring for sample pH, your facility is also exempt from monitoring rainfall pH for the remainder of the permit.

If the average of the four (4) most resent samples is equal to or greater than the benchmark listed, check the appropriate box on page 1. If so, you have exceeded the benchmark and must continue to sample this parameter semiannually until the average is below the benchmark. See Section 5(e)(1)(B) of the General permit for requirements when exceeding a benchmark.

If the sample results reported by the testing laboratory were below detection limit, for the purpose of averaging, use a value that is  $\frac{1}{2}$  the detection limit for that parameter in the formula above. For example, if the result for Oil & Grease was <2.0 mg/L, use a value of 1.0 mg/L for determining the average. Please refer to section 5 e(1)B(iii) for a more detailed explanation.



### General Permit for the Discharge of Stormwater Associated with Industrial Activity, effective 10/1/2011 Stormwater Monitoring Report Form Sector G - Municipal or Federal Facilities

### Facility Information

Permittee Name: Town of Hamden	Site Name: Hamden PWG
Mailing Address: 2750 Dixwell Ave., Hamd	
Contact Person: Mark Austin	Title: <u>Town Engineer</u>
Business Phone: 203-287-7040	ext.:Email: MAustin@Hamden.com
Site Address: 1125 Shepard Ave., Hamden	I, CT
Receiving Water (name/basin): Mill River (E	Basin No. 5302)
Permit #: GSI 001682 Prima	ary SIC: 9199
Discharges into an Impaired Waterbody: Y	es No 🔀 (If yes, complete the table on page 3 of this form)
Sample Information	

Sample Location: Outfall 006	Person Collecting Sample: C. Izzo, HRP Associates
Date/Time Collected: 1/12/18 / 13:42	
This report is for samples required:	Semi-annually 🖾 Annually 🔲 Other 🔲
Check here if the sample contains sr	iow or ice melt:
Check here if a benchmark exceedar	nce is solely due to background or off site sources

### Monitoring Results

Parameter	Required Frequency	Results (units)	Benchmark	Benchmark Exceedance (see pg 4)	/Test/Method	Laboratory Name
Oil & Grease	Semi-annual	ND<2.0	5.0 mg/L		Moriani ration there is seen	We say the start of the second se
Rainfall pH	Semi-annual	Exempt	n/a			
Sample pH	Semi-annual	Exempt	5-9 SU			
COD	Semi-annual	500 mg/L	75 mg/L			
TSS	Semi-annual	110 mg/L	90 mg/L			
TP	Semi-annual	1.9 mg/L	0.40 mg/L	$\boxtimes$		
TKN	Semi-annual	ND<0.5	2.30 mg/L			
NO <sub>3</sub> -N	Semi-annual	Exempt	1.10 mg/L		SM 4500-NO3 F	CTL PH0547
Total Copper	Semi-annual	ND<0.020	0.059 mg/L			
Total Zinc	Semi-annual	0.097 mg/L	0.160 mg/L			
Total Lead	Semi-annual	0.023 mg/L	0.076 mg/L			
24 Hr. LC <sub>50</sub>	Annual-Year 1&2	N/A	n/a			
48 Hr. LC <sub>50</sub>	Annual-Year 1&2	N/A	n/a			

\* See Additional Sector G Monitoring Section on page 3 of this form for Federal or Municipal facilities with <u>incidental solid deicing material storage only</u>.

### Exemptions

List here any parameter(s) that will not be sampled for the remainder of the permit term: see note below **pH**, **NO3-N** 

**NOTE:** Complete the "Data Tracking Table" (page 4 on this form) to show the parameter is eligible for the monitoring exemption in Section 5(e)(1)(B)(iii) of the general permit. If you are discontinuing monitoring for impaired water parameters (per Section 5(e)(1)(D)), or parameters that are present due to natural or background levels or off site run-on (per Section 5(e)(1)(B)(V)), attach additional supporting information to this form.

BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE DEEP-PED-SMR-SECTOR.G.NOT.CTDOT-014 1 of 4

### STORMWATER ACUTE TOXICITY TEST DATA SHEET

(required annually only during Year 1 and Year 2 of the permit)

Site Name: NA (CTL No. 12204)	
Date/Time Begin:	Date/Time End:
Sample Hardness:	Sample Conductivity:
Test Species: Daphnia pulex < 24 hrs old	Dilution Water Hardness:

•

Effluent Dilution	Numbe	er of Org Surviving	anisms J	Diss	olved Ox (mg/L)	kygen	Te	emperat (°C)	ure		pH (su)	
Hour	00	24	48	00	24	48	. 00	24	48	00	24	48
CONTROL 1								]				
CONTROL 2												
CONTROL 3												
CONTROL 4												
6.25% A											1	
6.25% B											· · ·	
6.25% C												
6.25% D	•										· .	
12.5% A												
12.5% B			·									
12.5% C												
12.5% D												
25% A												
25% B												
25% C												
25% D	•											· · · ·
50% A									ĺ			
50% B												:
50% C												
50% D												
100% A												
100% B												
100% C			-									
100% D					•							,

### **REFERENCE TOXICANT RESULTS**

Test Species	Datest	Reference=Toxic	ant see See S	ource	LC <sub>50</sub>
Daphnia pulex		· · · · · · · · · · · · · · · · · · ·		· ·	

BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE DEEP-PED-SMR-SECTOR.G.NOT.CTDOT-014 2 of 4

### Additional Monitoring: Sector G

### For Federal or Municipal facilities with incidental solid deicing material storage only:

Parameter	Required Frequency	Results (units) Benchmark	Test Method Laboratory Name
Chloride	Semi-annual Years 1&2 only	n/a	
Cyanide	Semi-annual Years 1&2 only	n/a	

Additional Monitoring for Discharges to Impaired Waters (if applicable):

Parameter	Frequency	Results (units)	Test Method	Laboratory Name

### Statement of Certification

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute."

Signature of Permittee

Mark Austin, P.E. Name of Permittee (print or type)

Curtyn & algo

Signature of Preparer (if different than above)

Carrolyn Izzo, HRP Associates, Inc. Name of Preparer (print or type)

2-20-W1X

Date

Town Engineer Title (if applicable)

2/8/2017

Date

Project Geologist Title (if applicable)

Please send all completed forms to:

WATER TOXICS PROGRAM COORDINATOR BUREAU OF WATER PROTECTION AND LAND REUSE CT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION 79 ELM STREET HARTFORD, CT 06106-5127

BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE DEEP-PED-SMR-SECTOR.G.NOT.CTDOT-014 3 of 4

Rev. 01/24/2013

### General Permit for the Discharge of Stormwater Associated with Industrial Activity, effective 10/1/2011 Data Tracking Sheet Sector G-Municipal or Federal Facilities

Permittee Name: Town of Hamden

Permit #: GSI 001682

Site Name: Hamden PWG

Site Address: 1125 Shepard Ave., Hamden, CT

Sample Location: Outfall 006

Enter the sample dates and the data reported for the 4 most recent semi-annual sample results at this discharge location in the chart below. To determine the average for the four samples add up each of the four results and then divide that number by 4. Only monitoring collected under the current permit (effective 10/1/11,) can be used to earn the monitoring exemption.

### Average = (Sample 1+ Sample 2 + Sample 3 + Sample 4)

4

			e Result		an a		
Barameter Stample Date	<u>11/16/17</u> 6.2	1/12/18	3	Average	Benchmark*	Qualify for exemption?	
Sample pH	Exempt	ND<2.0 Exempt		4.1	5.0 mg/L	No	
COD	1500	500		Exempt	5-9 S.U.	Yes, Previously	
TSS	2400	110		1000	75 mg/L	No	
TP	2.6	1.9		2.25	90 mg/L 0.40 mg/L	No	
TKN NO3-N	7.9 Exempt	ND<0.5		4.2	2.30 mg/L	No	
-		Exempt		Exempt	1.10 mg/L	Yes. Previously	
Total Copper Total Zinc	0.12	ND<0.020		0.07 •	0.059 mg/L	No	
Total Lead	0.50	0.097	· · · · · · · · · · · · · · · · · · ·	0.3	0.160 mg/L	No	
		V.V2.3		0.09	0.076 mg/L	No	

\*If the average of the 4 most recent samples is less than the benchmark listed, your facility is no longer required to sample semi-annually for that parameter for the rest of the permit (current permit expires 9/30/2016). If your facility qualifies for an exemption from monitoring for sample pH, your facility is also exempt from monitoring rainfall pH for the remainder of the permit.

If the average of the four (4) most resent samples is equal to or greater than the benchmark listed, check the appropriate box on page 1. If so, you have exceeded the benchmark and must continue to sample this parameter semiannually until the average is below the benchmark. See Section 5(e)(1)(B) of the General permit for requirements when exceeding a benchmark.

If the sample results reported by the testing laboratory were below detection limit, for the purpose of averaging, use a value that is  $\frac{1}{2}$  the detection limit for that parameter in the formula above. For example, if the result for Oil & Grease was <2.0 mg/L, use a value of 1.0 mg/L for determining the average. Please refer to section 5 e(1)B(iii) for a more detailed explanation.



### **Facility Information**

Permittee Name: Town of Hamden	Site Name: Hamden Landfill, Trans. Sta. & Recyc. Ctr								
Mailing Address: 2750 Dixwell Ave., Hamden, CT 06514									
Contact Person: Mark Austin Title: Town Engineer									
Business Phone: (203) 287-7040 e	ext.: Email: MAustin@Hamden.com								
Site Address: 231 Wintergreen Ave., Hamd	den, CT 06514								
Receiving Water (name/basin): Wintergreen	n Brook (Basin No. 5304)								
Permit #: GSI 001681	Primary SIC: <u>4953</u>								
Discharges into an Impaired Waterbody: Ye	es No X (If yes, complete the table on page 3 of this form)								

### **Sample Information**

Sample Location: Outfall 001	Person Collecting Sample: <u>C. Izzo (HR</u>	P Associates)
Date/Time Collected: 1/12/18 / 12:55	Date of Previous Storm Event: Decemb	er 25, 2017
This report is for samples required:	Semi-annually 🛛 Annually 🗌 Other 🗌	
Check here if the sample contains sr	iow or ice melt:	
Check here if a benchmark exceedar	nce is solely due to background or off site sources	see note below

### **Monitoring Results**

*Parameter ::	Required Frequency	Results (units)	Benchmark	Effluent Limit	Benchmark Exceedance (see pg 4)	Test-Method -	Laboratory Name
Oil & Grease	Semi-annual	Exempt	5.0 mg/L	n/a			
Rainfall pH	Semi-annual	Exempt	n/a	n/a			
Sample pH	Semi-annual	Exempt	5-9 SU	* *			
COD	Semi-annual	190 mg/L	75.mg/L	n/a	$\boxtimes$	EPA 410.4	CTL PH0547
TSS	Semi-annual	260 mg/L.	90 mg/L	*	$\boxtimes$	SM 2540D	CTL PH0547
TP	Semi-annual	1.0 mg/L	0.40 mg/L	n/a	$\boxtimes$	EPA 365.1	CTL PH0547
TKN	Semi-annual	2.2 mg/L	2.30 mg/L	n/a		EPA 351.2	CTL PH0547
NO <sub>3</sub> -N	Semi-annual	Exempt	1.10 mg/L	n/a			
Total Copper	Semi-annual	ND<0.02	0.059 mg/L	n/a		EPA 200.8	CTL PH0547
Total Zinc	Semi-annual	0.080	0.160 mg/L	*		EPA 200.8	CTL PH0547
Total Lead	Semi-annual	0.035 mg/L	0.076 mg/L	n/a		EPA 200.8	CTL PH0547
24 Hr. LC <sub>50</sub>	Annual-Year 1&2	NA	n/a	n/a		NA	NA
48 Hr. LC <sub>50</sub>	Annual-Year 1&2	NA	n/a	n/a		NA	NA

\* See Additional Sector C Monitoring Section on page 3 of this form.

### Exemptions

List here any parameter(s) that will not be sampled for the remainder of the permit term: see note below O&G, pH, NO3-N

**NOTE:** Complete the "Data Tracking Table" (page 4 on this form) to show the parameter is eligible for the monitoring exemption in Section 5(e)(1)(B)(iii) of the general permit. If you are discontinuing monitoring for impaired water parameters (per Section 5(e)(1)(D)), or parameters that are present due to natural or background levels or off site run-on (per Section 5(e)(1)(B)(V)), attach additional supporting information to this form.

BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE DEEP-PED-SMR-SECTOR.C-014 1 of 6

### STORMWATER ACUTE TOXICITY TEST DATA SHEET

(required annually only during Year 1 and Year 2 of the permit)

Site Name: Hamden Landfill, Transfer Station and Recycling Center								
Date/Time Begin:	Date/Time End:							
Sample Hardness:	Sample Conductivity:							
Test Species: <i>Daphnia pulex</i> < 24 hrs old	Dilution Water Hardness:							

(						1						
Effluent Dilution	Numbe	er of Org Survivin	anisms 9	Disso	olved Ox (mg/L)	kygen	Te	Temperature (°C)			pH (su)	·
Hour	00	24	48	00	24	48	00	24	48	00	24	48
CONTROL 1		1								1		[
CONTROL 2												
CONTROL 3												1
CONTROL 4										1		
6.25% A											1	
6.25% B										1		
6.25% C												
6.25% D	-											
12.5% A										].		
12.5% B												
12.5% C												
12.5% D											1	,
25% A												
25% B												
25% C									·			
25% D												
50% A												
50% B												
50% C	•											
50% D												
100% A										-		
100% B												
100% C												:
100% D												

#### **REFERENCE TOXICANT RESULTS**

Test Species	Dates	Refer	ence Toxicant	Source	LC <sub>50</sub> storage
Daphnia pulex			~/		

BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE DEEP-PED-SMR-SECTOR.C-014 2 of 6

, JHI

### Additional Monitoring: Sector C – Landfills and Solid Waste Disposal Areas Only

Parameter	Required Frequency	Results (Units)	Benchmark	Effluent.	Benchmark Exceedance (see pg 4)	Test Method	Laboratory Name
Total Iron	Quarterly	11 mg/L	1 mg/L	n/a	$\boxtimes$	SM 3111B	CTL PH0547
Effluent S	amples*			i de la companya Na serie de la companya de la comp		eghesine <b>na</b> shuthini Da shariya na shuthini	adarritari Castani
BOD	Annually for the entire permit term		n/a	140 mg/L			
TSS	Annually for the entire permit term		n/a	88 mg/L			
Ammonia	Annually for the entire permit term		n/a	10 mg/L			
Alpha Terpineol	Annually for the entire permit term		n/a	0.033 mg/L			-
Benzoic Acid	Annually for the entire permit term		n/a	0.12 mg/L			
p-Cresol	Annually for the entire permit term		n/a	0.025 mg/L			
Phenol	Annually for the entire permit term		. n/a	0.026 mg/L			
Total Zinc	Annually for the entire permit term		n/a	0.200 mg/L			
Sample pH	Annually for the entire permit term	117.4400 (1994) - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1994 - 1	n/a	6-9 mg/L		- -	

\*Annual samples may be taken at the same time as one of the semi-annual samples for the general sampling parameters. An effluent limit applies to any single sample (not average of 4).

### Additional Monitoring for Discharges to Impaired Waters (if applicable)

	Parameter a	Required Frequency	Results (units)	Test Method	Laboratory Name
	·				
		· · · · · · · · · · · · · · · · · · ·			
L					

### **Statement of Certification**

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of the individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute."

Signature of Permittee

Mark Austin, P.E.

Name of Permittee (print or type)

wohn A

Signature of Preparer (if different than above)

Carrolyn Izzo, HRP Associates, Inc. Name of Preparer (print or type) 2-20-2019

Date

Town Engineer Title (if applicable)

2/8/2017

Date

Project Geologist Title (if applicable)

Please send all completed forms to:

WATER TOXICS PROGRAM COORDINATOR BUREAU OF WATER PROTECTION AND LAND REUSE CT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION 79 ELM STREET HARTFORD, CT 06106-5127

#### General Permit for the Discharge of Stormwater Associated with Industrial Activity, effective 10/1/2011 Data Tracking Sheet Sector C –Refuse Systems

Permittee Name: Town of Hamden	Permit #: GSI 001681
Site Name: Hamden Landfill, Transfer Station and Recycling	g Center
Site Address: Wintergreen Brook (Basin No. 5304)	•
Sample Location: Outfall 001	

Enter the sample dates and the data reported for the four (4) most recent semi-annual or quarterly monitoring sample results at this discharge location in the chart below. To determine the average for the four samples add up each of the four results and then divide that number by 4. **Only monitoring collected under the current permit (effective 10/1/11,) can be used to earn the monitoring exemption**.

