

BP CHEMICALS

BP Chemicals Inc. Ft. Amanda Road P.O. Box 628 Lima, Ohio 45802-0628 (419) 226-1200

VIA OVERNIGHT MAIL

Mr. James M. Ottarson Ohio Environmental Protection Agency Northwest District Office 347 North Dunbridge Road Bowling Green, Ohio 43402

August 18, 1999

NLIO

Reference:	Docket No. 040-07604
	License No. SUB-0908

Subject: Mixed Waste Pond Closure Project Field Change No. 064

Dear Sir:

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In accordance with the Mixed Waste Pond Closure Project Field Change Approval Procedure (BPCI Administrative Procedure AP-02), BP Chemicals, Inc. (BPCI) herewith submits Field Change No. 064 for Ohio EPA concurrence. This field change is to modify Project Specification 02225 for the placement and compaction of contaminated soil in Cell No. 2 by changing the allowable upper moisture limit from +4 percent of optimum to +6 percent of optimum. With this change the contractor would still be required to achieve a density of 90 percent of modified proctor (per ASTM D 1557) as is currently required. The benefit achieved by this change will be to provide a wider window of allowable moisture contents without sacrificing in-place density. Since permeability of the waste after placement in the cell is not an issue, this change to +6 percent should not be detrimental to the quality of the placement.

Attached is a copy of the field change, a copy of the revised page 5 of Specification 02225 and a copy of an August 13, 1999 letter from Dames & Moore that provides a technical evaluation of the proposed change.

Your concurrence is requested. Copies of this letter are also being sent to NRC and ODH for review. If there are any questions, please give me a call at (419) 226-1299.

Sincerely,

William M. Rupert, PE Project Environmental Coordinator

9909080164 990818 PDR ADOCK 04007604 C PDR cc: Sam Nalluswami, NRC Headquarters Ed Kulzer, NRC Region 3 Ruth Vandegrift, Ohio Dept. of Health

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August 13, 1999

3065 Southwestern Boulevard Suite 202 Orchard Park, New York 14127 716 675 7130 Tel 716 675 7136 Fax

BP Chemicals, Inc. Ft. Amanda Road Lima, Ohio 45802-0628

Attn: Mr. Larry Vonderembse Project Manager

Re: Review of Field Change Notice 63 Mixed Waste Pond Closure Project BP Chemicals, Inc. Lima, Ohio

Dear Mr. Vonderembse:

Dames & Moore has reviewed the Field Change Request (FOC) number 63 submitted by Sevenson Environmental Services requesting the change in the moisture content upper limit specified for placement and compaction of the contaminated soil during cell construction for the Mixed Waste Pond Closure Project. The request is to increase the upper moisture content limit during placement and compaction from +4 percent to +6 percent. Sevenson believes that this change will expedite placing and compacting the materials as, we understand, the as-excavated moisture content is nearer to 5 and 6 percent.

The intent of the specification is to assure a relatively uniform, dense waste mass. Density is important in providing a soil material that is stable and will undergo limited, uniform settlement. Specifying a moisture content range, as done in this case, is typical to provide the contractor with guidance and to limit the likelihood of the contractor attempting to compact excessively wet or dry soil. In clay barrier layers, moisture content is frequently specified to assure that the clay has low hydraulic conductivity and is ductile. However, this is not the concern for the placement of the contaminated soil.

Changing the upper limit moisture content is not a significant change provided Sevenson can achieve the required 90 percent compaction per ASTM D 1557 (Modified Proctor) at 6 percent over optimum moisture content. In practice, this should result in a waste material being expcsed for less time and provide a wider range of weather conditions in which to place contaminated soil. When dealing with contaminated soils, it is generally a good practice to limit the time the material is exposed and handled.

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DAMES & MOORE



Mr. Vonderembse August 13, 1999 Page 2

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Dames & Moore and Bowser Morner shall monitor the soil placement to ensure that excessively wet or soft soil is not used and that 90 percent of maximum dry density (per Modified Proctor) is achieved.

Sincerely, DAMES & MOORE

J. Britt Quinby, P.E. Principal Engineer



22007-015-121 (jbq/fao) APH:BUF:p/bpci/focxx.ltr.wpd

BP CHEMICALS, INC. MIXED WASTE POND CLOSURE PROJECT

FIELD CHANGE REQUEST FORM

Field Change Number: 064 Date: August 12, 1998

Subject: Mixed Waste Pond Project - Project Specifications - Section 02225; Placement and Compaction of Contaminated Soil

Description: 1.5.3.2 b. states that the moisture content (rounded to the nearest whole percent) shall be within 4 percent of optimum as obtained by ASTM D 1557 (modified proctor). The request is to change the moisture content requirement to -4 percent +6 percent of optimum.

