#### 4 Form 3160-5 (August 2007)

# **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT APR 3 0 2013

RECEIVED

FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

5. Lease Serial No. NM-012202

6. If Indian, Allottee or Tribe Name

# SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to rejenter and Office

1. Type of Well	abandoned well. Use For	m 3160-3 (APD) for sur	ch proposalsna	gement			
Qil Well   Gas Well   Other   Service   Gas Well   Other   Oth	SUBMIT IN TRIPL	7. If U	nit of CA/Agre	ement, Name and/or No.			
38. Address 39. Phone No. (include area code) 505-330-9179  10. Field and Pool or Exploratory Area Dakota  4. Location of Well (Footage, Sec., T.R., M., or Survey Description)  11. Country or Parish, State San Juan County, NM  12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA  TYPE OF SUBMISSION  TYPE OF ACTION    Notice of Intent	Oil Well  Gas Well						
Subsequent Report   Casing Repair   Degen   Production (Start/Resume)   Water Shut-Off   Well Integrity   Water Disposal   Soil   Subsequent Report   Casing Repair   Degen   Plug and Abandon   Plug Back   Water Disposal   Soil   So	2. Name of Operator BP America Production Company			9. API 30004	9. API Well No. 30004524103		
12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA  TYPE OF SUBMISSION  TYPE OF ACTION    Notice of Intent	3a. Address			1	10. Field and Pool or Exploratory Area		
TYPE OF SUBMISSION  TYPE OF ACTION    Notice of Intent							
Notice of Intent  Acidize  Deepen  Production (Start/Resume)  Water Shut-Off  Alter Casing  Fracture Treat  Reclamation  Well Integrity  Other Remediation of hydrocarbon impacts  Subsequent Report  Change Plans  Plug and Abandon  Temporarily Abandon  Temporarily Abandon  Temporarily Abandon  Temporarily Abandon  Plug Back  Water Disposal  Temporarily Abandon  New Convert to Injection  Plug Back  Water Disposal  Temporarily Abandon  New Convert to Injection  Plug Back  Water Disposal  Temporarily Abandon  Temporarily Abandon  New Convert to Injection  New Convert to Injection  Plug Back  Water Disposal  Temporarily Abandon  New Convert to Injection  New Temporarily Abandon  Temporarily Abandon  New Convert to Injection  New Temporarily Abandon  Temporarily Abandon  New Lourse  New Lourse  New Temporarily Abandon  New Lourse  New Lour	12. CHECK THE AP	PROPRIATE BOX(ES) TO IND	ICATE NATURE OF	NOTICE, REI	PORT OR OTH	IER DATA	
Alter Casing Fracture Treat Reclamation Well Integrity  Casing Repair New Construction Recomplete  Casing Repair New Construction Recomplete  Change Plans Plug and Abandon Temporarily Abandon hydrocarbon impact  Final Abandonment Notice Convert to Injection Plug Back Water Disposal  3. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones.  Attach the Bond under which the work will be performed or provide the Bond No. on flie with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed one testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)  BP proposes to excavate and implement soil shredding to remediate approximately 500 cubic yards of hydrocarbon impacted soil. The impacted soil will be excavated to determine the final extents of hydrocarbon impacts. The soil shredding consists of processing impacted soil mechanically, followed by the application of hydrogen peroxide to oxidize the hydrocarbons. The soils will be sampled and laboratory analyzed for total petroleum hydrocarbons, benzer toluene, ethylbenzene and xylenes to determine if contaminant concnetrations are at or below the site ranking criteria for use as backfill. Upon meeting or exceeding the site criteria for contaminant concnetrations, the treated soil will be placed in the excvation as backfill material. BP currently estimates 2-3 weeks to complete this process.	TYPE OF SUBMISSION		ТҮРЕ С	OF ACTION			
Subsequent Report	Notice of Intent	er Casing Fract	ture Treat Reclamation Well Integrity				n of
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K	determined that the site is ready for final inspectors by the proposes to excavate and implement soil sexcavated to determine the final extents of hydrogen peroxide to oxidize the toluene, ethylbenzene and xylenes to determine exceeding the site criteria for contaminant	ection.) Shredding to remediate approximated approximates. The soil significant approximate and the soils will be if contaminant concnetration.	imately 500 cubic ya hredding consists of be sampled and lab ns are at or below th	ards of hydroc processing in poratory analy ne site ranking	carbon impactor mpacted soil n zed for total p g criteria for us ackfill material	ed soil. The impacted soinechanically, followed by the troleum hydrocarbons, because as backfill. Upon meeting in the soil in	l will be the enzene, ng or
14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)	I hereby certify that the foregoing is true and corrections.	ect. Name (Printed/Typed)					
Steve Moskal  Title Field Environmental Coordinator	Steve Moskal		Title Field Environmental Coordinator				
Signature 20 10 Date 04/30/2018	Signature 200 Min		Date 04/30/2018				
THIS SPACE FOR FEDERAL OR STATE OFFICE USE	Т	HIS SPACE FOR FEDE	RAL OR STATI	E OFFICE	USE		
Approved by  Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any fictitious or fraudulent statements or representations as to any matter within its jurisdiction.	Conditions of approval, if any, are attached. Approval that the applicant holds legal or equitable title to those entitle the applicant to conduct operations thereon.  Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Sect	rights in the subject lease which wo	pertify ould Office erson knowingly and wi	AV MA			tes any false,