#### Average = (Sample 1+ Sample 2 + Sample 3 + Sample 4) 4

		Samp	le Result				
Parameteras Sample Date	11/16/17	2 1/12/18	3	4	Average	Benchmark**	Qualify for exemption?
O&G	Exempt	Exempt	·		Exempt	5.0 mg/L	Yes, previously
Sample pH*	Exempt	Exempt			Exempt	5-9 S.U.	Yes, previously
COD	430 mg/L	190 mg/L			310	75 mg/L	No
TSS*	400 mg/L	260 mg/L			330	90 mg/L	No
TP	0.90 mg/L	1.0 mg/L			0.95	0.4 mg/L	No
TKN	3.5 mg/ L	2.2 mg/L	·		2.85	2.30 mg/L	· No
NO <sub>3</sub> -N	Exempt	Exempt			Exempt	1.10 mg/L	Yes, previously
Total Copper	<0.030 mg/L	<0.020 mg/L			<0.030	0.059 mg/L	No
Total Zinc*	0.11 mg/L	0.080 mg/L			0.095	0.16 mg/L	No
Total Lead	0.039 mg/L	0.035 mg/L	· · · · · · · · · · · · · · · · · · ·		0.037	0.076 mg/L	No
Total Iron	10 mg/L	11 mg/L			10.5	1.0 mg/L	No

\*\*If the average of the four (4) most recent samples is less than the benchmark listed, your facility is no longer required to sample semi-annually or quarterly for that parameter for the rest of the permit (current permit expires 9/30/2016).

If the average of the four (4) most resent samples is equal to or greater than the benchmark listed, check the appropriate box on page 1. If so, you have exceeded the benchmark and must continue to sample this parameter semiannually until the average is below the benchmark. See Section 5(e)(1)(B) of the General permit for requirements when exceeding a benchmark.

If the sample result reported by the testing laboratory was below detection limit, for the purpose of averaging, use a value that is ½ the detection limit for that parameter in the formula above. For example, if the result for Oil & Grease was <2.0 mg/L, use a value of 1.0 mg/L for determining the average. Please refer to Section 5 e(1)B(iii) for a more detailed explanation.

\*Due to effluent limits, landfills and solid waste disposal areas within Sector C are required to monitor annually for nine parameters including sample pH, TSS and Zinc for the entire permit term. The pH of uncontaminated rainfall is also recommended to provide background information. See additional

monitoring for landfills and solid waste disposal areas within Sector C on page 2 of this form for this list of parameters.

BUREAU OF MATERIALS MANAGEMENT & COMPLIANCE ASSURANCE DEEP-PED-SMR-SECTOR.C-014 6 of 6



# SPILL PREVENTION, CONTROL & COUNTERMEASURE PLAN

Town of Hamden Public Works Garage 1125 Shepard Ave Hamden, Connecticut 06518

Original Prepared: May 2012

Revision(s): April 2013

Prepared By:

HRP Associates, Inc. 197 Scott Swamp Road Farmington, CT 06032

HRP #: HAM4063.WM

Issued On: June 19, 2018



This Spill Prevention Control and Countermeasure (SPCC) Plan was generated at the request of Town of Hamden Department of Public Works by HRP Associates, Inc. (HRP). It is the privileged property of Town of Hamden Department of Public Works and HRP., and is not to be distributed to or shared with anyone other than authorized personnel of Town of Hamden Department of Public Works, HRP Associates, Inc., and/or local, state, or federal regulatory or emergency response authorities. This SPCC plan has been certified by a Professional Engineer and an original copy has been retained by HRP Any changes or modifications made to this plan (other than non-technical amendments such as changes to phone numbers or names) by Town of Hamden Department of Public Works which are not certified by a Professional Engineer negate the Professional Engineer certification and may lead to a violation of the applicable SPCC regulations.



### **TABLE OF CONTENTS**

PROFE	SSION	AL ENGINEER CERTIFICATION	iv
GENER	RAL FAC	ILITY INFORMATION	v
COMPL	IANCE	INSPECTION PLAN REVIEW PAGE	vi
1.0	INTRO	ODUCTION	1
2.0	FACIL	ITY DESCRIPTION	2
	2.1 2.2	Facility Operations Drainage Pathways and Distance to Navigable Waters	3
3.0	RESPO	ONSIBILITIES, NOTIFICATIONS AND REPORTING	5
	3.1 3.2 3.3	Responsibilities Initial Notifications Regulatory and Response Notifications for All Spills 3.3.1 Connecticut Requirements 3.3.2 Spills Threatening to Reach Navigable Waters 3.3.3 Spills Threatening Human Health or the Sewer 3.3.4 Commercial Clean-Up Contractors	5 6 6 7
	3.4 3.5 3.6	Federal Reporting State Reporting LiabilityError! Bookmark not defin	8 9 e <b>d</b> .
4.0		GENCY PROCEDURES	
5.0	PAST	SPILL EXPERIENCE	12
6.0	ΡΟΤΕΙ	NTIAL SPILL PREDICTION	13
	6.1 6.2	Oil Capacity and Storage Containment and Control Measures	17 17 17
	6.3	<ul><li>6.2.3 Electrical Transformers</li><li>General Practices</li><li>6.3.1 Oil Transfer Procedures</li></ul>	17
		<ul> <li>6.3.1 Oli Marsfel Procedures</li></ul>	20 20 21
7.0	INSPE	ECTIONS	22
	7.1 7.2	Visual Inspections Integrity Testing	



8.0	SPILL ABATEMENT EQUIPMENT AND MATERIALS	25
9.0	SECURITY	26
10.0	TRAINING	27
11.0	FACILITY RESPONSE PLAN	28
12.0	SPCC PLAN AMENDMENT	29
	<ul><li>12.1 Facility Modifications</li><li>12.2 US EPA Requirements</li></ul>	29
	12.2 US EPA Requirements	29
	12.3 5-Year Revisions	29
13 0	IMPLEMENTATION SCHEDULE	30

### **FIGURES**

Figure 1	Site Location Map
Figure 2	Facility Diagram

### **TABLES**

Table 1	Oil Filled Operation Equipment Oil Storage
Table 2	Bulk Fuel Storage
Table 3	Integrity Testing

### **APPENDICES**

- Appendix A SPCC Regulations 40 CFR 112
- Appendix B SPCC Rule Cross-Reference
- Appendix C Spill Reporting Form (Example)
- Appendix D Inspection Logs
- Appendix E Certification of the Applicability of the Substantial Harm Criteria Checklist
- Appendix F Training Documentation Sign-In Form (Example)
- Appendix G Photo Log of Oil Storage Locations
- Appendix H SPCC Records
- Appendix I ConVault Onsite Integrity Testing Procedures



### PROFESSIONAL ENGINEER CERTIFICATION

I hereby certify that (i) I am familiar with the requirements of 40 CFR Part 112, (ii) my agent has visited and examined the facility, (iii) the plan has been prepared in accordance with good engineering practices including the consideration of applicable industry standards, (iv) procedures for required inspections and testing have been established, (v) and the Plan is adequate for the facility.

	Michael J. Mastroluca, P.E. Printed Name of Registered Professional Engineer HRP Associates, Inc. 197 Scott Swamp Road, Farmington, CT 06032 860-674-9570	
(Professional Engineer Seal)	Signature of Registered Professional Engineer	
Date:	Registration No: <u>22681</u> State: <u>Connecticut</u>	-

Note: This certification is contingent on meeting the action items listed in Section 10.0 of this plan. This certification shall in no way relieve the Town of Hamden Department of Public Works of its duty to prepare and fully implement a SPCC Plan in accordance with 40 CFR 112.7, as required by 40 CFR 112.3(a), (b), and (c).



### **GENERAL FACILITY INFORMATION**

Name and Location of Facility:	Town of Hamden Public Works Garage (PWG) 1125 Shepard Avenue Hamden, Connecticut 06518
Type of Facility:	Municipal Government, Public Works Garage
Telephone Number:	(203) 287-7044
Normal Operating Schedule:	7:00 am to 4:30 pm Monday through Friday
Name and Address of Owner/Operator:	Town of Hamden
Designated Person Responsible for Spill Prevention at the Facility:	Joe Colello, Superintendent of Sanitation & Waterways (203) 287-2600 (office)/(203) 619-4052 (cell)
Date of Initial Operation of Facility:	1970
Oil Spill History:	None
Receiving Waters:	Unnamed Brook which discharges to Shepard Brook

### MANAGEMENT APPROVAL

The Town of Hamden PWG is committed to the prevention of discharges of oil to navigable waters and the environment, and maintains the highest standards for spill prevention control and countermeasures through regular reviews, updating and implementation of this SPCC Plan for its facility in Hamden, Connecticut. This SPCC Plan will be implemented as herein described. By signing this document, I certify that I am thoroughly familiar with this SPCC Plan.

Authorized Facility Representative: <u>Joseph Colello</u>
---

|--|



#### COMPLIANCE INSPECTION PLAN REVIEW PAGE

In accordance with 40 CFR 112.5(b), a review and evaluation of this SPCC Plan is conducted at least once every five years. As a result of this review and evaluation, The Town of Hamden PWG will amend the SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of review. Any amendment to the SPCC Plan shall be certified by a Professional Engineer\* (in accordance with 40 CFR 112.3(d)) within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.

REVIEW DATE	PLAN UPDATE REQUIRED (YES/NO)	DESCRIPTION OF REQUIRED REVISION	**SIGNATURE CERTIFYING TO STATEMENT BELOW	DATE OF AMENDMENT (if necessary)
10/2017	Yes	5 year review and update	⊠ will amend □ will not amend Signature:	
			□ will amend □ will not amend Signature:	
			□ will amend □ will not amend Signature: 	
			□ will amend □ will not amend Signature:	
			□ will amend □ will not amend Signature: 	

# **CERTIFICATION STATEMENT**

\*A Professional Engineer's certification is required if (1) the site maintains oil in excess of 10,000 gallons, (2) the site has a single discharge exceeding 1,000 gallons or two discharges each exceeding 42 gallons within a twelve month period in the three years prior to the SPCC Plan self certification date, or (3) the SPCC Plan deviates from any requirements as allowed by 40 CFR 112.7(a)(2) and 112.7(d) except as provided in 40 CFR 112.6(c).



#### 1.0 INTRODUCTION

The Oil Pollution Prevention Regulation in 40 CFR Part 112 was developed in order to (1) prevent oil discharges from reaching navigable waterways (defined to include, but not limited to: lakes, rivers, streams, and wetlands) and adjoining shorelines, and (2) to ensure effective response to oil discharges.

Required under this rule is the development of a Spill Prevention, Control and Countermeasure Plan (SPCC) for applicable owners, users and/or operators of facilities that could possibly discharge oil in harmful quantities into navigable waterways.

On January 14, 2010, the Environmental Protection Agency (EPA) put into effect a final rule amending the SPCC regulations. Under these rule requirements, owners or operators of facilities that "drill, produce, gather, store, use, process, refine, transfer, distribute, or consume oil and oil products" must prepare a SPCC if any of the following storage practices apply:

- Greater than 1,320 gallons of oil is stored in above-ground containers/tanks, or
- Greater than 42,000 gallons of oil is stored in underground containers/tanks provided the underground storage tank (UST) is not subject to the technical requirements of the UST regulations, 40 CFR Part 280 or 281.

The SPCC regulations established is a deminimus container size of 55 gallons. Only containers of oil (defined as "oil of any kind or in any form, including, but not limited to...petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil") with a capacity of 55 gallons or greater are counted in the calculation of the 1,320-gallon threshold. All containers with a storage capacity of less than 55 gallons of oil are exempt from the SPCC regulations. A complete copy of the SPCC regulations is included in Appendix A.

Town of Hamden PWG is required to prepare, maintain, and follow a SPCC plan since greater than 1,320 gallons of petroleum products are stored above-ground and the discharge of oil could potentially impact the Unnamed Brook from the onsite storm drainage system.



# 2.0 FACILITY DESCRIPTION

#### 2.1 Facility Operations

The Town of Hamden PWG is located at 1125 Shepard Avenue in Hamden, Connecticut (Figure 1). The facility is made up of one main building, which consists of administrative offices and a vehicle garage. A 6,000 square foot addition was made to the east side of the building in 2014. The Town of Hamden PWG maintains a sand/salt storage shed, inside and outside equipment and vehicle storage, stockpiles of construction materials (stone, etc) and a 10,000-gallon ConVault dual compartment above-ground fuel storage tank and fueling station. The facility uses/stores a variety of oil-containing products in storage containers of less than 55 gallons. Most of these containers are stored in flammable cabinets or on a containment pallet.

The Town of Hamden PWG's total above-ground oil storage volume is approximately 10,379 gallons and includes the following containers with capacities at or exceeding 55 gallons typically at any one time:

- 6,000-gallons gasoline ConVault storage tank (vehicle fueling)
- 4,000-gallons diesel ConVault storage tank (vehicle fueling)
- 125-gallon (approx.) mineral oil Transformer
- 254-gallon diesel Generator Reservoir

In addition approximately 27 town vehicles (payloaders, dump trucks, etc.) with fuel capacities greater than 55-gallons are located at the facility. The EPA has determined that oil-filled motor vehicle tanks or "motive power containers" used solely to fuel the propulsion of a vehicle are not governed by SPCC rules per 40 CFR 112(d)(7). Additionally, not listed above are those containers located on-site that are in storage containers of less than 55-gallons. Although these containers are exempt from the SPCC regulations, any spill or release from these sources should be managed in accordance with this Plan.

With the exception of the oil/water separator, the Town of Hamden Public Works Garage currently has no underground storage tank[s] on site. Interior floor drains tie into one 1,500 gallon oil/water separator. This oil/water separator drains to the sanitary sewer and operates per the requirements of the CT DEEP's Vehicle Maintenance General Permit. Oil/Water separators used exclusively to treat wastewater are exempt from SPCC requirements and do not count towards the facility-wide storage capacity. It is included in this Plan as a Best Management Practice.

The location of storage units subject to SPCC regulations are depicted on Figure 2, the Facility Diagram. Please note that Figures 1 and 2 have been provided at the end of the text for convenience to the reader and user of this SPCC Plan.



# 2.2 Drainage Pathways and Distance to Navigable Waters

The Town of Hamden PWG is registered under the *General Permit for the Discharge Associated with Industrial Activities*, effective October 1, 2011. This General Permit requires that the PWG prepare and implement a Stormwater Pollution Prevention Plan, which is maintained at the facility.

There are five regulated outfalls from this site, identified on the Site Map (Figure 2) as Outfall 001, Outfall 002, Outfall 003, Outfall 004, and Outfall 006.

The following outfall changes have occurred since the 2011 General Permit became effective:

- Outfall 005 was eliminated in 2013; the drainage swale was eliminated (resulting in ground infiltration).
- Outfall 001A has been added for a small area where surface drainage discharges to the unnamed brook which borders the site. There is no indication that this location has ever been monitored.
- Outfall 004 has been added as a regulated outfall, with the potential to receive discharge from a portion of the fueling station and trucks traffic.

#### Site Drainage Areas:

Outfall 001 collects stormwater from the building's roof, age, the salt storage shed, equipment storage (i.e. snow plows, screeners), a scrap metal roll-off, a vehicle loading bay, the pump out area for the 1,000-gallon oil/water separator (cleanout area),, and crushed stone and road milling storage bins. Stormwater from this drainage area is collected in one catch basin, and discharges through a concrete pipe to an unnamed brook that runs north-south along the eastern boundary of the site, discharging to the Shepard Brook.

Outfall 001A is a small area adjacent to the unnamed brook which runs adjacent to the site. A concentrated surface discharge drains to the brook. Some site equipment may be stored in this area intermittently. This location is not currently monitored.

Outfall 002 is understood to receive drainage from the Town of Hamden PWG roof only (as noted by the 2015 Town Engineer). This should be verified with the 2018 plan update. Based on this understanding (no significant pollution sources), Outfall 002 was determined not to be a sample location.

Outfall 003 receives stormwater from a catch basin east of the fueling station. The drainage area for this outfall includes the fueling station and truck storage to the southeast of the Town of Hamden PWG building. Under significant storm conditions, this outfall may also receive overflow from an on-site retention pond that is designed to collect stormwater sheet flow from the surrounding area (which is mostly gravel and may include gravel storage).

Outfall 004 is a drainage swale that receives stormwater drainage from a portion of the fueling area, and the employee parking lot.



Outfall 005 was removed in 2013 as described above.

Outfall 006 is a drainage swale that receives stormwater from the gravel lot on the northeast corner of the site. Millings and a scrap metal roll-off are stored in this drainage area. In the Fall this area is used as for temporally leaf storage (prior to DPW transfer of the leaves to the Hamden landfill).

Facility drainage, based on a visual observation of site contours, is toward the east side of the property. It is estimated, based on a review of the Mount Carmel #80 USGS 7.5 Minute Topographic Quadrangle Map that drainage from the site would flow to an unnamed tributary of Shepard Brook, located approximately 100 feet south of the site.

Note that off-site drainage enters the site (at the entrance to the facility) as run-on from Shepard Avenue.



# 3.0 RESPONSIBILITIES, NOTIFICATIONS AND REPORTING

#### 3.1 Responsibilities

The duties of the SPCC Emergency Coordinator and his/her alternate are to routinely inspect all storage and handling facilities and take corrective action when conditions warrant.

In addition, the SPCC Emergency Coordinator will set up and maintain: necessary spill emergency procedures; recordkeeping; personnel training; SPCC plan reviews and amendments (if required); and reporting requirements.

In the event of an oil release, the employees of the PWG shall carry out the procedures outlined herein under the direction of the SPCC Coordinator or his/her alternate(s).