Justification: Changing the moisture content upper limit to 6 percent is not a significant change provided the required 90 percent of maximum density per ASTM D 1557 (modified proctor) is achieved. This will allow for the timely placement of contaminated soil with a moisture content in this upper range. It also allows for placement of the material in a wider range of weather conditions resulting in less time the material is handled and exposed. This is particularly important in consideration of the wet season typically encountered in the fall of the year.

Attachments: Revised 1.5.3.2b. of Specification 02225; Dames & Moore letter dated 8/13/99

Requested by:	alistore B	Spatone	2 SEVENSON	8/12/99	
	Signature	-/	Company	Date	
BPCI Project Approvals					
Dames & Moore	the Bu	# 24	Yes No	8/12/99	
Certifying Engineer	Signature	/	Approval	Date	
BPCI Radiation	(Not Require	ed)	Yes No		
Safety Officer	Signature		Approval	Date	
BPCI HSE	(Not Require	ed)	Yes No		
Manager	/ Signature	1	Approval	Date	
BPCI Project	Lang bu	den	Yes No	8/16/99	
Manager	Signature		Approval	Date	
Regulatory Agency Concurrence					
Ohio EPA			Yes No		
Concurrence	Signature		Concur	Date	
NRC			Yes No		
Concurrence	Signature		Concur	Date	
22007-015-121 APH:P/FCR1/fieldchg59.doc			Dames & Moore		

PLACEMENT AND COMPACTION OF CONTAMINATED SOIL

number as the returned material, but with the suffix A. For example if the contents of staging pile C (representing sampling units 8, 9 and 10) for survey unit 75 of the Celite Pond soil are removed and replaced with new material, the replacement material samples collected for DU analysis would designated CE-75-8-DU-A through CE-75-10-DU-A. (See Section 1.5.1.2.) If replacement material is rejected, use the next letter of the alphabet to designate subsequent replacement material. The contractor may alternatively choose not to replace staging piles, but, instead, to only place the one or more staging piles that qualify for permanent placement. This alternative shall be dictated by extenuating circumstances such as bad weather, scheduled end of production or breakdown of equipment. In such circumstances, the contractor shall submit a written request to the BPCI Project Manager for case-by-case authorization, and shall receive written authorization from the BPCI Project Manager before proceeding.

- 1.5.2.6. Archive all samples until release is authorized by Owner.
- 1.5.3. Verification of adequate compaction following placement
 - 1.5.3.1. The Owner's testing contractor will perform a maximum dry density and optimum moisture content test in accordance with ASTM D 1557 (modified Proctor) for each 10,000 cubic yards of material placed, plus whenever there is change in source or there is an apparent change in material characteristics. If two materials that are visually or texturally different are blended together, perform a new maximum dry density/optimum moisture content test on the combined material after blending. The Owner, Engineer or QA/AC contractor may make the determination of a material change.
 - 1.5.3.2. A minimum of one in-place density test by either ASTM D 1556, D 2167, or D 2922 and one in place moisture content by ASTM D 2216 or D 3017, will be made by the Owner's testing contractor for each survey unit of placed contaminated soil. Nuclear testing of in-place densities, if used, will be cross checked by one of the other methods each day of backfilling and compaction activities. The tests will be made at locations directed by the Owner, Engineer or QA/QC contractor. The contractor will be required to have materials meet the following requirements:
 - a. In-place density of soil shall be a minimum of 90 percent of the maximum density as obtained by ASTM D 1557 (modified Proctor).
 - b. Moisture content (rounded to the nearest whole percent)shall be within 4 <u>4</u> percent to +6 percent of optimum as obtained by ASTM D 1557 (modified Proctor).
 - 1.5.3.3. Record the coordinates and elevation of each measurement.
 - 1.5.3.4. Record the number of passes made by the compaction equipment in each direction.
- 1.5.4 The Contractor shall designate a quality assurance representative who shall observe all testing, backfilling and compaction operations for conformance with these specifications.
- 1.5.5 The contractor shall provide a grid system and the means to establish one, tied to the site coordinate system, that can be used for locating the extent of each lift and sample locations. Elevations will be included with each grid point and tied to the site bench mark elevations.
- 1.5.6 Perform all analytical testing and sampling (including sample storage, chain of custody, etc.) in accordance with the QA/QC Plan, or BPCI and Engineer approved procedures developed in accordance with the QA/QC Plan.
- 1.5.7 Testing may be performed by an independent testing agency to be engaged by