SAMPLE

SPILL, PREVENTION, CONTROL, AND COUNTERMEASURES PLAN

TEX'S BULK STORAGE TERMINAL

100 Everspill Road
Post Office Box 311 (K)
Oil City, USA 12345
Telephone: (123) 222-2222

SJ Oil Company
P.O. Box 00002
Crude City, USA 77777

CONTACT
Steve Doe, Manager

CERTIFICATION: I hereby certify that I have visited and examined the facility; and, being familiar with the requirements of 40 CFR Part 112, I attest that this SPCC Plan has been prepared in accordance with good engineering practices, including consideration of applicable industry standards, that the plan is adequate for this facility, and in accordance with 40 CFR Part 112 requirements.

ENGINEER: MC Kenny

SIGNATURE: MC Kenny
REGISTRATION NUMBER: 98765

STATE: Commonwealth of Pennsylvania

DATE: November 31, 2002

COMMONWEALTH OF
PENNSYLVANIA
MC Kenny
No. 98765

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The following sample Spill Prevention, Control, and Countermeasure (SPCC) Plan is only an example. People drafting an SPCC Plan are obliged to follow the applicable regulations set forth at 40 CFR §§ 112.3 through 112.15. Care should be taken to ensure that the SPCC Plan accurately reflects the operations, equipment, and structures at the specific facility and the potential impact that any discharge may have.

Introduction

Spill Prevention, Control, and Countermeasure plans for facilities are prepared and implemented as required by U.S. Environmental Protection Agency (U.S. EPA) regulations contained in Title 40, *Code of Federal Regulations*, Part 112 (40 CFR 112). A non-transportation related facility is subject to SPCC regulations if: 1) due to its location, the facility could reasonably be expected to discharge oil into or upon the navigable waters of the United States; 2) the total aboveground storage capacity exceeds 1,320 gallons (calculated total of containers with capacity of 55 gallons or more); or 3) the completely buried storage capacity exceeds 42,000 gallons*.

The SPCC plan is not required to be filed with U.S. EPA, but a copy must be available for on-site review by the Regional Administrator during normal working hours if the subject facility is attended at least 4 hours a day. The SPCC plan must be submitted to the U.S. EPA Region III Regional Administrator and the state agency in charge of oil pollution control along with the other information specified in 40 CFR 112.4 if either of the following occurs:

1. The facility discharges more than 1,000 gallons of oil into or upon navigable water of the United States or adjoining shorelines in a single event; or
2. The facility discharges more than 42 gallons of oil in each of two discharge events within any 12-month period.

Discharge information must be reported to U.S. EPA Region III and the state agency within 60 days if either of the above thresholds is reached. The report is to contain the following information:

1. Name of facility;
2. Name(s) of the owner or operator of the facility;
3. Location of the facility;
4. Maximum storage or handling capacity of the facility and normal daily throughput;
5. Corrective actions and/or countermeasures taken, including a description of equipment repairs and/or replacements;
6. An adequate description of the facility, including maps, flow diagrams, topographical maps as necessary, and diagrams which show the location of exempted tanks;
7. The cause of the discharge, including a failure analysis of the system or subsystem that failed;
8. Additional preventative measures taken or contemplated to minimize the possibility of recurrence; and
9. Such other information the Regional Administrator may require pertinent to the Plan or discharge.

* Completely buried tanks subject to all of the technical requirements of 40 CFR Parts 280 and 281 do not count in the calculation of the 42,000-gallon threshold.

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The SPCC plan shall be amended within 6 months whenever there is a change in facility design, construction, operation, or maintenance that materially affects the facility's discharge potential. The plan must be reviewed once every 5 years and amended to include more effective prevention and control technology, if such technology will significantly reduce the likelihood of a discharge event and has been proven in the field. All technical amendments must be certified by a registered professional engineer.

Owners and operators failing or refusing to comply with these federal regulations are liable to a Class I civil penalty of $10,000 per violation (up to a maximum assessment of $25,000) or a Class II penalty of up to $10,000 per day of violation (up to a maximum assessment of $125,000) plus a 10% increase assessed cap for Class I and Class II penalties.

If the owners and operators of a facility required to prepare an SPCC plan are not required to submit a facility response plan, the SPCC plan should include a signed certification form, Attachment A, contained in Appendix C to 40 CFR 112.

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40 CFR 112, Subpart A - General Requirements for All Facilities and All Types of Oils

SPCC PLAN REVIEW - 40 CFR 112.5(b)

The owner or operator must complete a review and evaluation of the SPCC plan at least once every 5 years. Evidence of these reviews shall be recorded in the plan.