#### 3.2 Initial Notifications

In the event of any emergency or occurrence related to the release or threatened release of petroleum products, the following persons shall be notified immediately:

Name	Office Phone	Home Phone	Cell Phone
Joseph Colello (SPCC Emergency Coordinator)	(203) 287-2600		(203) 619-4052
Mike Siciliano (Alternate SPCC Emergency Coordinator)	(203) 287-2600		(203) 530-9674

The Emergency Coordinator and his/her Alternate Emergency Coordinator have been chosen based on the following qualifications:

- Must be on-site or on call at all times
- Must be familiar with the facility layout
- Must know the locations and characteristics of the materials handled
- Must be familiar with all operations and activities at the facility
- Must be thoroughly familiar with emergency plans
- Must know the locations of all records
- Must have the <u>authority</u> to commit facility resources in the event of an emergency

The Emergency Coordinator or the designated Alternate will then notify the proper off-site authorities about the actual emergency, following their initial action at the site.

#### 3.3 Regulatory and Response Notifications for All Spills

The guidelines in this section apply to all spills: petroleum products, chemicals, and/or non-hazardous and hazardous waste.



#### **Connecticut Requirements**

The Connecticut Department of Energy and Environmental Protection (CTDEEP) shall be notified immediately of any spill that poses a potential threat to human health or the environment

CTDEEP Emergency Response Unit, Hartford (24 hours)

Phone: (860) 424-3338

Within 24 hours of the spill, The Town of Hamden PWG is required to report such facts such as:

- the location;
- the quantity and type of substance, material or waste;
- the date and the cause of the incident
- the name and address of the owner
- the name and address of the person making the report and his relationship to the owner

Note: Unless specifically requested, the CTDEEP does not require a written submission when reporting a spill. A copy of an example Spill Reporting form for internal use can be found in Appendix C.

#### Spills Threatening to Reach Navigable Waters

In the event that a spill of <u>oil</u> in any amount (or enough to cause sheen) threatens to reach navigable waters, the National Response Center in Washington as well as local authorities shall be notified immediately:

Authorities	Phone Numbers
National Response Center (NRC)	(800) 424-8802
EPA Region I	(617) 424-8802
CT DEEP	(860) 424-3338

With any of the above notifications, Town of Hamden PWG personnel will be ready to report the following information immediately following the discovery of the event:

- Your name, location, organization, and telephone number;
- Name and address of the party responsible for the incident;
- Date and time of the incident;
- Location of the incident;
- Source and cause of the release or spill;
- Types of material(s) released or spilled;
- Quantity of materials released or spilled;
- Danger or threat posed by the release or spill;
- Number and types of injuries (if any);
- Weather conditions at the incident location;
- Any other information that may help emergency personnel respond to the incident.



*Navigable waters* of United States are defined in 40 CFR Part 110.1 to include interstate waterways or intrastate waterways including lakes, rivers and streams which may be utilized by interstate travelers for recreational purposes. *Navigable waters* also include lakes, rivers and streams from which fish or shellfish are taken. The complete definition may be found in Section 502(7) of the Federal Water Pollution Control Act. "Navigable waters" for the purpose of the Town of Hamden PWG's response plan includes a spill that may enter the storm drainage system and/or may reach the unnamed brook.

#### Spills Threatening Human Health or the Sewer

In the event the Emergency Coordinator or designated alternate determines that the release of materials threatens human health outside the facility and evacuation may be necessary, he/she will also report his findings to the local authorities:

Authority	Phone Numbers		
CTDEEP Emergency Response	(860) 424-3338		
Town of Hamden Police Department	911 or (203) 230-4000		
Town of Hamden Fire Department	911 or (203) 407-5880		
Hospital of Saint Raphael	(203) 789-3000		

If the spill has discharged down the drain to local sewer authority, immediately contact:

Authority	Phone Numbers
Greater New Haven Water Pollution Control Authority	203-466-5260

#### **Commercial Clean-Up Contractors**

Should a spill contractor be needed, the PWG will contact one of the following contractors:

Contractor	Phone Numbers
Connecticut Tank Removal, Inc.	(203) 384-6020
United Industrial Services	(203) 235-3753

The PWG should contact the above contractor and invite a representative to visit the facility in order to become familiarized with the site. This will enable the contractor to promptly dispatch a well-equipped spill response team to the facility in the event of a spill.



# 3.4 Federal Reporting

After a spill or release of greater than 1,000 gallons or after two spills of greater than 42 gallons within any twelve-month period, or if the spill impacted a navigable waterway, the Emergency Coordinator will report the event(s) to the following agency within 60 days.

The Regional Administrator U.S. Environmental Protection Agency – Region I 5 Post Office Square – Suite 100 Boston, Massachusetts 02109-3912 Phone: (617) 918-1010

The EPA report will include:

- Name of the facility;
- Your name;
- Location of the facility;
- Maximum storage or handling capacity of the facility and normal daily throughput;
- Corrective action and countermeasures you have taken, including a description of equipment repairs and replacement;
- An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;
- The cause of the discharge, including a failure analysis of the system or subsystem in which the failure occurred;
- Additional preventive measures you have taken or contemplated to minimize the possibility of recurrence; and
- Such other information as the Regional Administrator may reasonably require pertinent to the Plan or spill event.

As required by EPA Federal Regulation 40 CFR 112.4(c), a copy of the EPA report will also be submitted to the CTDEEP Emergency Response Section at the following address:

The Connecticut Department of Energy and Environmental Protection Hazardous Materials Management Unit Oil and Chemicals Spills Section 79 Elm Street Hartford, Connecticut 06106-5127 (860) 424-3338

If 1,000 gallons or more of material is spilled to a navigable waterway, or there are two or more reportable spills (to the National Response Center) in a year, the EPA may conduct an inspection of the site and review this Plan. Following the inspection and review, the EPA may require facility modifications and/or operational changes to minimize the possibility of future spills.



#### 3.5 State Reporting

If the Town of Hamden PWG staff has determined that a reportable spill or release of petroleum products (or other virgin or waste chemicals) has occurred, the Emergency Coordinator must contact the CTDEEP within twenty-four (24) hours of the event to the following agency:

Connecticut DEEP Emergency Response Unit, Hartford (24 Hours)

Phone: (860) 424-3338

For all spills reported to the CTDEEP, the Town of Hamden PWG will submit written information in the form of a letter describing the details of the discharge or spill and supporting the adequacy of the response action within 30 days of the discovery of the reportable discharge or spill.

The documentation shall contain one of the following items:

- A statement that the discharge or spill response action has been completed and a description of how the response action was conducted. The statement shall include the initial report information outlined in Section 3.3 of this plan;
- A request for an extension of time to complete the response action, along with the reasons for the request. The request shall also include a projected work schedule outlining the time required to complete the response action. The executive director may grant an extension up to six months from the date the spill or discharge was reported. Unless otherwise notified by the appropriate regional manager or the Emergency Response Team, the Town of Hamden PWG personnel shall proceed according to the terms of the projected work schedule; or
- A statement that the discharge or spill response action has not been completed nor is it expected to be completed within the maximum allowable six month extension. The statement shall explain why completion of the response action is not feasible and include a projected work schedule outlining the remaining tasks to complete the response action. This report will be mailed to:

The Connecticut Department of Energy and Environmental Protection Hazardous Materials Management Unit Oil and Chemicals Spills Section 79 Elm Street Hartford, Connecticut 06106-5127



#### 4.0 EMERGENCY PROCEDURES

In the event of a spill or release, the emergency procedures outlined in the Emergency Procedures flow chart provided on the following page will be followed. A copy of the emergency procedure flow chart will be in or near the Primary Emergency Coordinator's office, as well as all of the alternates. If any employee discovers a spill or release, it will immediately be reported to the Emergency Coordinator. If the Emergency Coordinator or alternate determines that the spill or release cannot be handled by on-site personnel and/or may be a threat to either health or the environment, the listed professional spill response contractor (previously listed in Section 3.3) will be contacted.

The Emergency Coordinator or Alternate is responsible for determining when a spill event has concluded or is under control sufficiently such that normal activities and personnel presence may be safely resumed.

<u>Only if the spill or release can be safely handled by on-site personnel, the following actions may be</u> conducted:

- While awaiting arrival of the Emergency Coordinator or designated Alternates, personnel shall commence containment activities immediately, if safe to do so, using spill response materials available on site. Containment activities may include up righting a spilled container, closing a valve, protecting a drain, or using spill response material to berm a spilled area.
- Following spill containment, trained personnel may begin absorbing the spilled material with absorbent material provided in the site spill kits.
- Used absorbent material will be collected and containerized for off-site disposal in containers such as 55-gallon drums. All equipment and manpower shall be utilized to remove spilled materials promptly and in a safe manner. All drums used to contain spilled waste will be transported to the waste storage area for eventual off-site disposal by a licensed transporter.



CONTACT EMERGENCY COORDINATO		COORDINATOR:			
		24-hour phone			
<ol> <li>Emergency Coordinator – Josep</li> <li>Alternate Emergency Coordinator</li> </ol>		(203) 619-4052 (203) 530-9674			
		(203) 550-5074			
EMERGENCY COORDINATOR OF	AI TERNATE OBTAINS TH		]		
1) What Spilled					
2) Location of Spill					
<ol> <li>Size and Extent of Spi</li> <li>Whether Any Personn</li> </ol>	II el are injured or other haz	ardous situations			
i) Whether any Personal					
YES	PERSONNE	EL INJURED?	NO		
	TERSONNE				
EMERGENCY COORDINATOR OR ALT	FRNATE CONTACTS THE	FOLLOWING			
AMBULANCE: 911					
BE PREPARED TO GIVE: NAME,		INJURIES, EXTENT OF EMERGENCY, POSSIB	LE		
	CALS INVOLVED AND QUA				
		ATE INTERNAL FACILITY ALARMS AND/OR COMI PERSONNEL OF EVACUATION	MUNICATIONS		
		BED, NEUTRALIZED, OR OTHERWISE CONTROLL OR BY MAINTENANCE PERSONNEL UTILIZING EC			
RELEASE DI EIN EUTEES IN THE IN		NG THEIR HEALTH OR SAFETY??			
YES		NO NO			
BEGIN CONTAINING SPILL, CLEAN-U		EMERGENCY COORDINATOR OR ALTERNAT			
MATERIAL, STORE PROPERLY FOR D		CONTRACTOR:	E CONTACTS STILL		
		Hamden Fire Department 911 or (203) 407-588	)		
		Hamden Police Department 911 or (203 230-4000 CT DEEP Emergency Response (860) 424-3338			
		CT Tank Removal Inc. (203) 384-6020			
		United Industrial Services (203) 235-3753			
		<u></u>			
HAS SPILL REACHED (		NAMED BROOK OR HAS ENTERED THE SOIL, WAT THE AIR?	TER OR		
YES		NO			
		Y CONTACT AGENCIES LISTED IN			
EMERGENCY COORDINATOR OR ALTERNATE IMMEDIATELY CONTACT AGENCIES LISTED IN SECTION 3.3 OF SPCC PLAN AS APPROPRIATE.					
SPILL CONTAN		NED-UP AND STORED PROPERLY FOR DISPOSAL			
REPORTING REQUIRE	REPORTING REQUIREMENTS MET (SECTION 3.4 AND 3.5) AND SPILL FORM (APPENDIX C) COMPLETED				
	-				
	EVENT C	ONCLUDED			





# 5.0 PAST SPILL EXPERIENCE

In order to prepare a more complete and accurate plan, significant spills or releases, corrective action taken, and plans for preventing a recurrence have been taken into consideration.

In preparing this plan, no spills having occurred within the past five years were identified.

Any future spills will be documented using the Spill Form in Appendix C.



# 6.0 POTENTIAL SPILL PREDICTION

#### 6.1 Oil Capacity and Storage

The Town of Hamden PWG was inspected for the presence of oil-filled equipment and bulk storage containers on-site. It was determined that all petroleum products are stored and managed in aboveground storage containers. Tables 1 and 2 summarize the oil capacities, containment and control practices identified at the Town of Hamden PWG. At any one time, a total of approximately 10,125 gallons of oil are stored at the facility aboveground. Tables 1 and 2 also describes the potential type of failure(s), the estimated amount of material which may be released, the probable flow direction of a spill should one occur and existing secondary containment facilities in each area of concern.

#### Oil Filled Equipment

While oil-filled equipment is not subject to the bulk storage container requirements, it must still meet the requirements for general secondary containment. General secondary containment may include:

- i. Dikes, berms, or retaining walls sufficiently impervious to contain oil;
- ii. Curbing;
- iii. Culverting, gutters, or other drainage systems;
- iv. Weirs, booms, or other barriers;
- v. Spill diversion ponds;
- vi. Retention ponds; or
- vii. Sorbent materials

#### Oil Filled Operational Equipment

Oil-filled operational equipment includes any oil storage container in which the oil is present solely to support the function of the apparatus or the device. The following oil/filled operational equipment with oil reservoirs equal to or greater than 55-gallons are located on-site; the mobile generator and the pad-mounted transformer. In addition, an oil water separator is located outside below grade and vehicles and trucks are stored primarily inside the garage.

Table 1 is a description of existing and recommended measures for the avoidance and/or containment of the release of materials from the facility associated with oil-filled operational equipment. Specific facility recommendations are presented in Section 12.0 of this report. All oil reservoirs listed in Table 1 are compatible with the oil stored within.



# TABLE 1 - OIL-FILLED OPERATION EQUIPMENT OIL STORAGESTORAGE, POTENTIAL SPILL PREDICTION AND CONTROL SUMMARY

#### Town of Hamden Public Works Garage 1125 Shepard Avenue Hamden, Connecticut

Area/Source	Total Volume	Potential Type	Potential Spill Volume	Flow Direction & Distance to Closest Stormwater	Secondary Containment
	(gallons)/ Oil Type	of Failure	(gallons)	Drain*	Containment
OIL-FILLED EQUIPMENT	•				
Transformer (non-PB mineral oil) – north side of building	125 (approx.)	Electrical Transformer Failure (Tank Rupture)	125	Onto concrete pad, then into surrounding gravel and grass. Nearest CB over 100 feet away	A
Mobile Generator	254	Tank Rupture	254	Spill would be expected to be contained by nearby spill containment supplies.	А
	204	Spills during filling	25.4	Equipment stored inside building when on-site	ň

\*Spill volumes represented would flow depending on degree of reservoir damage (pinhole leak vs. catastrophic failure). For the purposes of this SPCC Plan, worst-case scenario assumes that represented volumes would flow directly to the closest storm water drain or water body.

# Secondary Containment Legend

- A To be contained by Speedi-Dry or other absorbent material.
- B Spill contained by impervious nature of building's floor and/or walls.
- C<sup>1</sup> Sized secondary containment via double-walled construction.
- C<sup>2</sup> Sized secondary containment via constructed berm
- C<sup>3</sup> Secondary containment pallet, pan, or appropriately sized containment tank.
- D Spill contained by building's floor and walls and concrete sump.
- E Fuel tank is drained before being stored outdoors for any period of time.
- F Inadequate containment, see Section 12.0 for recommendations and implementation schedule.

# Oil Filled Manufacturing Equipment

Oil filled manufacturing equipment stores oil only as an ancillary element of performing a mechanical or chemical operation to create or modify an intermediate or finished product.

#### <u>Bulk Fuel Storage</u>

Bulk fuel storage refers to any container (≥55 gallons capacity) used to store oil other than oil filled electrical, operating, or manufacturing equipment. These containers are used for purposes including, but not limited to, the storage of oil prior to use, while being used, or prior to further distribution in commerce. These containers are subject to the more laborious bulk storage



container requirements of 40 CFR 112.8 and 40 CFR 112.12 which include but are not limited to sized secondary containment, integrity testing, facility and dike drainage, and discharge avoidance.

Table 2 is a description of measures for the avoidance and/or containment of the release of materials from the facility associated with bulk fuel storage. All containers listed in Table 2 are compatible with the oil stored within.



TABLE 2 – BULK FUEL STORAGE POTENTIAL SPILL PREDICTION AND CONTROL SUMMARY							
Town of Hamden Public Works Garage 1125 Shepard Avenue Hamden, Connecticut							
Area/Source	Total Volume (gallons)/ Öil Type	Potential Type of Failure         Potential Spill         Flow Direction and distance to closest storm water drain/water body*         Overflow Protection/Discharge Avoid					
ABOVE-GROUND STO	ORAGE TANKS						
		Tank failure	6,000		Faultaned with emergency shut off values and		
Above-ground ConVault double- walled storage tank and fill port spill containment	6,000 gallons Diesel	Spill during transfer	600	Double walled tank (on concrete pad)~75 ft to nearest CB to the east	Equipped with emergency shut-off valves and spill and overfill protection. Tank filling operations overseen by Public Works Garage personnel. See Section 5.3.1		
		Tank failure	4,000		Equipped with emergency shut-off valves and		
Above-ground ConVault double- walled storage tank and fill port spill containment	4,000 gallon Gasoline	Spill during transfer	400	Double walled tank (on concrete pad)~75 ft to nearest CB to the east	spill and overfill protection. Tank filling operations overseen by Town of Hamden Public Works Garage personnel. See Section 5.3.1		
		depending on degre	e of reservoir da	amage (pinhole leak vs. catastr	ophic failure).		
Secondary Containment LegendATo be contained by spill kit absorbent materials.BSpill contained by impervious nature of building's floor and wallsC <sup>1</sup> Sized Secondary containment via double-walled constructionC <sup>2</sup> Sized Secondary containment via constructed bermC <sup>3</sup> Sized Secondary containment via spill palletDElectronic Monitoring SystemEInadequate containment, see Section 13.0 for implementation schedule							



#### 6.2 Containment and Control Measures

#### Equipment/Vehicles

Approximately twenty-seven mobile vehicles are stored on the premises of the Town of Hamden PWG. These vehicles are primarily stored inside the facility's garage. The EPA has determined that oil-filled motor vehicle tanks or "motive power containers" used solely to fuel the propulsion of a vehicle are not governed by SPCC rules per 40 CFR 112(d)(7). Although these vehicles are exempt from the SPCC regulations, any spill or release from these sources should be managed in accordance with this Plan. Vehicles currently stored outside should be moved inside or removed from the site.