(Instructions on page 2)

#### **GENERAL INSTRUCTIONS**

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

#### **SPECIFIC INSTRUCTIONS**

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13 - Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment.

#### **NOTICES**

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and grantingapproval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

#### **BP Remediation Plan**

To:

Cory Smith, Vanessa Fields(NMOCD), Whitney Thomas (BLM),

From:

Steve Moskal (BP)

CC:

Jeff Blagg (Blagg Engineering), Emmanuel Adeloye (BLM)

Date:

4/30/2018

Re:

Bolack E 001 - Ex-situ Soil Remediation - Soil Shredding (L) S-3, T28N,

R08W; API #30-045-24103; Serial No.:NM-012202

Dear Mr. Smith, Mrs. Fields and Mrs. Thomas,

The Bolack E 001 site is an active natural gas production well location within the San Juan Basin Gas Field in San Juan County, New Mexico. The site is located on land managed by the Bureau of Land Management Farmington Field Office (BLM-FFO) and is in an area primarily used for oil and gas production and some recreation.

## **Background**

Historical impacts were identified at the location on March 20, 2018 during the closure of a below grade tank (BGT), 45 bbl., Tank B. The impacts are likely the result of earthen pits formerly used on the location. No historical documentation is available regarding this pit. Initial site investigation determined additional delineation was required to define the extents of impacts. Vertical delineation of the site has not yet been performed. The well site is operated by BP Production.

#### Site Ranking

Following the NMOCD site ranking criteria, the site closure standard is 100 ppm TPH, 50 ppm BTEX and 10 ppm benzene:

- Depth to groundwater >100' (10 points)
- Nearest surface water source >1,000' (0 points)
- Distance to nearest water well or water source <1,000' (10 points)

#### **Proposed Remediation - Soil Shredding**

Based on recent success of soil shredding technologies performed on BP remediation sites, BP proposes to use this technology at the subject site. To date, BP has successfully contracted soil shredding of nearly 150,000 cubic yards of soil to meet site closure standards.

Soil shredding involves the excavation of the impacted soil which is then placed in processing equipment, such as a hammer mill or pug mill, to mechanically process and break-up the soil. The soil becomes more uniform and is aerated during the mechanical processing. The soil is then ejected from the processing equipment and a chemical oxidizer is applied, in this case, a 35% solution of hydrogen peroxide and water. The applied concentration of hydrogen peroxide typically ranges from 3-8%. The hydrogen peroxide quickly oxidizes the hydrocarbon impacts (reagents), resulting in soil, water and carbon dioxide (products). Once the soil is processed, it is stockpiled and allowed to sit for approximately 2-5 days of residence time. A composite soil sample is collected from each segregated stockpile and submitted for laboratory analysis to determine the effectiveness of the ex-situ remediation process. If the laboratory results are of acceptable levels, the soil will be used as backfill Page | 1

to the excavation; if results are unsatisfactory, the soil is passed through the process once more and a subsequent laboratory sample will be collected for laboratory confirmation as described before. Typically, 24 hours of notice is provided to the regulatory agencies for the opportunity to observe and witness the stockpile sampling.