Signature	Date
Steve Doe	6/10/77
Steve Doe	6/03/80
Steve Doe	6/01/83
Steve Doe	5/21/86
Steve Doe	5/15/89
Steve Doe	5/13/92
Steve Doe	5/11/95
Steve Doe	5/11/98
*Steve Doe	8/01/99
Steve Doe	8/01/02
**Steve Doe	8/01/07

* Amended to reflect installation of tank number 7 (10,000-gallon tank of diesel fuel).
** Next review and evaluation of the plan in 5 years unless amendment comes first.

MANAGEMENT APPROVAL - 40 CFR 112.7

This SPCC plan is fully approved by the management of Tex's Bulk Storage Terminal and has been implemented as described.

Steve Doe	8/01/02
Steve Doe - Facility Manager	Date

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PAST DISCHARGE HISTORY - (40 CFR 112.7 (a) - *required under previous rule*)

Written Description of Discharge	Corrective Actions Taken	Plan for Preventing Recurrence
On 5/17/83, the oil/water separator malfunctioned, allowing 3 to 5 gallons of oil to enter Carol Creek.	A boom was placed on Carol Creek immediately after the malfunction was discovered.	The oil/water separator was repaired. Inspection and maintenance of the separator were improved to minimize the chances of future recurrence.
On 11/7/91, tank 3 was overfilled during refilling after the visual level gauge failed. Approximately 300 gallons was discharged.	No. 2 fuel discharged within secondary containment was cleaned up using absorbent. Contaminated soil was removed.	High-level alarms were installed on all aboveground tanks in addition to the 100,000-gallon tanks. The level indicators and alarms are regularly tested to ensure proper operation.

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FACILITY INFORMATION

Facility Name: Tex's Bulk Storage Terminal

Street Address:	100 Everspill Road Oil City, VA 12345 Telephone: (123) 222-2222	**Mailing Address:**	P.O. Box 311(K) Oil City, VA 12345
Owner:	SJ Oil Company P.O. Box 00002 Crude City, VA 77777 Telephone: (123) 222-3333	**Contact:**	Steve Doe, Facility Manager 505 Oil Road Oil City, VA 12345 Telephone: (123) 222-4444

Other Personnel: Secretary-Bookkeeper, Dispatcher, Transport Driver, Delivery Personnel (3)

Location: The facility is located in Clean County, Virginia, approximately 250 feet west of Carol Creek. The facility is bordered to the north by Everspill Road and to the west by Regina Highway. The facility coordinates are 40° 00' 00" north latitude and 77° 00' 00" west longitude.

Facility Description: Tex's Bulk Storage Terminal handles, stores, and distributes petroleum products in the form of motor gasoline, kerosene, and No. 2 fuel oil. Figure 1 shows the property boundaries and adjacent highway drainage ditches, buildings on site, and oil-handling facilities.

Fixed Storage:

ASTs:

(2) 100,000- gallon vertical tanks (one premium gasoline and one regular gasoline)
(2) 20,000- gallon vertical tanks (No. 2 fuel oil)
(1) 20,000- gallon vertical tank (kerosene)
(1) 10,000- gallon vertical tank (diesel fuel oil)

Portable Storage: (1) 1,000- gallon aboveground horizontal tank (regular gasoline)

USTs:

(5) 10,000- gallon underground storage tanks (diesel fuel)

Total Oil Storage: 271,000 gallons

In-Plant Treatment: A 3,000-gallon oil/water separator used to treat drainage is located in the north-east corner of the facility. Separator effluent is discharged into Carol Creek under state and federal permits.

Vehicles:
(1) Transport Truck
(4) Tankwagon Delivery Trucks

FIGURE 1

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POTENTIAL DISCHARGE VOLUMES AND RATES - 40 CFR 112.7(b)

Potential Event	Discharge Direction	Volume Released	Discharge Rate
Complete failure of a full tank	East to Carol Creek	100,000 gallons	Instantaneous
Partial failure of a full tank	East or north to Carol Creek or the oil/water separator	1 to 99,000 gallons	Gradual to instantaneous
Tank overfill	North to the oil/water separator	1 to many gallons	Up to 1 gallon per minute
Pipe failure	North or east to the oil/water separator or Carol Creek	Up to 20,000 gallons	4 gallons per second
Leaking pipe or valve packing	North or east to the oil/water separator	Several ounces to several gallons	Up to 1 gallon per minute
Tank truck leak or failure	Northeast to the oil/water separator	1 to 8,000 gallons	Gradual to instantaneous
Hose leak during truck loading	Northeast to the oil/water separator	1 to several gallons	Up to 1 gallon per minute
Pump rupture or failure	North to east to the oil/water separator	1 to several gallons	Up to 1 gallon per minute
Oil/water separator malfunction	East to Carol Creek	1 to several gallons	Up to 1 gallon per minute