In addition to the vehicles, a diesel generator trailer with a fuel capacity of approximately 254 gallons is also stored inside the garage. Spill absorbent materials are stored within the garage and could be used to contain potential spills from the vehicles or generator. The PWG shall develop a Standard Operating Procedure (SOP) for active containment for the generator. The SOP shall include, at a minimum; not to store the generator near the trench drain, ensure spill containment supplies located nearby, and use of drip pans and/or booms if any leaks noted. This SOP should be posted near the generator storage location inside the facility.

There is one 1500-gallon oil/water separator, operated and monitored by the Town of Hamden PWG personnel, which is located north of the building that collects vehicle washwater and discharges to the sanitary sewer. This discharge is permitted under a CTDEEP Vehicle Service General Permit. The separator is double walled and was installed in 2014.

#### 10,000-gallon ConVault Dual Compartment AST and Fueling Station

The dual aboveground storage tank and fueling station is located about 50 feet south of the main building and was installed in 2012. The tank and fueling station is located on top of a concrete pad and contains canopied shelter. Tanker trucks fill the diesel and gasoline tanks via the fill located on each side of the double walled dual compartment tank. The diesel and gasoline fueling station is available to the Town of Hamden vehicles (i.e. public works, fire trucks, police cars).

The 10,000 gallon AST is double-walled and equipped with emergency shut off valves and spill/overfill protection. The Town of Hamden PWG employees oversee all oil transfers. In the case of a spill, there are spill control kits adjacent to the pump island. Town of Hamden PWG personnel routinely inspect the area to ensure no leaks are occurring.

#### Electrical Transformers

One pad-mounted transformer is located on-site with dielectric fluid capacities at or exceeding 55gallons. Being an oil filled operational equipment as outlined in Section 6.1, preventive methods implemented for transformers will include having sorbent material readily available as outlined in Section 7.0 and conducting periodic inspections as outlined in Section 7.1.

#### 6.3 General Practices

#### 6.3.2 Oil Transfer Procedures



# Loading and Unloading

Diesel and gasoline is delivered (i.e. "loaded") to the AST via a tanker truck. Approximately once a year, accumulated oil is pumped from the on-site 1,500-gallon concrete oil/water separator by vacuum tanker trucks for off-site disposal.

In accordance with 40 CFR Part 112.7 (c), procedures utilized by the facility to prevent or control an oil spill in transfer areas include:

#### Before the Loading/Unloading Begins

- The vendor chocks the wheels of the delivery truck and visually checks all hoses for leaks and wet spots;
- Facility personnel ensure that all applicable drainage valves are locked in the closed position and check the tank for any signs of a leak;
- Facility personnel will ensure that internal and external valves on the receiving tank are open along with the pressure relief valves.
- Facility personnel will confirm the type of oil and the quantity of which will be transferred;
- Facility personnel will visually confirm the ability of the tank to accept the agreed upon quantity;
- Facility personnel will ensure spill control equipment is readily available, place pigs/socks/berms in appropriate locations to contain a small spill from the truck, and place a spill mat over nearby stormwater catch basins.

#### Loading/Unloading Process

- Facility personnel and the vendor will remain at the tank/transfer area for the entire transfer process;
- The vendor will shut off the delivery truck engine prior to making connections. Do not
  restart the engine during the loading/unloading process unless the truck engine is used to
  operate a pump;
- The vendor will ensure all valves are in proper positions and begin the transfer;
- The vendor will monitor the flow meters to determine the rate of flow;
- Facility personnel will monitor the tank volume to prevent overflow; and
- Facility personnel and vendor will periodically inspect all systems hoses and connections.

#### After the Loading/Unloading Process

- Facility personnel will visually check the volume delivered;
- The vendor will ensure all valves are in proper positions and disconnect the hose;
- Facility personnel and vendor will check the transfer area for any signs of a spill;
- Facility personnel will return the spill control equipment to its storage location; and
- The vendor will prepare to depart.



A delivery and pump/out log should be used to ensure supervision of the entire unloading operation and minimize any releases. The following information should be recorded on the logs:

- Date and time of delivery (start, end);
- Quantity in tank;
- Quantity delivered;
- Inspection comments; and
- Employee present.

Mobile on-site vehicle fueling "*wet-hosing*" operations are not specifically exempt from the secondary containment requirements of the 40 CFR Part 112.7(c), and therefore are subject to the facility oil transfer procedures discussed above. Mobile on-site vehicle fueling does not occur at this facility.

# <u>Drum Handling</u>

The facility does not receive or ship oil in drums, but in the event this situation changes, in accordance with 40 CFR Part 112.7 (c), procedures utilized by the facility to prevent or control an oil spill during waste oil drum transfer operations include:

- The vendor chocks the wheels of the waste hauler truck;
- Facility personnel and the vendor ensure that the drums are in good condition and there are no signs of drips, leaks or spills prior to loading into the truck;
- Facility personnel will confirm the quantity of drums which will be transferred; and
- Facility personnel will ensure spill control equipment is readily available.
- Facility personnel and the vendor will be present for the entire transfer process;
- Facility personnel and the vendor will ensure no damage has been done to the drums and there are no signs of leaks or spills;
- The vendor will prepare to depart.

# Fuel Dispensing

The PWG dispenses diesel and gasoline at the fueling station. The SPCC regulations state that the starter control on each dispensing pump must be locked in the "off" position and located at a site accessible only to authorized personnel when the pump is in a non-operating non-standby status. However, the pumps are used by Authorized Town Personnel 24 hours per day, seven days a week, and therefore, always in "operation". The Town of Hamden PWG ensures that access to the diesel and gasoline pumps is restricted from unauthorized personnel by locking the chain-link fence at the main entrance during PWG non-operating hours. The pumps are controlled by a *Fuel Master* System which requires a Town of Hamden ID badge to dispense fuel from the pumps.

At a minimum, the following procedures should be followed during delivery:



- During transfer of the petroleum product, the **truck's tires should be chocked**.
- Before and after delivery, all valves and drains on the truck should be inspected to ensure none are leaking.
- Town employees shall remain with the vehicle at all times.

#### 6.3.2 Dike Drainage

The facility does not maintain any diked ASTs which are subject to storm water collection and drainage, however if the facility maintains any diked areas requiring drainage in the future, the outlined procedure below will be used.

- Trained Town of Hamden PWG personnel should conduct visually inspection of the contained rainwater for evidence of an oily sheen or film, color, sludge or deposits.
- If there is any evidence of an oily sheen or film, discoloration, or oily sludge or deposits, PWG personnel will NOT drain the accumulated liquid to the ground but will contact an outside contractor to vacuum the contained fuel/oil/water mixture and dispose in accordance with the resulting waste stream determination.

If the containment area is drained to the ground, Town of Hamden PWG personnel will monitor the entire draining event (i.e. not leave that dike or containment area while the dike is being drained). Additionally, all drain lines will be securely closed and locked after the event.

The draining log, available in Appendix D, should be utilized to record any future dike draining operations at the facility.

#### 6.3.3 Recovered Clean-up Material Disposal

- The Town of Hamden PWG staff typically would use absorbent pads, absorbent socks, and granular loose absorbent material to contain any minor spills or releases.
- Waste Absorbent material will be cleaned-up and disposed of using the following procedure:
- Contain the clean-up material into a dedicated storage container as soon as a spill is absorbed, but no later than the end of the day in which the spill occurred.
- The dedicated drum will be labeled with the words "Oil Absorbent Material" or other words as appropriate.
- Conduct a hazardous waste determination to determine if material is hazardous or nonhazardous waste.
- The used clean-up material will then be disposed of properly based on the outcome of the hazardous waste determination.
- Shipping records for used materials that is transported off-site will be maintained in the PWG's files.



# 6.3.4 Vehicle Traffic

Vehicle traffic is not a significant oil spill incident risk potential at the Town of Hamden PWG. There is no outdoor above-ground piping, and the fueling AST on-site is located in an area provided with sufficient barriers to traffic (on a concrete pad, under a roof, surrounded by bollards). The transformer is also situated on a concrete pad behind concrete barriers. In addition, the vehicle area west of the Building is sufficiently wide to allow vehicles to pass.

# 6.3.5 Drum and Container Handling

In the event the facility has drums located on-site, the following precautions will be taken during drum handling operations, and the SPCC plan will be updated as necessary.

- Keep the drum or container closed at all times, except when adding or removing oil; and
- Use appropriate transport devices such as a dolly or a specifically designed handcart
- When transporting by forklift, ensure drum(s) is secured to the pallet.



# 7.0 INSPECTIONS

# 7.1 Visual Inspections

On a monthly basis, Town of Hamden PWG personnel will inspect its oil storage areas. A written record of the inspections will be kept. An SPCC Inspection Log (Appendix D), will be completed and signed by the inspector as part of each monthly inspection.

At a minimum, Town of Hamden PWG personnel will inspect all tanks for deterioration (e.g. corrosion), leaks, tank supports and foundations, and condition of secondary containment, where applicable. In addition to the tank, the associated above-ground piping will be inspected for damage, including the condition of the piping system including all valves, flanges, etc. Containers and drums will be checked for proper labeling and signs of deterioration or leakage. Any sign of rust, corrosion, or leakage constitutes an unsatisfactory condition requiring appropriate preventive maintenance. Any container or drum label deficiencies will be corrected immediately. The containment areas will also be inspected for cracks or other forms of deterioration.

Town of Hamden PWG personnel will also verify the adequate supply of spill containment and abatement materials. See Section 8.0 for a detailed list of spill abatement equipment and materials that will be maintained on-site.

All inspection logs will be made a part of the SPCC and maintained on-site for at least three (3) years. Any problems will be reported to the Emergency Coordinator and corrected as soon as possible.

# 7.2 Integrity Testing

Each container with a capacity of 55 gallons or greater (e.g. 55-gallon drum, tank, etc.), which is not an oil-filled electrical, operating, or manufacturing equipment, is considered to be a bulk storage container and is therefore regulated under 40 CFR 112.8(c)(6). Each above ground bulk storage container will be tested for integrity on a regular schedule and when material repairs are made.

STI provides industry standards regarding integrity testing guidance for shop-built tanks and portable containers. The guidance categorizes ASTs from 1-3 based on a spill or release risk level, with 1 being the lowest risk and 3 being the highest risk for a spill or release. For instance, a double-walled, shop-built tank in contact with the ground that maintains a Continuous Release Detection Method (CRDM) and is less than 5,000 gallons is considered a Category 1 tank. Category 1 tanks are recommended by STI to have periodic inspections conducted by the owner or designated employee.

The integrity testing requirement does <u>not</u> apply to oil-filled electrical operating and manufacturing equipment, 55-gallon drums which are not reused on-site, and portable totes which are not reused or USTs subject to 40 CFR 280. Re-use of portable containers is subject to STI SP001 standards. For 55-gallon drums it is more practical to replace the drums than to conduct any type of integrity testing beyond visual inspection. Any sign of compromised integrity visually observed should be remedied by replacing the questionable drum. Currently, the PWG does not store oil in drums or totes.



The regulations allow deviations from this requirement where "you provide equivalent environmental protection by some means of spill prevention, control, or countermeasure" 40 CFR Part 112.7(a)(2). The life expectancy of a typical shop built bulk storage container is approximately twenty years, after which it is past its nominal useful life. Although a rigorous testing program could justify leaving tanks past their life expectancy in-place, the cost of such testing is likely to be more than the expense of replacing the tank.

ConVault® tanks are unique among above-ground tanks in that they are double walled, equipped with a polyethylene liner within the interstitial space and have a 4-6" concrete encasement that forms the secondary containment double wall. In addition, the interstitial space is equipped with a leak detection system that would indicate any failure of the primary inner steel tank. The concrete encasement is resistant to ballistic and vehicle impact as well as fire. All of these features provide environmental protection equivalent to the integrity testing techniques listed in 40 CFR 112.8(c)(6). This structure was installed in 2012 and does not need to be considered for formal external integrity testing until 2032. However, inspections will be performed an on monthly and annual basis.

Based on the above criteria, the facility will perform integrity testing on the following bulk storage tanks as outlined below:



TABLE 3 INTEGRITY TESTING STEEL TANK INSTITUTE AST CATEGORIES						
Location	Description	Installation Date	AST Steel Tank Institute Category <sup>1</sup>	Integrity Testing Implementation		
South side of building	6,000-gallon diesel dual compartment ConVault AST	2012	1	Visual monthly and annual inspection by facility personnel (as per checklist in Appendix D)* Formal external inspection every 20 years by a certified inspector		
South side of building	4,000-gallon gasoline dual compartment ConVault AST	2012	1	Visual monthly and annual inspection by facility personnel (as per checklist in Appendix D)*		
STI Category Explanation <sup>1</sup>						
1 Secondary Containment and Continuous Release Detection Method (CRDM)						
2 Secondary Containment						
3 No secondary containment or Release Prevention Barrier (RPB), or one or the other						

\*In addition, ConVault requires some items be checked on a weekly basis as part of the ConVault warranty. See Appendix I for ConVault specific maintenance checklists.

The routine integrity testing procedure will consists of monthly and annual visual inspection by designated facility personnel. Visual inspections consist of evaluating each of the above listed tanks and drum storage areas in accordance with the Inspection Logs, provided in **Appendix D**. Observations are to be recorded on the Inspection Logs during the time of visual inspection, and a record of the logs made a part of this SPCC Plan. The 6,000-gallon AST will require formal inspection by a certified inspector every 20 years.

<sup>1</sup> STI explanations described in SP001 5<sup>th</sup> Edition – Standard for the Inspection of Aboveground Storage Tanks by the Steel Tank Institute



# 8.0 SPILL ABATEMENT EQUIPMENT AND MATERIALS

The Town of Hamden PWG must maintain spill control equipment at or near all of the oil storage areas on-site. Spill control equipment should be stored in locations, which are accessible to all employees. Town of Hamden PWG personnel should inspect the spill control equipment periodically to ensure that they are maintained in working order and spill abatement materials are replenished as needed. The following materials at a minimum must be provided:

- absorbent material (i.e. Speedi-Dry, pads, and booms)
- shovel/broom
- "Attack Pack" Spill Kit hanging from ConVault AST
- temporary disposal bag or drum

Spill mats should be obtained and used to cover nearby catchbasins during fuel deliveries. Spill control equipment will be stored in locations which are accessible to all employees and located near oil storage locations. Town of Hamden Town of Hamden PWG personnel will inspect the spill control equipment periodically to ensure that they are maintained in working order and spill abatement materials are replenished as needed.

The commercial clean-up contractor who could be contacted by the Town of Hamden PWG if their assistance is needed is as follows:

Firm	Phone Number
Connecticut Tank Removal, Inc	(203) 384-6020
United Industrial Services	(203) 235-3753



# 9.0 <u>SECURITY</u>

The Town of Hamden PWG will maintain the following security measures in place at the facility:

- 1. Access to the Town of Hamden PWG is limited to a gated access at the entrance to the facility. All vehicles enter and exit through this access point. The facility hours are 7:00am-4:30pm, Monday through Friday. The gate is maintained locked at all other times.
- 2. Due to this facility being a town occupied facility, town officials (i.e. fire department, board of education) have a key to unlock the fence and to fill up the town vehicles at any time. A town ID badge is required to dispense fuel from the diesel and gasoline fueling station. The AST is encased in 6" thick reinforced concrete to provide protection from fire, ballistics, and vehicle impacts. Bollards are located near the AST to protect the tank from vehicular traffic.
- 3. Motion sensors lighting is mounted on the exterior walls of the building. Lights are also installed on the canopy above the AST tank to allow sufficient lighting during hours of darkness for Town of Hamden personnel fueling vehicles at after-hours. The lighting at the facility is adequate to assist in the prevention of discharges due to acts of vandalism.



# 10.0 TRAINING

EPA Regulation 40 CFR Part 112.7(f) <u>requires that annual training be provided for all "oil handling"</u> <u>personnel</u> to assure an understanding of the SPCC Plan. Personnel at Town of Hamden PWG whose duties involve the daily management, use, inspection or maintenance of oil storage, transfer, process or treatment equipment will be trained in the contents of this SPCC Plan. This training will highlight those portions of the SPCC as they relate to facility operations, including, but not limited to, known discharges or failures, malfunctioning components, and recently developed precautionary measures. The training will include the following:

- Operation and Maintenance of equipment to prevent the discharge of oil;
- Discharge procedure protocols;
- Applicable pollution control laws, rules and regulations;
- General facility operations;
- Contents of the facility SPCC plan; and
- Review of any spills or releases in the last year.