BP proposes to perform the remediation of hydrocarbon impacts by the means of soil shredding. A conservative estimate of approximately 500 cubic yards of soil will be treated through the soil shredding process. BP proposes to treat the impacted soil and segregate windrow stockpiles broken into 100 cubic yard increments. A single, five-point composite, soil sample will be collected to represent each 100 cubic yard stockpile. If necessary, once a baseline of approximately 1,000 cubic yards of soil is consistently and successfully treated, BP will propose to decrease the sampling frequency to 500 cubic yard stockpile segments. The 500 cubic yard sampling modification will be discussed with the NMOCD and BLM for approval and input prior to implementation. BP would expect to have a sampling modification approval from the agencies within 48 working hours from the time of request. The remediation will then continue until complete and sampling will be based on the regulatory agencies approved sampling plan.

Excavation sampling will be in accordance with a typical dig and haul. The sidewalls and base of the excavation will be sampled in a frequency based on the size and progress of the excavation. Agency notification of excavation sampling will also be issued in advanced, 24-48 hours if possible.

BP is currently anticipates mobilizing to the location within the next week. BP plans to shut the well in and remove all necessary surface equipment.

It is understood, that if soil remediation is not successful via the soil shredding, an alternative method such as a dig and haul or soil vapor extraction will be necessary. BP will be in close communications with the agencies in the event an alternative remediation method is required.

# **Site Closure and Reporting**

Once the soil shredding process is complete, the excavated area will be fully backfilled and compacted, and surface equipment will be re-set. Any necessary interim reclamation will be performed. Final reclamation of the well pad will occur at a later date, once the natural gas production well is plugged and abandoned.

A final remediation report will be delivered to NMOCD and BLM for approval of final site closure regarding the excavation and soil shredding activities within 60 days of the end of remediation.