CONTAINMENT AND DIVERSIONARY STRUCTURES - 40 CFR 112.7(c)

i Dikes are provided around tanks 1, 2, 3, 4, 5, and 7, which store oil products.

ii The loading and unloading area for tanker trucks is curbed to provide secondary containment.

iii Surface drainage at the facility is engineered so that oil discharged outside of diked or curbed areas at the facility will drain into the oil/water separator.

iv Weirs, booms, or other barriers are available from the local cleanup contractor.

v Sorbent materials are provided in emergency discharge equipment lockers located strategically through out the facility.

DEMONSTRATION OF PRACTICABILITY - 40 CFR 112.7(d)

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Facility management has determined that use of the containment and diversionary structures or readily available equipment to prevent discharged oil from reaching navigable water is practicable and effective at this facility.

INSPECTIONS, TESTS, AND RECORDS - 40 CFR 112.7(e)

Daily visual inspections consist of a complete walkthrough of the facility property to check for tank damage or leakage, stained or discolored soils, excessive accumulation of water in diked areas, and plant effluent discharged from the oil/water separator. The inspections also ensure the dike drain valves are securely closed.

The checklist provided in Attachment B is used during monthly inspections. These inspections are performed in accordance with written procedures such as API standards and engineering specifications. Written inspection procedures and monthly inspections are signed by the inspector and are maintained in the office for 3 years.

PERSONNEL, TRAINING, AND DISCHARGE PREVENTION PROCEDURES - 40 CFR 112.7(f)

1. Facility personnel have been instructed by management in the operation and maintenance of oil pollution prevention equipment and pollution control laws and regulations.

2. The facility manager, Steve Doe, is accountable for oil discharge prevention at Tex's Bulk Storage Terminal.

3. Yearly discharge prevention briefings are provided by management for operating personnel to ensure adequate understanding of the SPCC plan. These briefings highlight any past discharge events or failures and recently developed precautionary measures. Training has been held on oil discharge prevention, containment, and retrieval methods. A simulation of an on-site vehicular discharge has been conducted, and future exercises shall be periodically held to prepare for possible discharge response. Records of these briefings and discharge prevention training are kept on the form shown in Attachment C. Instructions and phone numbers regarding the reporting of a discharge to the National Response Center and the state are listed below and have been publicized and posted in the office.

EMERGENCY TELEPHONE NUMBERS

A. Notification Procedures

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1. Facility Manager, Steve Doe (123) 222-3333
2. National Response Center (800) 424-8802
3. State Emergency Response Commission (123) 555-2221

B. Clean-up Contractors

1. E-Z Clean Environmental (123) 222-3038
2. O.K. Engineers, Inc. (123) 222-2207

C. Supplies and Equipment

1. Oil City Equipment Co. (123) 222-8372
2. Northwestern Sorbent Co. (123) 222-9213

SECURITY - 40 CFR 112.7(g)

1. The facility is surrounded by steel security fencing and the entrance gates are locked when the facility is unattended.

2. The master flow and drain valves are locked in the closed position when in nonoperating or nonstandby status.

3. The electrical starter controls for the oil pumps are located in the office, which is locked when the pumps are not in use.

4. The loading and unloading connections of oil pipelines are capped when not in service or when in standby service for an extended time.

5. Two area lights are located in such a position so as to illuminate the office and storage areas.
   i. Consideration was given to discovering discharges at night.
   ii. Lights may prevent discharges occurring through acts of vandalism.

TANK CAR AND TANK TRUCK LOADING/UNLOADING RACK - 40 CFR 112.7(h)

1. Curbing is installed at the vehicle loading/unloading rack and holds the single largest compartment of any truck used at the facility.

2. Warning signs and chock blocks are provided at the loading/unloading rack to prevent premature vehicular departure.

3. The lower most drain and all outlets on tank trucks are inspected and tightened prior to filling and disconnection of oil transfer lines, and prior to vehicle departures.

BRITTLE FRACTURE EVALUATION - 40 CFR 112.7(i)

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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 failure or other catastrophe, the container will be evaluated for risk of discharge or failure due to brittle fracture or other catastrophe, and corrective action will be taken as necessary.