All current and new hires of "oil handling" personnel shall be trained by Town of Hamden PWG staff prior to beginning work. This training includes a detailed and complete review of PWG's SPCC Plan and its standard operating procedures. Annual refreshers of this training will be given to all facility employees. Sign-in sheets (example in Appendix F) for each training session may be maintained in Appendix H of this SPCC.

The Emergency Coordinator, also the Designated Person Responsible for spill prevention at the facility (page ii), will approve the SPCC and certify that he/she is thoroughly familiar with the Plan. As such, the Emergency Coordinator is qualified to conduct training of oil handling personnel or may opt to designate to another qualified individual thoroughly familiar with this plan to conduct such training.



# 11.0 FACILITY RESPONSE PLAN

The Town of Hamden PWG is not required to prepare and submit a Facility Response Plan defined under 40 CFR Part 112.20 for the following reasons:

- This facility does not transfer oil over water to or from vessels with a total oil facility storage capacity greater than or equal to 42,000 gallons.
- The facility does not have a total oil storage capacity greater than or equal to 1,000,000 gallons.

Since the PWG does not meet the substantial harm criteria, the facility must only complete a Certification of Harm Determination Form and maintain the form as part of their SPCC Plan. The Certification form, to be completed, is included in Appendix E.



#### 12.0 SPCC PLAN AMENDMENT

#### 12.1 Facility Modifications

This SPCC Plan, under 40 CFR 112.5, will be amended whenever there is a change in facility design, construction, operation or maintenance which material affects the facility's potential for a discharge of oil to navigable waters of the United States or adjoining shorelines. These plan amendments will be prepared within six (6) months and fully implemented as soon as possible, but not later than six (6) months following the plan's amendment. Emergency response issues will be reviewed when:

- The plain fails during an emergency;
- It becomes evident that emergency contacts are not equipped to handle situations; or
- There are personnel changes (i.e. emergency coordinator or alternate).

# **12.2 US EPA Requirements**

The Environmental Protection Agency Regional Administrator may require amendments to the Plan whenever the facility has: 1) discharged more than 1,000 U.S. gallons into or upon the navigable waters in the U.S.; 2) discharged oil in quantities larger than 42 gallons, as defined in 40 CFR Part 112.1(b), into or upon the navigable waters of the U.S. in two spill events, occurring within any twelve month period.

#### 12.3 5-Year Revisions

Regardless of facility changes, the SPCC Plan will also undergo a complete review and evaluation at least once every five (5) years. As a result of this review, the plan will be updated within six (6) months to include more effective prevention and control technology, if such technology is identified as having the ability to significantly reduce the likelihood of spills, and has been field proven at the time of the review. All technical amendments to this plan shall be certified by a Professional Engineer in accordance with 40 CFR 112.3(d). Non-technical amendments include changes to phone numbers or names. These amendments will be made as the change occurs, initialed, and dated by the PWG personnel.

All 5-year SPCC plan reviews will be documented at their completion in the SPCC Plan Review Log on page iii at the beginning of this plan. The person responsible for the 5-year review will attest to the certification statement with their signature, include the date of the review and indicate whether a revision to the plan is necessary, as well as date of the revision, if applicable.



# 13.0 IMPLEMENTATION SCHEDULE

The Town of Hamden PWG will fully implement this SPCC Plan and be compliant with the SPCC regulations by following the recommendations & implementation schedule presented below. HRP Associates, Inc. recommends the following in order to the PWG to fully implement the SPCC Plan and be compliant with SPCC regulations. The PWG will complete the far right column at the time that each item is implemented. Failure to implement these actions may negate the PE signature associated with this SPCC Plan.

Action Item Number	Action Item	Corresponding Section in SPCC Plan	Proposed Implementation Date	Actual Implementation Date and Signature
1	Post the spill response flow chart in the office of the primary emergency coordinator and alternate	4.0	Initially and update as necessary	
2	Ensure Fuel Master Computer system working correctly	6.3.1	September 2018	
3	Provide a barrel of speedy-dry readily accessible in vicinity of ConVault AST	8.0	September 2018	
4	Place a spill kit inside interior bay door on southern side of building near trucks requiring maintenance, and near mobile generator	8.0	September 2018	
5	Maintain spill response material on site in appropriate locations	8.0	On going	
6	Continue to remove unused/impaired vehicles and equipment from the property, and/or move into the building.	6.2.1	On going	
7	Ensure appropriate employees are familiar with and following oil transfer procedures, including covering storm drains during transfers to the ASTs	6.3.1	With each transfer event	
8	Conduct monthly inspections	7.1, Appendix D	Ongoing	
9	Initiate integrity testing schedule	7.2 and Appendix D	Ongoing	
10	Provide SPCC initial training to all employees who handle oil or chemicals, and provide ongoing annual training.	10.0	Upon certification of SPCC and annually thereafter	
11	Amend the Plan within 6 months within changes to facility design, construction, operation, or maintenance that affect the potential for oil discharge to a navigable waterway.	12.1	As needed	
12	Remove accumulated oil from buckets under leaking vehicles	6	September 2018	
13	Perform a complete review and evaluation of the SPCC Plan at least once every five years.	12.3	September 2022	

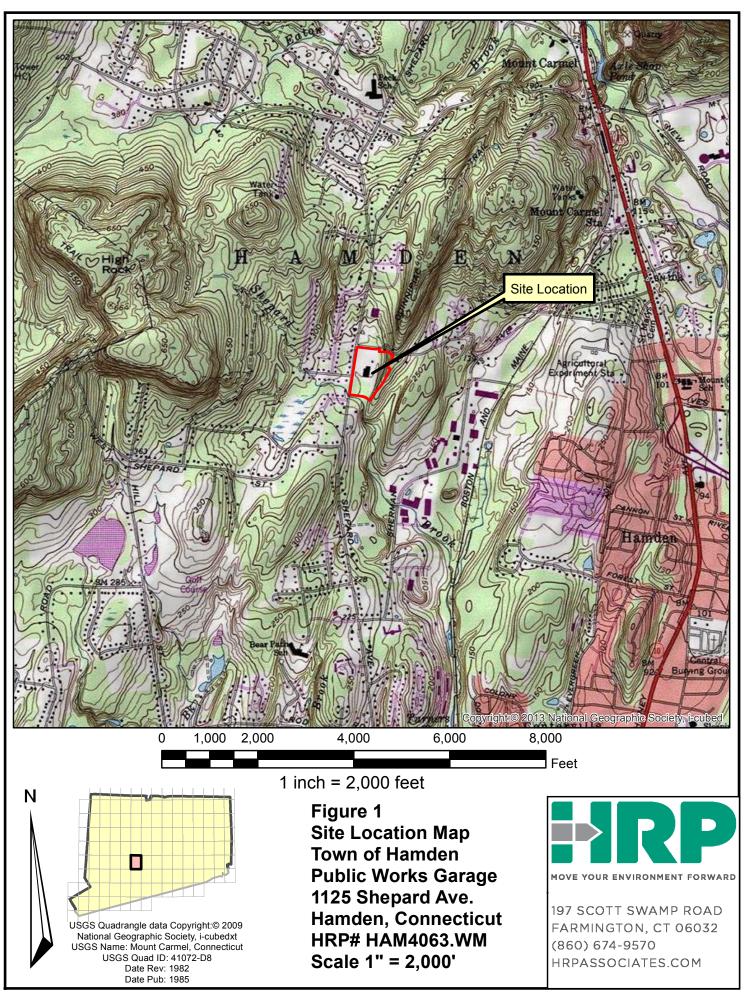


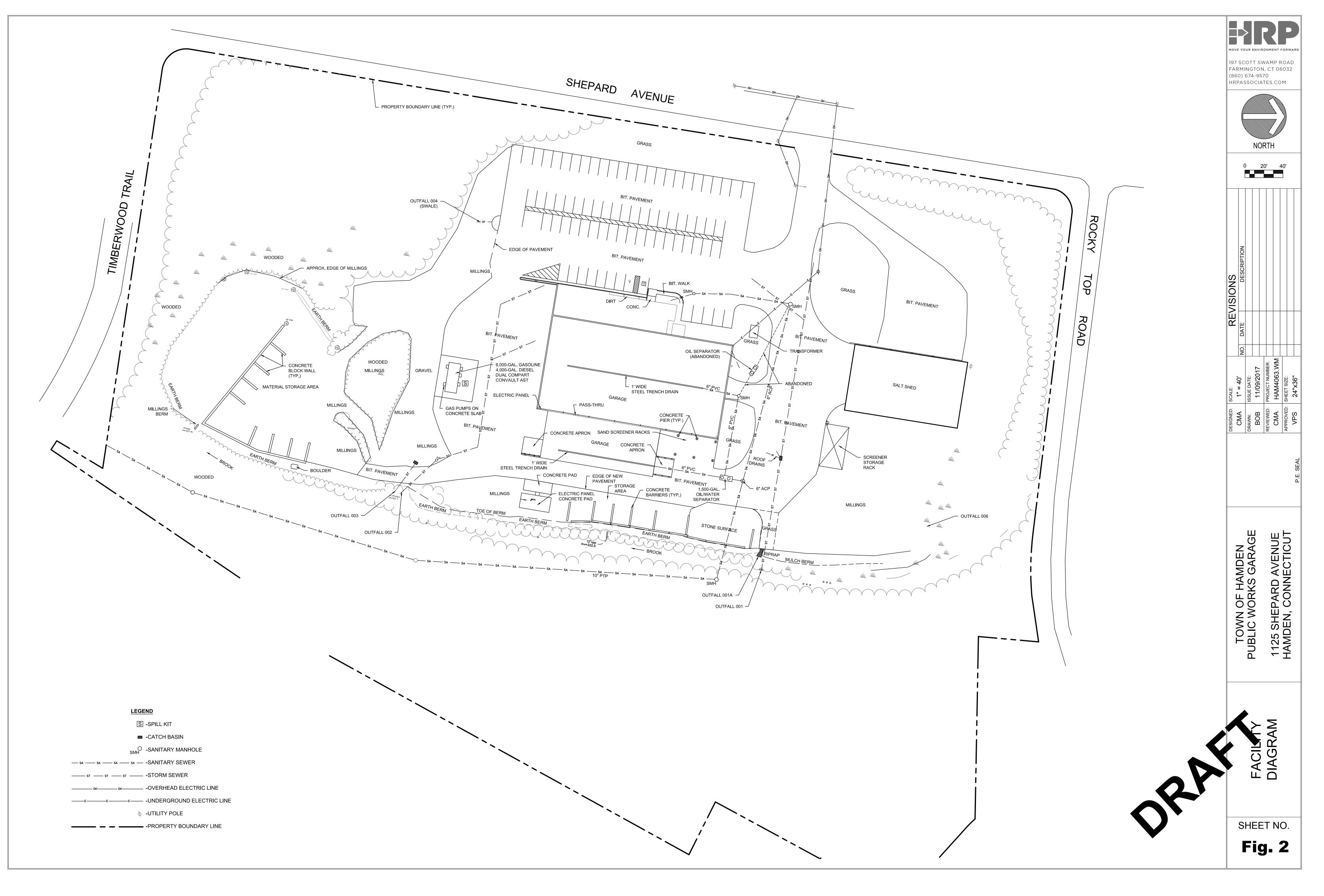
Action Item Number	Action Item	Corresponding Section in SPCC Plan	Proposed Implementation Date	Actual Implementation Date and Signature
14	Address the leak from the piping on top of the ConVault tank		September 2018	
15	Develop and post SOP regarding generator storage inside facility	6.2	September 2018	



# FIGURES







DRAWING NAME: J:\H\HAMDT - TOWN OF HAMDEN\3 TOWN FACILITIES\HAM4063WM\CAD\Figure 2 - 1125 Shepard Avenue Facility Diagram.dwg LAYOUT: 24 x 36 - SSM PLOT DATE: Nov 16, 2017 - 4:30pm OPERA1

## APPENDIX A SPCC Regulations – 40CFR 112



## APPENDIX B SPCC Regulatory Cross-Reference



	Town of Hamden PWG SPCC Plan Regulatory Cross Reference		
SPCC Rule Section	Description	Facility SPCC Plan	Visually Confirmed in Field
112.3(d)	Except as provided in § 112.6, a licensed Professional Engineer must review and certify a Plan for it to be effective to satisfy the requirements of this part.	i	NA
112.3(d)(1)	By means of this certification the Professional Engineer attests:	i	NA
112.3(d)(1)(i)	That he is familiar with the requirements of this part:	i	NA
112.3(d)(1)(ii)	That he or his agent has visited and examined the facility:	i	NA
112.3(d)(1)(iii)	That the Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part;	i	NA
112.3(d)(1)(iv)	That procedures for required inspections and testing have been established; and	i	NA
112.3(d)(1)(v)	That the Plan is adequate for the facility.	i	NA
112.3(d)(1)(vi)	That, if applicable, for a produced water container subject to § $112.9(c)(6)$ , any procedure to minimize the amount of free-phase oil is designed to reduce the accumulation of free-phase oil and the procedures and frequency for required inspections, maintenance and testing have been established and are described in the Plan.	NA	NA
112.4(a)	Notwithstanding compliance with § 112.3, whenever your facility has discharged more than 1,000 U.S. gallons of oil in a single discharge as described in § 112.1(b), or discharged more than 42 U.S. gallons of oil in each of two discharges as described in § 112.1(b), occurring within any twelve month period, submit the following information to the Regional Administrator within 60 days from the time the facility becomes subject of this section:	§3.4	NA
112.4(a)(1)	Name of the facility;	§3.4	NA
112.4(a)(2)	Your name;	§3.4	NA
112.4(a)(3)	Location of the facility;	§3.4	NA
112.4(a)(4)	Maximum storage or handling capacity of the facility and normal daily throughput;	§3.4	NA
112.4(a)(5)	Corrective action and countermeasures you have taken, including a description of equipment repairs and replacements;	§3.4	NA
112.4(a)(6)	An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary;	§3.4	NA
112.4(a)(7)	The cause of such discharge as described in § 112.1(b), including a failure analysis of the system or subsystem in which the failure occurred;	§3.4	NA
112.4(a)(8)	An additional preventive measures you have taken or contemplated to minimize the possibility of recurrence; and	§3.4	NA
112.4(a)(9)	Such other information as the Regional Administrator may reasonably require pertinent to the Plan or discharge.	§3.4	NA
112.4(d)	Amendment of Spill Prevention Control and Countermeasure Plan (SPCC) by Regional Administrator.		
112.5(a)	SPCC amendments due to changes in facility design.	iii	NA
112.5(b)	Perform a review and evaluation of SPCC Plan at least once every five years. The owner/operator must document completion of the review and evaluation, and must sign a statement as to whether he will amend the SPCC Plan. The following will suffice: "I have completed review and evaluation of the SPCC Plan for (name of facility) on (date), and will (will not) amend the Plan as a result.	=	NA
112.5(c)	Obtain Professional Engineers certification for any technical amendments in accordance with 11-2.3(d).	iii	NA
112.7(a)(1)	Include a discussion of your facility's conformance with the requirements listed in 40 CFR 112.7.		