Case No./Name:Bolack E 001/3004524103 Date Submitted:05/02/2018

Company: BP America Production Company

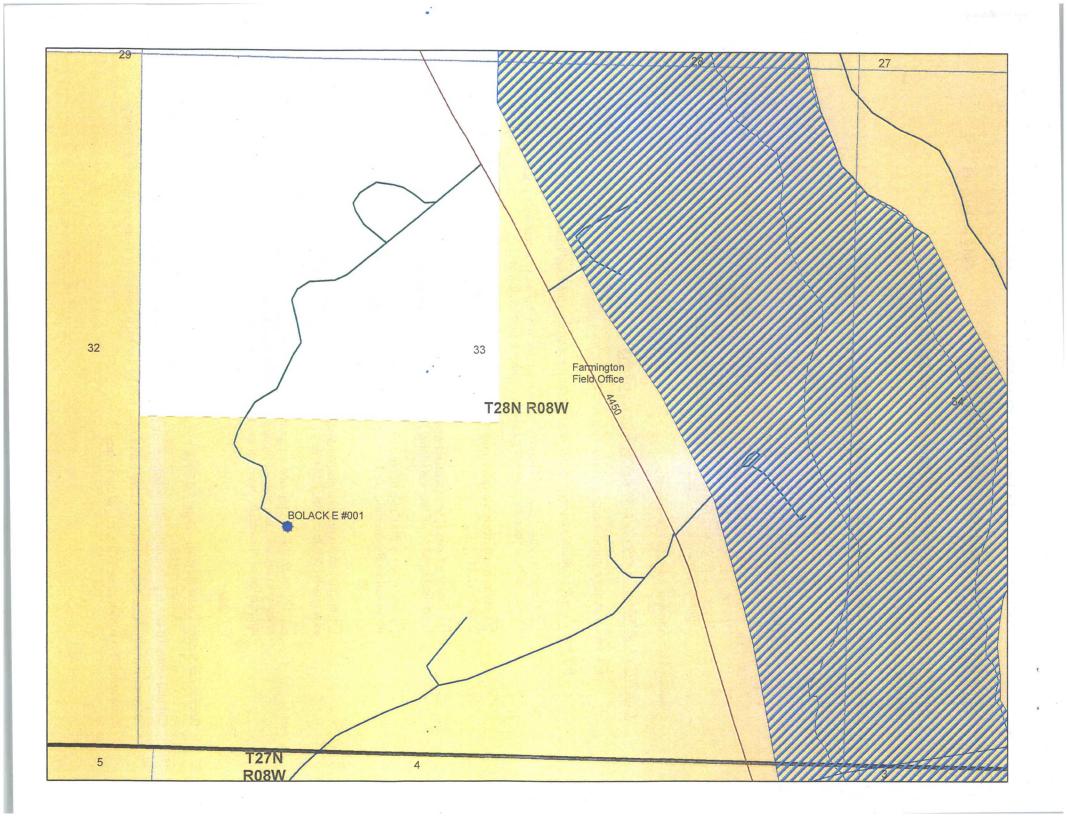
Type of Case: Soil Shredding

## IS A CULTURAL RESOURCE INVENTORY REQUIRED?

Proposal involves non-Federal lands. Proposal is within an existing right-of-way. Proposal is along an existing road. Proposal is within an existing disturbed area. The well pad is to be expanded feet to the Other: BP will like to utilize soil shredding to remediate hydrocarbon contaminated soil at above reference loaction. The activities will remain entirely on the previously disturbed well pad. NOTE: Attach map (e.g., USGS map, survey plat, GIS) and other supporting information as needed. If you are proposing to use a previously culturally surveyed area, identify by BLM cultural case number if known.
Submitted by: Abiodun Adeloye (Emmanuel)
CULTURAL RESOURCE SPECIALIST RECOMMENDATIONS
☐ Inventory for cultural resources is required.
Inventory for cultural resources is not required for the reason(s) indicated below.
Previous natural ground disturbance has modified the surface so extensively that the likelihood of finding cultural properties is negligible (e.g., within a floodplain), or
Human activity has created a new land surface to such an extent as to eradicate traces of cultural properties, or
Existing Class II or equivalent inventory or environmental data are sufficient to indicate that there is no likelihood of finding a National Register or eligible property, or
Inventory at the Class III level of intensity has previously been performed and records adequately documenting the location, methods, and results of the inventory are available in report no.  , or
Natural environmental characteristics are unfavorable to the presence of cultural properties (such as recent landslide or rock falls), or
The nature of the proposed action is such that no impact can be expected on significant cultural resources (e.g. land use will not require any surface disturbing action, e.g., aerial spraying, hand application of chemicals, travel on existing roads, etc.), or
Other:
Recommended by: Geoff Haymes Date: 5/2/2018 Archaeologist
Cultural Notes (if any, e.g., conditions, stipulations, etc.): Area was inventoried in 1979 (NMCRIS Activity 4991) but

not to current standards. New inventory and/or monitoring will be needed if remediation moves outside of exisitng

disturbance. No known sites, TCPs, etc. in the vicinty.