CONFORMANCE TO APPLICABLE GUIDELINES - 40 CFR 112.7(j)

Communication with the State agency in charge of oil pollution control has indicated that the requirements of 40 CFR 112 are in conformance with all State agency requirements and are the most stringent rules, regulations, and guidelines. This SPCC plan was written in conformance with the requirements of 40 CFR 112.

40 CFR 112, Subpart B - Requirements for Petroleum Oils and Non-Petroleum Oils, Except Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and Vegetable Oils (Including Oils from Seeds, Nuts, Fruits and Kernels)

FACILITY DRAINAGE - 40 CFR 112.8(b)

1. Drainage from diked storage areas is restrained by valves to prevent a discharge or other excessive leakage of oil into the facility's drainage system.

2. Gate valves are used to drain diked areas.

3. In the event of a discharge from a tank, the oil should be contained within a dike. If a discharge occurs during transfer or in a manner that cannot be contained in a dike, the material is in a drainage area, as indicated in Figure 1. Facility drainage from undiked areas with the potential of receiving discharged oil terminates at the oil/water separator.

4. Facility drainage systems are adequately engineered to prevent oil from leaving the facility. In the event of equipment failure, discharged oil terminates at the oil/water separator. Facility drainage systems are adequately engineered to prevent a discharge in the event of equipment failure or human error.

5. Drainage waters are treated continuously at the two-stage oil/water separator. The separator equipment has two lift pumps. Pump #1 is a permanently installed pump.

BULK STORAGE CONTAINERS - 40 CFR 112.8(c)

1. Each aboveground container is of UL-142 construction and is compatible with the oils they contain and conditions of storage.

2. All aboveground containers tanks have concrete dikes for secondary containment with a volume that can hole the largest single container, plus adequate freeboard to contain precipitation. The containment volume is adequate to hold a 24-hour, 25-year storm event.

3. Drainage of rainwater from diked area, bypassing treatment, is accomplished if:

    i. The bypass valve is normally sealed closed.

    ii. Runoff rainwater is inspected to ensure compliance with applicable water quality standards and will not cause a harmful discharge.

    iii. The bypass value is opened and resealed under supervision.

    iv. Usual and customary business records are kept for drainage events. A sample dike drainage record is attached (Attachment D).

4. The underground storage tanks are coated and cathodically protected to prevent an

undetected discharge. The buried tanks are also subject to regular leak testing.

5. There are no partially buried tanks at the facility and should be avoided in the future.

6. Aboveground containers are periodically tested using a system of visual inspection combined with non-destructive shell thickness testing, including inspection of container supports and foundations. Comparison records are maintained.

7. There are non-internal heating coils at this facility.

8. Each container is equipped with a direct-reading level gauge. The 100,000-gallon containers are equipped with high-level alarms. Venting capacity is suitable for the fill and withdrawal rates.

9. Plant effluent discharged into Carol Creek is observed frequently to detect possible upsets in the oil/water separator.

10. Oil leaks that result in a loss of oil from container seams, gaskets, rivets, and bolts are promptly corrected.

11. The portable oil container and other mobile oil storage are located to prevent discharged oil from reaching navigable water, provided with secondary containment, and located where they are not subject to periodic flooding.

TRANSFER OPERATIONS, PUMPING, AND IN-PLANT PROCESSES - 40 CFR 112.8(d)

1. Buried piping is coated and cathodically protected as warranted to protect against corrosion. If a section of buried line is exposed, it is carefully examined for deterioration. If corrosion damage is found, additional examination and corrective action will be taken as indicated by the magnitude of the damage.

2. Pipelines not in service or in standby for an extended period are capped or blank flanged and marked as to their origin.

3. All pipe supports are properly designed to minimize abrasion and corrosion and to allow for expansion and contraction.

4. All aboveground pipelines, valves, and appurtenances are examined monthly to assess their condition. Also on a monthly basis, all flange joints, expansion joints, valve glands and bodies, catch pans, pipeline supports, locking of valves, and metal surfaces are inspected. Integrity and leak testing for piping is conducted as warranted by modification, construction, relocation, or replacement.

5. Warning signs are posted as needed to prevent vehicles from damaging aboveground pipelines.

SPILL PREVENTION, CONTROL, AND COUNTERMEASURES PLAN REQUIREMENTS FOR ONSHORE OIL PRODUCTION FACILITIES - 40 CFR 112.9

This section is not applicable to this facility.

SPILL PREVENTION, CONTROL, AND COUNTERMEASURES PLAN REQUIREMENTS FOR ONSHORE OIL DRILLING AND WORKOVER FACILITIES - 40 CFR 112.10

This section is not applicable to this facility.