	Town of Hamden PWG SPCC Plan Regulatory Cross Reference		
SPCC Rule Section	Description	Facility SPCC Plan	Visually Confirmed in Field
112.7(a)(2)	Comply with all applicable requirements listed in this part. Except as provided in § 112.6, your Plan may deviate from the requirements in paragraphs (g), (h)(2) and (3), and (i) of this section and the requirements in subparts B and C of this part, except the secondary containment requirements in paragraphs (c) and (h)(1) of this section, and §§ 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.9(d)(3), 112.10(c), 112.12(c)(2), and 112.12(c)(11), where applicable to a specific facility, if you provide equivalent environmental protection by some other means of spill prevention, control, or countermeasure. Where your Plan does not conform to the applicable requirements in paragraphs (g), (h)(2) and (3), and (i) of this section, or the requirements of subparts B and C of this part, except the secondary containment requirements in paragraph (c) and (h)(1) of this section, and §§ 112.8(c)(2), 112.8(c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), and 112.12(c)(11), you must state the reasons for nonconformance in your Plan and describe in detail alternate methods and how you will achieve equivalent environmental protection. If the Regional Administrator determines that the measures described in your Plan do not provide equivalent environmental protection, he may require that you amend your Plan, following the procedures in § 112.4(d) and (e).	§6.3.1	~
112.7(a)(3)	Describe in your Plan the physical layout of the facility and include a facility diagram, which must mark the location and contents of each fixed oil storage container and the storage area where mobile or portable containers are located. The facility diagram must identify the location of and mark as "exempt" underground tanks that are otherwise exempted from the requirements of this part under § 112.1(d)(4). The facility diagram must also include all transfer stations and connecting pipes, including intra-facility gathering lines that are otherwise exempted from the requirements of this part under § 112.1(d)(11). You must also address in your Plan:	Figures 1 and 2, Table 1	√
112.7(a)(3)(i)	The type of oil in each fixed container and its storage capacity. For mobile or portable containers, either provide the type of oil and storage capacity for each container or provide an estimate of the potential number of mobile or portable containers, the types of oil, and anticipated storage capacities	Table 1 & Table 2	~
112.7(a)(3)(ii)	(ii) Discharge prevention measures including procedures for routine handling of products (loading, unloading, and facility transfers, etc.);	§6	$\checkmark$
112.7(a)(3)(iii)	(iii) Discharge or drainage controls such as secondary containment around containers and other structures, equipment, and procedures for the control of a discharge.	§6	$\checkmark$
112.7(a)(3)(iv)	(iv) Countermeasures for discharge discovery, response, and cleanup (both the facility's capability and those that might be required of a contractor);	§3	$\checkmark$
112.7(a)(3)(v)	(v) Methods of disposal of recovered materials in accordance with applicable legal requirements; and	§6.3.3	$\checkmark$
112.7(a)(3)(vi)	(vi) Contact list and phone numbers for the facility response coordinator, National Response Center, cleanup contractors with whom you have an agreement for response, and all appropriate Federal, State, and local agencies who must be contacted in case of discharge as described in § 112.1(b).	§3 & 4	$\checkmark$
112.7(a)(4)	Unless you have submitted a response plan under 40 CFR 112.20, provide information and procedures in your SPCC Plan to enable a person reporting a discharge to relate information on the exact address or location and phone number of the facility	§3 & 4	$\checkmark$
112.7(a)(5)	Unless you have submitted a response plan under 40 CFR 112.20, organize portions of the SPCC Plan describing procedures you will use when a discharge occurs in a way that will make them readily usable in an emergency and include appropriate supporting materials as appendices.	§3 & 4	~
112.7(b)	Where experience indicates a reasonable potential for equipment failure (such as loading or unloading equipment, tank overflow, rupture, or leakage, or any other equipment known to be a source of a discharge), include in your Plan a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the facility as a result of each type of major equipment failure.	Table 1 & Table 2	~



	Town of Hamden PWG SPCC Plan Regulatory Cross Reference		
SPCC Rule Section	Description	Facility SPCC Plan	Visually Confirmed in Field
112.7(c)	Provide appropriate containment and/or diversionary structures or equipment to prevent a discharge as described in § 112.1(b), except as provided in paragraph (k) of this section for qualified oil-filled operational equipment, and except as provided in § 112.9(d)(3) for flowlines and intra-facility gathering lines at an oil production facility. The entire containment system, including walls and floor, must be capable of containing oil and must be constructed so that any discharge from a primary containment system, such as a tank, will not escape the containment system before cleanup occurs. In determining the method, design, and capacity for secondary containment, you need only to address the typical failure mode, and the most likely quantity of oil that would be discharged. Secondary containment may be either active or passive in design. At a minimum, you must use one of the following prevention systems or its equivalent:	§6	~
112.7(c)(1)	<ul> <li>For onshore facilities:</li> <li>(i) Dikes, berms, or retaining walls sufficiently impervious to contain oil;</li> <li>(ii) Curbing or drip pans;</li> <li>(iii) Sumps and collection systems;</li> <li>(iv) Culverting, gutters, or other drainage systems;</li> <li>(v) Weirs, booms, or other barriers;</li> <li>(vi) Spill diversion ponds;</li> <li>(vii) Retention ponds; or</li> <li>(viii) Sorbent materials.</li> </ul>	§6	~
112.7(c)(2)	For offshore facilities: (i) Curbing or drip pans; or (ii) Sumps and collection systems.	NA	NA
112.7(d)	<ul> <li>When installation of structures or equipment, as outlined in 112.7(c) and (h)(1) and 40 CFR 112.8(c)(2), (c)(11), 112.9(c)(2), 112.10(c), 112.12(c)(2), 112.12(c)(11), 112.13(c)(2) and 112.14(c) is not practicable, clearly explain why such measures are not practicable; for bulk storage containers, conduct periodic integrity testing of the containers and periodic integrity and leak testing of the valves and piping, unless you have submitted a response plan under 40 CFR 112.20 provide the following in your SPCC Plan:</li> <li>Provide an oil spill contingency plan described in 40 CFR 109; and</li> <li>Provide a written commitment of manpower, equipment, and materials to control and remove harmful quantity of oil discharged.</li> </ul>	§6.2 §13	~
112.7(e)	Conduct inspections and tests required by this part in accordance with written procedures that you or the certifying engineer developed for the facility. You must keep these written procedures and a record of the inspections and tests, signed by the appropriate supervisor or inspector, with the SPCC Plan for a period of three years. Records of inspections and tests kept under usual and customary business practices will suffice for purposes of this paragraph.	§7	~
112.7(f)	Personnel, training, and discharge prevention procedures		
112.7(f)(1)	At a minimum, train your oil-handling personnel in the operation and maintenance of equipment to prevent discharges; discharge procedure protocols; applicable pollution control laws, rule, and regulations; general facility operations; and, the contents of the facility SPCC Plan.	§10	~
112.7(f)(2)	Designate a person at each applicable facility who is accountable for discharge prevention and who reports to facility management.	§10	~
112.7(f)(3)	Schedule and conduct discharge prevention briefings for your oil handling personnel at least once a year to assure adequate understanding of the SPCC Plan for that facility. Such briefings must highlight and describe known discharges as described in § 112.1(b) or failures, malfunctioning components, and any recently developed precautionary measures.	§10	$\checkmark$



	Town of Hamden PWG SPCC Plan Regulatory Cross Reference		
SPCC Rule Section	Description	Facility SPCC Plan	Visually Confirmed in Field
112.7(g)	Security (excluding oil production facilities). Describe in your Plan how you secure and control access to the oil handling, processing and storage areas; secure master flow and drain valves; prevent unauthorized access to starter controls on oil pumps; secure out-of-service and loading/unloading connections of oil pipelines; and address the appropriateness of security lighting to both prevent acts of vandalism and assist in the discovery of oil discharges.	§9	~
112.7(h)	Facility tank car and tank truck loading/unloading rack (excluding offshore facilities).		
112.7(h)(1)	Where loading/unloading rack drainage does not flow into a catchment basin or treatment facility designed to handle discharges, use a quick drainage system for tank car or tank truck loading/unloading racks. You must design any containment system to hold at least the maximum capacity of any single compartment of a tank car or tank truck loaded or unloaded at the facility.	§6	1
112.7(h)(2)	Provide an interlocked warning light or physical barrier system, warning signs, wheel chocks, or vehicle break interlock system in loading/unloading areas to prevent vehicles from departing before complete disconnection of flexible or fixed oil transfer lines.	§6	~
112.7(h)(3)	Prior to filling and department of any tank car or tank truck, closely inspect for discharges the lowermost drain and all outlets of such vehicles, and if necessary, ensure that they are tightened, adjusted, or replaced to prevent liquid discharge while in transit.	§6	~
112.7(i)	If a field-constructed aboveground container undergoes a repair, alteration, reconstruction or a change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe, or has discharged oil or failed due to brittle fracture failure or other catastrophe, evaluate the container of risk of discharge or failure due to brittle fracture or other catastrophe, and as necessary, take appropriate action.	7.0	~
112.7(j)	In addition to the minimal prevention standards listed under this section, include in your Plan a complete discussion of conformance with the applicable requirements and other effective discharge prevention and containment procedures listed in this part or any applicable more stringent State rules, regulations, and guidelines.	NA	Ý
112.8(b), 112.12(b)	Facility Drainage (for onshore facilities, except oil production)		
112.8 (b)(1), 112.12 (b)(1)	Restrain drainage from diked storage areas by valves to prevent a discharge into the drainage system or facility effluent treatment system, except where facility systems are designed to control such discharge. You may empty diked areas by pumps or ejectors; however, you must manually activate these pumps or ejectors and must inspect the condition of the accumulation before starting, to ensure no oil will be discharged.	6.3.2	4
112.8 (b)(2), 112.12 (b)(2)	Use valves of manual, open-and-closed design, for the drainage of diked areas. You may not use flapper-type drain valves to drain diked areas. If your facility drainage drains directly into a watercourse and not into an on-site wastewater treatment plant, you must inspect and may drain uncontaminated retained storm water, as provided in paragraphs (c)(3)(ii), (iii), and (iv) of this section.	6.3.2	~
112.8 (b)(3), 112.12 (b)(3)	Design facility drainage systems from undiked areas with a potential for a discharge (such as where piping is located outside containment walls or where tank truck discharges may occur outside the loading area) to flow into ponds, lagoons, or catchment basins designed to retain oil or return it to the facility. You must not locate catchment basins in areas subject to periodic flooding.	6.3	√
112.8 (b)(4), 112.12 (b)(4)	If facility drainage is not engineered as in paragraph (b)(3) of this section, equip the final discharge of all ditches inside the facility with a diversion system that would, in the event of an uncontrolled discharge retain oil in the facility.	6.3	$\checkmark$



	Town of Hamden PWG SPCC Plan Regulatory Cross Reference		
SPCC Rule Section	Description	Facility SPCC Plan	Visually Confirmed in Field
112.8 (b)(5), 112.12 (b)(5)	Where drainage waters are treated in more than one treatment unit and such treatment is continuous, and pump transfer is needed, provide two "lift" pumps and permanently install at least one of the pumps. Whatever techniques you use, you must engineer facility drainage systems to prevent a discharge as described in § 112.1(b) in case there is an equipment failure or human error at the facility.	NA	~
112.8 (c), 112.12 (c)	Bulk Storage Containers (for onshore facilities, except oil production)		
112.8 (c)(1), 112.12 (c)(1)	Bulk storage containers. (1) Not use a container for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature.	6.1	$\checkmark$
112.8 (c)(2), 112.12 (c)(2)	Construct all bulk storage tank installations (except mobile refuelers and other non- transportation-related tank trucks) so that you provide a secondary means of containment for the entire capacity of the largest single container and sufficient freeboard to contain precipitation. You must ensure that diked areas are sufficiently impervious to contain discharged oil. Dikes, containment curbs, and pits are commonly employed for this purpose. You may also use an alternative system consisting of a drainage trench enclosure that must be arranged so that any discharge will terminate and be safely confined in a facility catchment basin or holding pond.	§6	~
112.8 (c)(3), 112.12 (c)(3)	<ul> <li>Not allow drainage of uncontaminated rainwater from the diked area into a storm drain or discharge of an effluent into an open watercourse, lake, or pond, bypassing the facility treatment system unless you:</li> <li>(i) Normally keep the bypass valve sealed closed.</li> <li>(ii) Inspect the retained rainwater to ensure that its presence will not cause a discharge as described in § 112.1(b).</li> <li>(iii) Open the bypass valve and reseal it following drainage under responsible supervision; and</li> <li>(iv) Keep adequate records of such events, for example, any records required under permits issued in accordance with §§ 122.41 (j)(2) and 122.41 (m)(3).</li> </ul>	6.3.2	~
112.8 (c)(4)	Protect any completely buried metallic storage tank installed on or after January 10, 1974 from corrosion by coatings or cathodic protection compatible with local soil conditions. You must regularly leak test such completely buried metallic storage tanks.	NA	$\checkmark$
112.8(c)(5)	Do not use partially buried or bunkered metallic tanks for the storage of oil, unless you protect the buried section of the tank from corrosion. You must protect partially buried and bunkered tanks from corrosion by coatings or cathodic protection compatible with local soil conditions.	NA	$\checkmark$
112.8(c)(6)	Test or inspect each aboveground container for integrity on a regular schedule and whenever you make material repairs. You must determine, in accordance with industry standards, the appropriate qualifications for personnel performing tests and inspections, the frequency and type of testing and inspections, which take into account container size, configuration, and design (such as containers that are: shop- built, field-erected, skid-mounted, elevated, equipped with a liner, double-walled, or partially buried). Examples of these integrity tests include, but are not limited to: visual inspection, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or other systems of non-destructive testing. You must keep comparison records and you must also inspect the container's supports and foundations. In addition, you must frequently inspect the outside of the container for signs of deterioration, discharges, or accumulation of oil inside diked areas. Records of inspections and tests kept under usual and customary business practices satisfy the recordkeeping requirements of this paragraph.	7.3	~
112.8(c)(7)	Control leakage through defective internal heating coils by monitoring the steam return and exhaust lines for contamination from internal heating coils that discharge into an open watercourse, or pass the steam return or exhaust lines through a settling tank, skimmer, or other separation or retention system.	NA	√



	Town of Hamden PWG SPCC Plan Regulatory Cross Reference		
SPCC Rule Section	Description	Facility SPCC Plan	Visually Confirmed in Field
112.8(c)(8)	<ul> <li>Engineer or update each container installation in accordance with good engineering practice to avoid discharges. You must provide at least one of the following devices: <ul> <li>(i) High liquid level alarms with an audible or visual signal at a constantly attended operation or surveillance station. In smaller facilities, an audible air vent may suffice.</li> <li>(ii) High liquid level pump cutoff devices set to stop flow at a predetermined container content level.</li> <li>(iii) Direct communication between tank gauger and pumping station.</li> <li>(iv) Fast response system for determining liquid level of each bulk storage container such as digital computers, telepulse, or direct vision gauges. If you use this alternative, a person must be present to monitor gauges and the overall filling of bulk storage containers.</li> <li>(v) You must regularly test liquid level sensing devices to ensure proper operation.</li> </ul> </li> </ul>	Table 1 & 2 and §6	~
112.8(c)(9)	Observe effluent treatment facilities frequently enough to detect possible system upsets that could cause a discharge as described in § 112.1(b).	NA	$\checkmark$
112.8(c)(10)	Promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. You must promptly remove any accumulations of oil in diked areas.	§4 §6	$\checkmark$
112.8(c)(11)	Position or locate mobile or portable oil storage containers to prevent a discharge as described in § 112.1(b). Except for mobile refuelers and other non-transportation-related tank trucks, you must furnish a secondary means of containment, such as a dike or catchment basin, sufficient to contain the capacity of the largest single compartment or container with sufficient freeboard to contain precipitation.	§6	$\checkmark$
112.8(d)(1)	Facility Transfer Operations, Pumping, and Facility Process (onshore facilities, except oil production)		
112.8(d)(1)	Provide buried piping that is installed or replaced on or after August 16, 2002, with a protective wrapping and coating. You must also cathodically protect such buried piping installations or otherwise satisfy the corrosion protection standards for piping in part 280 of this chapter or a State program approved under part 281 of this chapter. If a section of buried line is exposed for any reason, you must carefully inspect if for deterioration. If you find corrosion damage, you must undertake additional examination and corrective action as indicated by the magnitude of the damage.	NA	~
112.8(d)(2)	Cap or blank-flange the terminal connection at the transfer point and mark it as to origin when piping is not in service or is in standby service for an extended time.	NA	$\checkmark$
112.8(d)(3)	Properly design pipe supports to minimize abrasion and corrosion and allow for expansion and contraction.	§6	$\checkmark$
112.8(d)(4)	Regularly inspect all aboveground valves, piping, and appurtenances. During the inspection you must assess the general condition of items, such as flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces. You must also conduct integrity and leak testing of buried piping at the time of installation, modification, construction, relocation, or replacement.	§7	~
112.8(d)(5)	Warn all vehicles entering the facility to be sure that no vehicle will endanger aboveground piping or other oil transfer operations.	§6.3.4	$\checkmark$



	Town of Hamden PWG SPCC Plan Regulatory Cross Reference											
SPCC Rule Section	Description	Facility SPCC Plan	Visually Confirmed in Field									
Appendix C to Part 112	<ul> <li>Appendix C to Part 112 – Substantial Harm Criteria</li> <li>Section 2.1 A non-transportation-related facility with a total oil storage capacity greater than or equal to 42,000 gallons that transfers oil over water to or from vessels must submit a response plan to EPA.</li> <li>Section 2.2 Any facility with a total oil storage capacity greater than or equal to 1 million gallons without secondary containment sufficiently large to contain the capacity of the largest aboveground oil storage tank within each area plus sufficient freeboard to allow for precipitation must submit a response plan to the EPA. Secondary containment structures that meet the standard of good engineering practice for the purposes of this part include berms, dikes, retaining walls, curbing, culverts, gutters, or other drainage systems.</li> <li>Section 2.3 A facility with a total oil storage capacity greater than or equal to 1 million gallons must submit its response plan if it is located at a distance such that a discharge from the facility could cause injury (as defined by 40 CFR 112.2) to fish and wildlife sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plans: Fish and Wildlife and Sensitive Environments" (59 FR 14713, March 29, 1994) and the applicable Area Contingency Plan. Facility owners or operators must determine the distance at which an oil spill could cause the appropriate formula presented in Attachment C-III to this appendix or a comparable formula.</li> <li>Section 2.4 A facility with a total oil storage capacity greater than or equal to 1 million gallons must submit its response plan if it is located at a distance such that a discharge from the facility would shut down a public drinking water intake, which is analogous to a public water system as described at 40 CFR 143.2(c).</li> </ul>	Appendi x E	~									

The following sections of the SPCC Rules do not apply to the facility:

- 112.9 SPCC Plan requirements for onshore oil production facilities.
- 112.10 SPCC Plan requirements for onshore oil drilling and work over facilities.
- 112.11 SPCC Plan requirements for offshore oil drilling, production, or work over facilities.
- 112.12 SPCC Plan requirements for animal, vegetable, & seed oils.