# United States Department of the Interior BUREAU OF LAND MANAGEMENT

Farmington Field Office

# REQUEST FOR THREATENED AND ENDANGERED (T&E) / SPECIAL STATUS SPECIES SPECIES PROPOSAL EVALUATION

Accomplishment Number

SPECIES PROPOSAL EVALUA	MION			•
Instructions: Double Form: 1) the u	pper portion - a request for	and 2) the low	er portion – evaluation of need	for Formal Consultation
TO: Resource Area Special St	atus Species, T & E Species	s, Migratory B	rds.	
Please evaluate this proposed action or Special Status Species which ma			ally listed T&E, proposed Fede	ral T&E, State listed T&E,
Description of the proposed Action contaminated soil at above reference	and Case Reference Numb	er: BP will like		
Ú				
LOCATION		· PI	ROPOSEE	
Sec 33, T28N, R8W			oiodun Adeloye (Emmnauel) N gnature of Initiating Official &	
			//02/2018 ate	
This proposal and relative data have	e been analyzed concerning	the following	species:SSS and habitat	
The analysis indicates that there we described proposed action and Form		Iay- affect situ ⊠is not nece	ation as a result of approving t	his ,
This proposal is a minor const	ruction	ion.		
Method of Analysis:	d Examination	☑ Data bank/	GIS	
COMMENTSNo known SSS issue	S		<del>:</del>	
	·			
Level 1 Biologist	E	valuated by	Level 2 Biologist	
/s/ John Kendall (Signature)	(Date)	5/2/2018	(Signature)	(Date)
•				•

Reviewed by

(Signature and Title)

Operator: BP America Production Company Well Name: Bolack E 001/3004524103 Legal Description: Sec 33, T28N, R08W

## Conditions of Approval

**Disclaimers:** BLM's approval of this remediation plan does not relieve the lessee and operator from obtaining any other authorizations that may be required by other jurisdictional entities.

- 1. This location has a ranking score of 10 due to being >100 feet depth to groundwater, >1,000 horizontal feet from Surface Water body and <1,000 within a Wellhead protection area in accordance with NMOCD's Guidelines for Remediation of Leaks, Spills and Releases and BLM-FFO NTL 94-1. This release will need to be cleaned to this regulatory standard; therefore, TPH needs to be <100 ppm, BTEX <50 ppm, and benzene <10 ppm.
- 2. BP will notify the BLM at least 24 hours prior to any conformation soil sampling event.
- Any disturbance of the Interim Reclaimed area will be reclaimed back to pre-project Interim
  Reclamation. Any new disturbance outside of the original approved area in the permit will be
  reclaimed to the Interim Reclamation size.
- 4. This approval is for the use of the Soil Shredding technique on the pre-disturbed well pad location only. Offsite access is not approved, if offsite access is found to be required an additional sundry will have to be submitted with any new details of the project.
- 5. Construction, construction maintenance or any other activity outside the approved areas will require additional approval and may require a new cultural survey and clearance.
- 6. All employees of the project, including the Project Sponsor and its contractors and sub-contractors will be informed that cultural sites are to be avoided by all personnel, personal vehicles and company equipment. This includes all personnel associated with construction, use, maintenance and abandonment of the well pad, well facilities, access and pipeline. They will also be notified that it is illegal to collect, damage, or disturb cultural resources, and that such activities are punishable by criminal and or administrative penalties under the provisions of the Archaeological Resources Protection Act (16U.S.C. 470aa-mm).
- 7. If, in its operations, operator/holder discovers any previously unidentified historic or prehistoric cultural resources, then work in the vicinity of the discovery will be suspended and the discovery promptly reported to BLM Field Manager. The BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of discovery and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. Minor recordation, stabilization, or data recovery may be performed by a BLM or permitted cultural resources consultant. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator/holder prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is

- completed. Failure to notify the BLM about a discovery may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).
- 8. If monitoring confirms the presence of previously unidentified cultural resources, then work in the vicinity of the discovery will be suspended and the monitor will promptly report the discovery to the BLM Field Manager. The BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery and consult with the State Historic Preservation Officer in accordance with 36 CFR Section 800.11. A Bureau of Land Management or permitted cultural resources consultant may perform minor recordation, stabilization, or data recovery. If warranted, more extensive treatment by a permitted cultural resources consultant may be required of the operator/holder prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any required treatment is completed.
- 9. If, in its operations, operator/holder damages, or is found to have damaged any previously documented or undocumented historic or prehistoric cultural resources, excluding "discoveries" as noted above, the operator/holder agrees at his/her expense to have a permitted cultural resources consultant prepare and have executed a BLM approved data recovery plan. Damage to cultural resources may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act of 1979 (as amended).