SPILL PREVENTION, CONTROL, AND COUNTERMEASURES PLAN REQUIREMENTS FOR OFFSHORE OIL DRILLING AND WORKOVER FACILITIES - 40 CFR 112.11

This section is not applicable to this facility.

40 CFR 112, SUBPART C - Requirements for Animal Fats and Oils and Greases, and Fish and Marine Mammal Oils; and for Vegetable Oils, Including Oils from Seeds, Nuts, and Fruits and Kernels

This section is not applicable to this facility.

40 CFR 112, SUBPART D - Response Requirements

This section is not applicable to this facility. A Certification of Substantial Harm Determination Form is included as Attachment A.

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CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION FORM

Facility Name: Tex's Bulk Storage Terminal
Facility Address: 100 Everspill Road
Oil City, VA 12345

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

   YES _____ NO XX

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

   YES _____ NO XX

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments. See Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Plan" Fish and Wildlife and Sensitive Environments" (see Appendix E to this part, section 10, for availability) and the applicable Area Contingency Plan.

   YES _____ NO XX

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix or a comparable formula) such that a discharge from the facility would shut down a public drinking water intake?

   YES _____ NO XX

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

   YES _____ NO XX

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

Steve Doe _____ Facility Manager _____
Signature Title

Steve Doe _____ July 1, 1994 _____
Name (please type or print) Date

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

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

ATTACHMENT A

FACILITY INSPECTION CHECKLIST

Instructions: This inspection record will be completed every month. Place an X in the appropriate box for each item. If any response requires elaboration, do so in the Descriptions and Comments space provided. Further descriptions or comments should be attached on a separate sheet of paper if necessary.

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	Yes	No	Descriptions and Comments
Tank surfaces show signs of leakage			
Tanks are damaged, rusted, or deteriorated			
Bolts, rivets, or seams are damaged			
Tank supports are deteriorated or bulked			
Tank foundations have eroded or settled			
Level gauges or alarms are inoperative			
Vents are obstructed			
Valve seals or gaskets are leaking			
Pipelines or supports are damaged or deteriorated			
Buried pipelines are exposed			
Loading/unloading area is damaged or deteriorated			
Connections are not capped or blank-flanged			
Secondary containment is damaged or stained			
Dike drainage valves are open			
Oil/water separator is functioning properly			
Oil/water separator effluent has a sheen			
Fencing, gates, or lighting is non-functional			

Remarks: _____

Signature: _____ Date: _____

ATTACHMENT B

RECORD OF PERSONNEL DISCHARGE PREVENTION BRIEFINGS

In accordance with the requirements of 40 CFR 112.7(f), this record of discharge prevention briefings for oil handling personnel will be completed at least once every year. The briefings must highlight and describe known discharges or failures, malfunctioning components, and any recently developed precautionary measures. Further descriptions or comments should be attached on a separate sheet of paper if necessary. Each person who participated in the briefing is listed below with printed name, signature, and the date of

participation in the briefing.

Facility Name: Tex's Bulk Storage Terminal, Oil City, Virginia

Name (Printed)	Signature	Date

ATTACHMENT C

SAMPLE

RECORD OF DIKE DRAINAGE

Instructions: This record will be completed when rainwater from diked areas is drained into a storm drain or into an open water course, lake, or pond, and bypasses the in-plant treatment. The bypass valve normally should be sealed closed and only opened and resealed following drainage under responsible supervision.

Facility Name: Tex's Bulk Storage Terminal, Oil City, Virginia

Diked Area	Date	Presence of Oil	Time Started	Time Finished	Signature

ATTACHMENT D

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APPENDIX B

DIKE DESIGNS

SAMPLE

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SAMPLE DIKE HEIGHT CALCULATION

Calculations for this example:

a) minimum containment volume (mcv) = to capacity of largest tank in a tank installation, in this example 50,000 gallons. mcv - 50000 × 0.1337 cu. ft/gal. = 6.685 cu. ft.

* Factor in freeboard per local requirements.

b) dike area (proposed) Length × Width

c) dike height (proposed)

d) dike volume (dike area × dike height)

e) Displacement volume (tank area × tank height of dike wall)

* Volume of tank (cylinder) = $\pi r^2 h$

f) effective secondary containment
dike volume - displacement volume = x

1) if x is greater than the mvc then the secondary containment may be adequate, if sufficient freeboard for precipitation is factored in

2) If x is less than mcv, adjust the dike area n dike height accordingly, the recalculate.

SAMPLE