## APPENDIX C Spill Reporting Form (Example)



#### REPORT OF PETROLEUM DISCHARGE, SPILLAGE, OR RELEASE

When did the incident occur? Date Time
Where did the incident occur?
How did the incident occur?
Under whose control was the petroleum product at the time of the incident? Please give their name, mailing address and telephone number.
Who is the owner of the property onto which the spill occurred? If this is corporate property or property owned jointly, who represents the owners? Please give their name, mailing address and telephone number.
When was the incident verbally reported to the TCEQ Date Time
Who reported the incident and whom were they representing? Please give their name, title, mailing address and telephone number.
What were the petroleum products released, spilled, or discharged? Give an exact description of each of the materials involved in the incident, including chemical names, percent concentrations, trade names, etc. Please attach a Material Safety Data sheet (MSDS) for each product involved. What were the quantities released, spilled, or discharged to each environmental medium (air, surface water, soil, groundwater)?
Did any of the petroleum products travel beyond the property line? (NOTE: materials that enter the ground water are considered to have gone beyond the property line).
What actions are being taken to prevent reoccurrence of an incident of this type?



Were there any injuries as a result of this incident? If so, list the names of exposed individuals, their addresses, phone numbers, and describe their injuries.

What is the appropriate advice regarding medical attention necessary for exposed individuals?

Are there any known or anticipated health risks, acute or chronic, associated with the release of this chemical or medical advice that should be communicated?

Was the incident completely cleaned up by the time this report was submitted? If not, what are the anticipated remedial actions and their duration?

I hereby affirm that the foregoing statement is true to the best of my knowledge.

Signature	Tî	tle	С	Date
Print Name			Т	elephone Number
Street Address/P.O. Box		City/Town	State	Zip

This form may be reproduced or computerized as long as it contains all of the information requested and is on an  $8-1/2" \times 11"$  white paper, black type format. For serious incidents the questions may be answered in a narrative format which must include the preparer's affidavit.



# APPENDIX D

**Inspection Logs** 



MONTHLY SPCC PLAN INSPECTION LOG Town of Hamden Public Works Garage Hamden, Connecticut														
Inspection Date: Inspector Name/Title:														
Inspection Time: Signature:														
OIL-FILLED OPERATIONAL EQUIPMENT														
Location / Description		aks or Spills	Condition (no supports a	tained in Good corrosion, sturdy nd foundations)	Problems Identified	Corrective Actions Taken & Date								
	Acceptable	Unacceptable	Acceptable	Unacceptable										
Equipment	I	1			10000.									
Pad mounted transformer located north of building														
Mobile Generator														

In addition verify spill kits are adequately stocked



MONTHLY SPCC PLAN INSPECTION LOG Town of Hamden Public Works Garage Hamden, Connecticut														
Inspection Date:          Inspection Time:          Signature:														
Inspection Time: Signature:														
BULK FUEL STORAGE CONTAINERS														
Tank Location/ Description	Conta Main (comp drainir	inment tained lete dike ng log as essary)	Fill and Valv Secur Lock	es rely	Free of Le Spill		Containe piping in Condi (no corrosic support foundat	<b>Good</b> tion on, sturdy s and	Level Indicator Functional/Ov erfill Protection		Problems Identified (enter work order as necessary)	Corrective Actions Taken & Date		
	Acceptabl e	Unacceptabl e	Acceptable	Unaccep table	Acceptable	Unaccep table	Acceptable	Unacceptabl e	Acceptable	Unaccep table				
ABOVE-GROU	ND STOR	AGE TANK	S AND DF	RUMS										
6,000-gallon Diesel ConVault AST														
4,000-gallon Gasoline ConVault AST			-											



Inspection Date	ANNUAL INTEGRITY INSPECTION LOG Town of Hamden Public Works Garage Hamden, Connecticut Inspection Date:Inspector's Name/Title:																		
Inspection Time: Signature:																			
Lountainment       Lountainment         Containment structure in satisfactory condition?       Containment         Tainage pipes/valves within containment fift for continued service.       Fuidence of tank settlement or foundation washout         Tank supports in satisfactory condition       Mater able to drain away from tank         Tank supports in satisfactory condition       Evidence of paint failure         Any damage evident to the tank shell?       Evidence of paint failure         Any damage evident to the tank shell?       Endition         Elanged connection bolts tight and fully engaged with no sign of wear or corrosion       Standing water on tank         Nents free of obstructions       Emergency vent operable? Lift as required         Insulation damaged or missing       Insulation         Mold on insulation       Nold on insulation         Is the insulation sufficiently protected from water intrusion       Is the insulation         Operate as required       Insulation         Are tank liquid level sensing device operate as required       Are tank liquid level sensing device         Are tank liquid level sensing device       Operation         Are tank liquid level sensing device       Operation         Are tank liquid level sensing device       Operation         Are tank liquid level sensing device       Operate as required         Are tank liquid lev											Comments								
6,000-gallon Diesel ConVault AST*																			
4,000-gallon Gasoline ConVault AST																			
				_															

\*This/These Tank(s) also require(s) 20 year external integrity testing. Date of Last Test:



	DIKE DRAINING LOG Town of Hamden Public Works Garage Hamden, Connecticut							
Date	Dike or Secondary Containment Location	Name of Oldcastle Personnel Making Assessment	Visual Indication of Oily Sheen or Film? (yes/no)*	Visual Indication of Discoloration? (yes/no)*	Dike Drained to Ground or Pumped & Hauled by Contractor?	If Drained to Ground**Return DrainStart andValve to ClosedEnd Time& LockedPosition		If Pumped & Hauled, Indicate Name of Contractor Used



# APPENDIX E

### Certification of the Applicability of the Substantial Harm Criteria Checklist



#### **CERTIFICATION FOR FACILITIES THAT DO NOT POSE SUBSTANTIAL HARM**

Facility	Name: Town of Hamden Public Works Garage		
Facility	Address: <u>1125 Shepard Ave.  Hamden, Connecticut</u>		
		<u>YES</u>	<u>NO</u>
	Does the facility have a maximum storage capacity greater than or equal to 42,000 gallons and do the operations include over water transfers of oil to or from vessels?		Х
	Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and is the facility without secondary containment for each above ground storage area sufficiently large to contain the capacity of the largest above ground storage tank within the storage area?		х
-	Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III or an alternative formula <sup>2</sup> considered acceptable by the RA) such that a discharge from the facility could cause injury to an environmentally sensitive area as defined in Appendix D?		X
	Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III or an alternative formula <sup>1</sup> considered acceptable by the RA) such that a discharge from the facility would shut down a public drinking water intake?		х
	Does the facility have a maximum storage capacity greater than or equal to one million (1,000,000) gallons and within the past 5 years, has the facility experienced a reportable spill in any amount greater than or equal to 10,000 gallons?		X

<sup>&</sup>lt;sup>2</sup> If an alternative formula is used, documentation of the reliability and analytical soundness of the alternative formula must be attached to this form.



#### **CERTIFICATION FOR FACILITIES THAT DO NOT POSE SUBSTANTIAL HARM**

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 (Please type or print)	-
Date	



### APPENDIX F Training Roster (Example)



#### Town of Hamden Public Works Garage 1125 Shepard Ave. Hamden, Connecticut

### **SPCC Plan Training Roster**

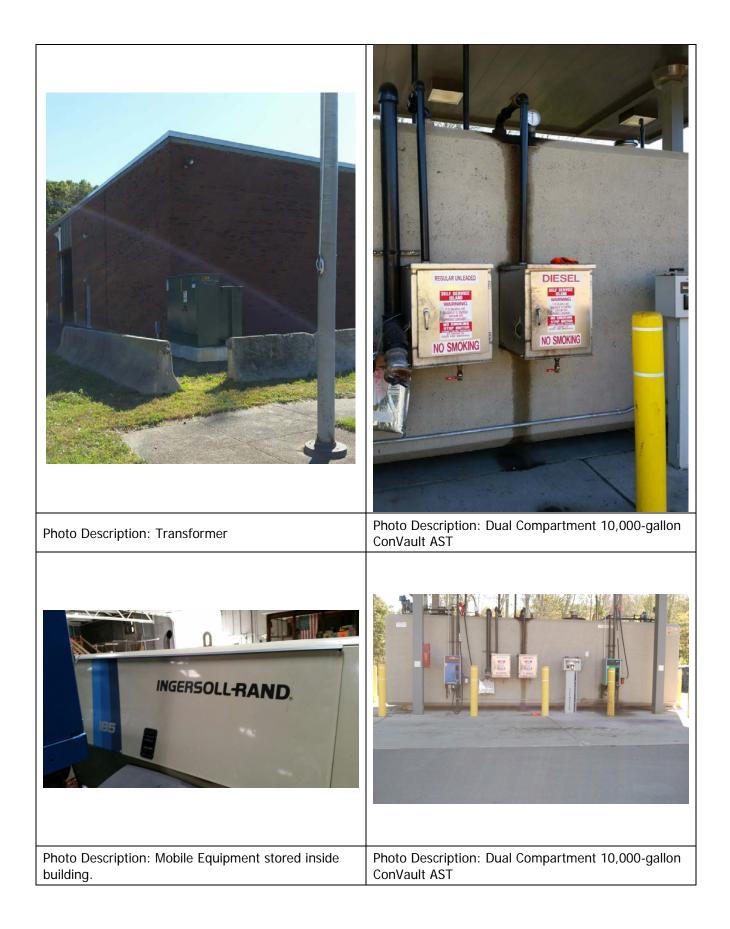
Date:	Training Conducted By:	Training Conducted By:			
Employee Name	Type of Training (Circle One)	Employee Signature			
	Initial / Refresher				
	Initial / Refresher				
	Initial / Refresher				
	Initial / Refresher				
	Initial / Refresher				
	Initial / Refresher				
	Initial / Refresher				
	Initial / Refresher				
	Initial / Refresher				
	Initial / Refresher				
	Initial / Refresher				
	Initial / Refresher				
	Initial / Refresher				
	Initial / Refresher				
	Initial / Refresher				
	Initial / Refresher				
	Initial / Refresher				
	Initial / Refresher				
	Initial / Refresher				
	Initial / Refresher				

By signing this form, each employee acknowledges that he/she has received SPCC Plan training and has an understanding of all material presented, including his/her responsibilities with regard to spill prevention and response at The CT Oil Company. Completed Training Rosters may be maintained in Appendix H of the SPCC Plan.



## APPENDIX G Photo Log of Oil Storage Locations





# APPENDIX H SPCC Plan Records



### APPENDIX I ConVault Onsite Integrity Testing Procedures





Above Ground Fuel Storage Solutions

# **Onsite Integrity Testing Procedures**

Onsite Inspection & Testing Recommendations to Meet Requirements of EPA SPCC Regulations

Release Date: January 31, 2014



#### The ConVault System

ConVault is an above ground, fuel and oil storage system manufactured for the purpose of above ground storage. The purpose of this testing procedure document is to aid ConVault owners and engineers in complying with the requirements of the Spill Prevention Control and Containment regulations for integrity testing or inspection as found at 40 CFR 112.8(c)(6) in effect as of January 14, 2010.

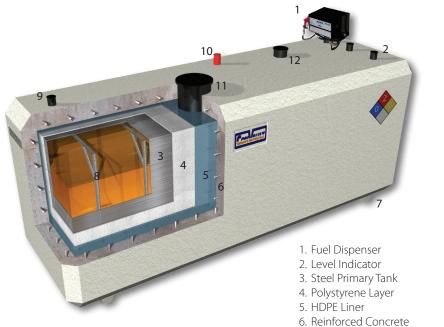
The ConVault system includes:

1. **Primary containment**: Inner shop fabricated steel tanks built in accordance with UL 142 Standard. The tank is pressure tested for 24 to 48 hours after fabrication process, again pressure tested during the precasting process, and also prior to shipment of the tank.

2. **Secondary containment**: Consists of a high density polyethylene (HDPE) liner. This secondary containment is vacuum tested prior to shipment of the tank.

3. **Encasement** inner steel tank and the HDPE liner are encased on all sides in 6" thick reinforced concrete. The entire system is elevated upon 4" to 6" high integral concrete legs.

The ConVault above ground fuel storage system is manufactured and tested in accordance with the UL 2085 Standard.



- 7. Support Legs
- 8. Internal Bracing
- 9. Atmospheric Vent
- 10. Leak Detector Tube
- 11. Overfill Containment
- 12. Emergency Vent

ConVault is thus a three layered containment system; Primary steel tank, secondary HDPE liner and exterior concrete layer acting as a dam or dike. The integrity of each layer will be addressed in the following steps.



**Note regarding Steel Tank Institute Standard Inspection Guidelines STI SP001**: STI SP001 requirements are not prepared or issued with inspection criteria that are readily applicable to other AST manufacturers especially to the concrete tanks. The STI SP001 should make a notation to say: Inquire with the manufacturer of the tank before utilizing SP001 to inspect your ConVault tank. Some portions of STI SP001 are applicable to the inspection of ConVault, such as inspection frequency. A copy of the STI SP001 Standard can be found at:

#### www.steeltank.com/Publications/STISPFAStore/tabid/487/Default.aspx

In no case should a pressure test be performed on the secondary containment. Serious damage to the tank system may result from pressure testing.

Refer to manufacturer's drawings and specifications to confirm the configuration of your tank. If you do not have drawings and specifications please contact the supplier or, manufacturer or call 1-888-965-3227.

- Testing of ConVault tanks may be completed by qualified personnel following this testing methodology. If you require assistance sourcing a qualified testing professional please call 1-800-965-3227 or visit www.convault.com.
- Testing should proceed only after reviewing all previous test records and any documentation detailing modifications, repairs, and visible or known damage to the tank.
- ConVault tank systems feature a nameplate which will provide the Underwriters Laboratory listing serial number. Include this number in the documentation of inspections.
- This testing procedure will not apply or may not be adequate if:
  - The ConVault has been moved from its original location;
  - The ConVault has sustained known or apparent trauma or impact;
  - Products incompatible with the inner steel tank have been put into the ConVault.



#### **Test Protocol**

- 1. Examine the area under and around the ConVault (pavement, drip pan, soil) for signs of movement or settlement that could lead to system performance problems.
- 2. Examine the area under and around the ConVault for signs of spills and if any are found, document the location relative to the ConVault tank.
- 3. Examine the exterior (sides and bottom) of the ConVault noting any cracks and/or damage to the concrete outer layer.
- 4. During the inspection of the ConVault exterior pay particular attention to any signs of fuel or oil leaks that may manifest as staining on the exterior of the concrete or dirt, dust or soil that may adhere to spilled fuel or oil. Document the location and nature of any signs of fuel or oil on the exterior (sides and bottom).
- 5. Fuel or oil spills on the side of a ConVault emanating from the top of the tank will be addressed in later sections of this document.
- 6. If fuel or oil is found in specific areas of the side or bottom of the ConVault the owner/user should be notified immediately.
  - i. Inquire as to the time frame the owner/user first noticed the spill.
  - ii. Note whether any fuel or oil has accumulated on the surface under the ConVault which can be specifically related to the location of fuel or oil present on the exterior (side and bottom). If any fuel or oil is noted on the surface under the ConVault, the owner/user should be notified immediately and the owner/user should take immediate steps to notify any appropriate governing authorities.

### If no evidence of leakage is noted on the exterior of the concrete containment layer then the inspection report indicate so.

- 7. Examine the top of the ConVault. Note: Examination of the top of the ConVault may involve persons walking on top of the tank and appropriate safety precautions should be implemented to insure the safety of the inspector from falls or injury related to tripping upon hardware. If appropriate a second person should be utilized to assist.
- 8. While inspecting the top of the tank, first locate and note the location, configuration, condition and types of any plumbing, meters and dispensing equipment.
  - i. Minor fuel spillage on top of the ConVault is not uncommon and may make it difficult to determine the actual

source of leaks. Any leaks directly related to the plumbing, meters, dispensing equipment or other hardware used to load or dispense fuel should be noted. Rust or other deterioration should also be noted.

- ii. Closely inspect the interfaces between the steel connections protruding from concrete. Note any areas that should be resealed to prevent the introduction of rain water into the system.
  - a. Consult with the tank manufacturer or call 1-800-965-3227 for recommendations.

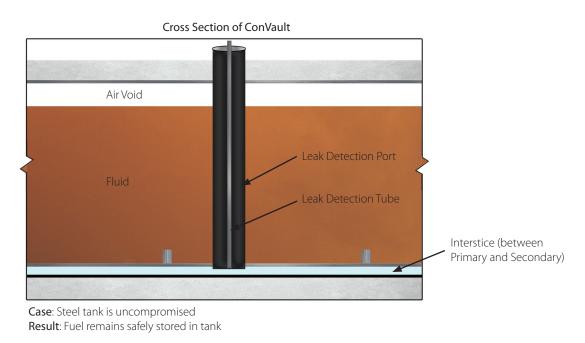
iii. Note the condition of the concrete surface. The surface should be relatively clean and smooth without cracks, holes or other deteriorations. A functioning layer of sealant (waterproof) paint should be present across the entire surface of the concrete top.

a. Use only recommended products to re-coat the top of the ConVault after thoroughly cleaning with bio-degreaser and light pressure cleaning.



#### Test Protocol (cont.)

- 9. Inspection of the primary steel tank
  - i. At this point the inspector should locate and note the leak detection port.
  - ii. The integrity of the inner steel primary tank is accomplished by checking for fluid between the steel tank and the HDPE liner. See below.



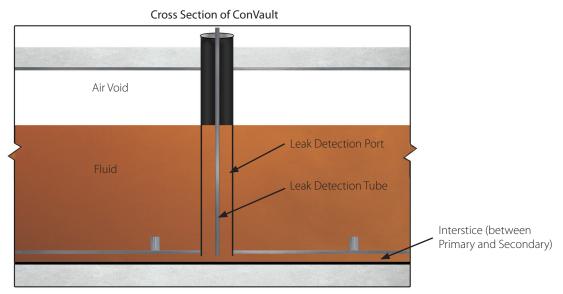
The inspector should obtain a clean wood or plastic inspection (non-pointed) rod of sufficient length to reach the full depth of the inner steel tank. With the inspection port cap opened, insert the rod to the bottom of the tube.

iii. Withdraw the inspection rod and visually examine it.

a. If the rod is dry and there is no liquid present then the primary steel tank is not leaking and the ConVault is suitable for continued use .

See next page if the rod is wet.





Case: Steel tank has been breached Result: Fuel is trapped by liner and is easily detected with probe

- b. If the rod is wet then the inspector must determine the nature of the liquid, water or fuel.
  - 1. If the liquid on the inspection rod is water then rainwater has entered the system due to inspection port cap being left off or water has entered the system due to a gap between the concrete outer layer and plumbing on top of the tank.

- The water should be extracted from the tank interstice. Consult with ConVault or the manufacturer of your ConVault or call 1-800-965-3227 for recommendations as to water removal techniques.

- c. If the rod is wet and smells of fuel or oil or has a sheen then:
  - 1. The owner/user should be notified immediately.
  - 2. It is possible that fuel or oil was introduced into the interstice through the inspection port. The fuel or oil should be extracted from the interstice. At this point and after complete extraction of the fuel or oil the rod should be re-introduced into the inspection port to check for the presence of fuel or oil. If the interstice contains fuel, after pumping out the fuel, the fuel entrapped in the secondary containment will flow down and fuel might be seen in the leak detector tube again. In this case, the best way of insuring the integrity of the primary tank is a pressure or vacuum test, using the ConVault testing manual: www.convault.com/testingmanual.pdf
  - 3. The inner steel primary containment tank may have leaked and the tank should be tested to determine if primary has failed.
    - At this point, the owner/user should contact the installer or manufacturer of the ConVault or call1-800-695-3227 for recommended next steps.



#### Industry Standard Requirements for Tank Inspection Frequency

For the sake of consistency, the standard for testing frequency for ConVault fuel and oil containment systems should be consistent with the requirements of STI SP001 which is detailed below and is normally a function of the size of the tank and it's Category per SP001 Standard.

#### **Tank Categories**

The tank categories and inspection schedule from SP001 are to be utilized for ConVault tanks.

Among other factors, owners should take a number of aspects into consideration such as the tank leak detection system, and that the monitoring equipment is in good working condition.

Based on many considerations, the SP001 standard classifies tanks into three categories. Depending on the risk a tank system poses to the environment if kept in service it is ranked as a category 1, 2 or 3 tank. Category 1 tanks pose the least amount of risk and category 3 the highest.

See **Table 5.4** of the standard, reproduced here, for examples of tank configuration and AST category. Please note that if the AST bottom plate, other than its legs or supports, is in contact with the ground or a concrete slab, it is prone to corrosion and increased susceptibility to leakage. Shop Fabricated Tanks in contact with the ground or a concrete base are almost always vertical tanks. Such tanks are placed in Category 2 or 3. ASTs which are elevated, have a leak detection system, have spill control and have no part of the tank in contact with the ground (other than legs or supports) are classified as category 1 tanks.

	Tank Configuration	Tank has CRDM	AST Category	
	AST in contact with ground	No	2 or 3	
ConVault	Elevated tank w/ spiill control & no part of AST in contact w/ ground	Yes	1	
	Vertical tank w/ RPB & spill control	Yes	1	
	Vertical tank w/ double bottom & spill control	Yes	1	
	Double-wall AST	Yes	1	
	AST w/ secondary containment dike/berm	Yes	1	

#### Table 5.4: Example Tank Configurations and AST Category

CRDM: Continuous Release Detection Method – or Leak Detection System RPB: Release Prevention Barrier

#### **Inspection Type and Frequency**

The SP0001 standard requires different inspection types and different inspection intervals based on the tank size, tank category, and the risk it poses. The tank inspection intervals from SP001 are to be followed for ConVault tanks.

In Table 5.5 of SP0001 (see next page), those portions pertaining to shop fabricated tanks up to 30,000 gallons have been highlighted showing inspection schedules for the different AST categories.



#### Industry Standard Requirements for Tank Inspection Frequency (cont.)

*In Table 5.5 use the following designations:* 

P - Periodic AST inspection

- E Formal External Inspection by Certified Inspector
- L Leak test by owner's designee I Formal Internal Inspection by Certified Inspector

() indicates maximum inspection interval in years. For example; E (5) indicates formal external inspection every 5 years.

SP001 Table 5.5: Insp	pection Schedules	ConVault ↓		
Shop Fabricated	AST Size (US Gallons)	Category 1	Category 2	Category 3
	0-1100 (0-4,164 liters)	Р	Р	P, E & L (10)
Shop Fabricated ASTs	1,101 - 5,000 (4,168 - 18,927 liters)	Ρ	P, E & L (10)	P, E & L (5), I (10) or P, L (2), E(5)
	5,001 - 30,000 (18,931 - 113,562 liters)	P, E (20)	P, E (10), I (20) or P, E (5), L(10)	P, E & L (5), I (10) or P, E & L (5), E(5)
	30,001 - 50,000	P, E (20)	P, E & L (5), I (15)	P, E & L (5), I (15)
Portable Containers	5	Р	Р	P*

\*Owners shall either discontinue use of portable container for storage or have the portable container DOT (Department of Transportation) tested and recertified per following schedule (refer to Section 9.0): Plastic containers – every 7 years; steel portable container – every 12 years Stainless Steel container – every 17 years



#### **Periodic Inspection Requirements**

ConVault tanks of 5,000 gallons or less capacity are CATEGORY 1 TANKS. Owners of ConVault ASTs of this size are NOT required to employ Certified AST Inspectors to inspect their tanks to comply with the standard's requirements, but can be in compliance with the standard by inspecting the tanks themselves or having their employees inspect them. ConVault tanks larger than 5000 gallons, are also self-inspected and only require inspection by a Certified Inspector after 20 years of service.

#### What qualifications are required for the owner to self-inspect his tank, and how does the owner need to know what to inspect?

Section 4 of the SP001 standard defines the qualifications of the Owner's Inspector as follows: "Periodic inspections are to be performed by an owner's inspector. The personnel performing these inspections shall be knowledgeable of storage facility operations, the type of AST and its associated components, and characteristics of the liquid stored".

Section 6 of the standard STI SP001 explains what is meant by the PERIODIC AST INSPECTION – and what needs to be inspected and kept in the owner's AST records. These are simple and straight-forward tasks which can be performed by any competent owner or his employees. The standard makes it very easy to know what to do and what to check for by providing a check list in the standard's Appendix C. The first section requires filling in information about the owner and the ID of the tank. The second section is the SP001 Monthly Inspection Checklist which consists of 9 easy to check, Yes or No questions such as; is there water in primary or secondary containment, are there visible signs of leakage around the tank, concrete pad, or ground, are all tank openings properly sealed, etc. The third section is the SP001 Annual Inspection Checklist which contains 27 questions with Yes or No answers and a space for comments. It should be noted that the Periodic Inspection must be performed in addition to the Formal External Inspections.

Simply put, the periodic inspection requirements are visual, documented inspections conducted by an owner's inspector, to assess the general AST conditions, as best as possible, without suspending AST operations or removing the AST from service.

ConVault strongly encourages the use of the Monthly and Annual Inspection Checklists provided in SP001, and, in fact, requires some of these items be checked on a weekly basis as part of the ConVault warranty.

See Pages 10-12 for a ConVault specific Maintenance Checklist.

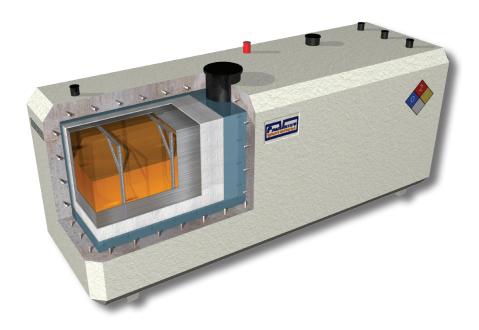
#### A copy of ConVault's weekly/monthly/yearly checklist is available online at http://www.convault.com/pdfdoc/checklist.pdf.



#### Summary

- As an owner of a ConVault you are NOT required to employ Certified Inspectors or a registered Professional Engineer to perform inspections on ConVault ASTs up to 5,000 gallons for most installations .
- For ConVault ASTs from 5,001 to 12,000 gallons you will need an External Inspection by a Certified Inspector once every 20 years for most installations.
- Monthly and yearly inspections by the tank owner or a designated employee are required by SP001, and Inspection Checklists are provided in Appendix C of the document.
- ConVault requires that the interstice be checked on a weekly basis using the inspection port and rod method described on Page 4.
- A newly installed ConVault AST will meet all the requirements of the SP001 checklists.

### Visit: www.epa.gov/emergencies/docs/oil/spcc/integrity-testing-factsheet.pdf if you have any questions regarding the EPA Spill Prevention, Control and Countermeasure Plan (SPCC) Program





### Maintenance Checklist

Inspection Date\_

Inspector

Note: This checklist is designed for general use. Some items may not apply. All equipment inspections and maintenance should be documented. You are **encouraged** to make copies of this checklist. See the corresponding maintenance procedures and your owner's manual for corrective actions and more details.

#### Weekly Maintenance:

- □ 1. Check leak detector for indication of fluid in interstice. (This is required by warranty.) If checked with a stick gauge, ensure the stick is clean and dry before insertion.
- $\Box$  2. Check for leaks on the pumps, filters, hoses, nozzles, joints and fittings.
- □ 3. Check nipples, spill containment and manholes for paint or powder coating decay (required by warranty). Check piping and fitting for rust.
- $\Box$  4. Check pump meter and reset button.
- □ 5. Check fuel gauge for proper operation. If you have a Kruger At-A-Glance Gauge, check the clear cap for weathering or cracks.
- $\Box$  6. Check spill containment for debris.
- $\Box$  7. Check for small cracks in concrete.
- $\square$  8. Check readability of signs and decals.

#### **Monthly Maintenance:**

- $\Box$  9. Check for water in the primary tank bottom under the fuel (required by warranty).
- □ 10. Visually check the tank, including under the tank for any signs of leakage as required by the Environmental Protection Agency 40 CFR 112.
- 11. Check leak detector tube cap for corrosion and proper operation. If a Kruger manual leak indicator is installed, remove the red ring and clear cap and check to see that the red indicator moves up and down about 1 inch freely. Also, check for weathering or cracks in the clear cap. If electronic leak detection is installed, check it by using the test button.
- $\Box$  12. Check all nozzles, hoses and fittings for wear and tear.
- □ 13. Check trigger mechanism on nozzle for metal fatigue or mechanical failure.
- $\Box$  14. Check pump motor for signs of over-heating or excessive wear.
- □ 15. Check body of tank for cleanliness, need of paint, or rusting where applicable. Check signs and decals for need of replacement. Check slab and supports of unit for structural soundness.
- 16. Check grounding wires to see that they are properly attached to the tank terminals and grounding rod.

#### **Other Periodic Maintenance:**

- □ 17. Replace the dispenser filter at least every six (6) months or as needed (mark the date replaced on the filter).
- $\Box$  18. Check fuel for bacterial infestation or microbial growth.
- $\Box$  19. Have a qualified person periodically check all electrical wiring.
- □ 20. Check the emergency relief vent at least once a year by lifting the top cap and releasing it to ensure freedom of movement.
- $\Box$  21. At least once a year, remove the leak detection device and check for proper operation.
- $\Box$  22. At least once a year, check the calibration of the fuel gauge.
- □ 23. Follow the pump manufacturer's recommendation for frequency and procedures of maintenance.
- □ 24. Document significant storage events per 40 CFR 112 and your state regulations.



### Maintenance Procedures

Please note that item numbers on this sheet corresponds with the item numbers on the Maintenance Checklist. Most of the maintenance requirements and procedures are also covered in the Convault owner's manual.

#### Weekly Checks:

- 1. If leak detector indicates fluid in the interstice, remove any devices and determine what the fluid is. Call your Convault representative.
- 2. If leaks are detected, contact the appropriate authorities as necessary. Tighten, repair as necessary, replace components, or contact your installer or service company.
- 3. If paint or powder coating deterioration occurs on nipples, spill containment or manholes, clean to bare metal, prime with a good quality zinc based primer, and repaint. If corrosion is severe, contact your Convault representative as soon as practical.
- 4. If dispenser meter is not working or will not reset, call your service company or installer.
- 5. If the fuel gauge fails to operate properly, repair/replace it, or call your service company before the next delivery. (It is the owner/operator's responsibility to prevent the overfilling of the tanks. The gauge is part of the required system to prevent overfilling.) If the Kruger cap has deteriorated, it could be allowing rainwater into the primary tank and should be replaced.
- 6. Keep spill containment clear of debris at all times. A contaminated spill containment will cause the fuel to be contaminated when any spill is released through the drain into the primary tank. Materials such as rags or paper products used to clean the spill containment must be disposed of properly, as they will usually contain fuel from the spill containment.
- 7. If there are small cracks in the concrete, fill and repair them. If you have questions, call your local Convault representative.
- 8. If signs or decals lose visibility, order replacements from your local Convault representative before the next time the tank is filled.

#### Monthly:

- 9. If there is water in the tank it will collect at the bottom, under the fuel. Water in the tank will cause increased corrosion. If you discover water in the primary tank it must be removed. One method is to pump it out with a "Thief Pump", a small pump that pulls the water from the bottom 1/8" of the tank. Check tank openings for possible water entry points. If you find that you are pumping out more than one half gallon of water for every 1000 gallons of product stored, see your fuel dealer, or call your Convault representative. Also consult item (I) in the maintenance section of the owner's manual.
- 10. If you detect leakage, determine what the liquid is, if possible, and call your Convault representative and appropriate authorities as necessary.
- 11. If there are problems with the leak detector tube or lock, clean and lubricate them as necessary. See item (G) in the maintenance section of the owner's manual. If the Kruger leak indicator does not function properly, remove it and repair or replace it. Due to ultraviolet radiation, the clear cap on the Kruger leak indicator will deteriorate over time. If it has deteriorated, it could be allowing rainwater into the interstitial area and should be replaced. New caps and rings or entire units can be purchased from Kruger, your service company, or your Convault representative. Kruger now offers a guard, which will prolong the life of the cap. If electronic leak detection test fails, call your service company.



- 12. If nozzles, hoses or fittings exhibit signs of wear and tear, repair/replace as necessary or call your service company.
- 13. If trigger mechanism on nozzle exhibits signs of metal fatigue or mechanical failure, replace nozzle or call your service company.
- 14. If pump motor shows signs of overheating or excessive wear, repair as necessary or contact your service company.
- 15. Clean, paint, and repair problem areas as necessary. Order replacements signs or decals from your local Convault representative If the slab is cracking or settling, contact your local Convault representative <u>and</u> your slab installer. If you have questions, call your local Convault representative.
- 16. If grounding wires are not attached properly, make appropriate changes or call your installer or your service company.

#### **Other Periodic Maintenance:**

- 17. Filters can be purchased from your Convault representative or local service company. The date can be scratched on with a sharp object, or written with a permanent marker.
- 18. If bacterial infestation is detected, consult item (H) in the maintenance section of the owner's manual.
- 19. Repair as necessary. Wiring (other than intrinsically safe items) in a class 1 area requires special sealing to prevent explosions.
- 20. If the emergency relief vent exhibits signs of motion restriction, promptly call your installer, your service company, or your Convault representative. Proper operation of this device is critical as most injuries and fatalities that happen in conjunction with fuel fires are due to improper, non-functional emergency relief vents or emergency relief vents replaced with normal pipe caps.
- 21. Most leak detection devices use a float. By removing the device from the leak detector tube and turning it upside down (simulating a floating situation) you can easily check for movement of the float and proper mechanical or electronic indication. If the leak detection device fails to operate properly, call your installer or your service company.
- 22. The fuel gauge can be checked by "sticking" the tank and comparing it to the gauge reading. Some gauges are more accurate than the stick. If the gauge reading varies substantially from the stick reading, contact the gauge manufacturer or service company. If your stick reads in inches only and you need a calibration chart, contact your Convault representative.
- 23. Pump maintenance requirements vary by manufacturer. If you have questions, contact your installer, local service company, or the manufacturer of the equipment.
- 24. If you have a warranty or environmental problem down the road, documentation will be very helpful. We recommend that you keep a copy of the "Maintenance Checklist" with items marked for every maintenance inspection. Notes about problems and corrections can be written on the back of the sheet and used for future reference. Many sites are now required to have a SPCC plan for emergencies on file. If you need a recommendation for companies that do this, please call your Convault representative. The name, phone number and location of your local representative can be obtained from the Convault web site by clicking on "Local Distributor" and your state or country at http://www.convault.com.







### **SPILL PREVENTION, CONTROL & COUNTERMEASURE PLAN**

Town of Hamden Public Works Garage ■ 1125 Shepard Ave. ■ Hamden, Connecticut

### **SPILL PREVENTION, CONTROL & COUNTERMEASURE PLAN**

Town of Hamden Public Works Garage 
1125 Shepard Ave. 
Hamden, Connecticut

