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**HEARING ON OIL AND GAS DEVELOPMENT:**

**EXEMPTIONS FROM HEALTH AND  
ENVIRONMENTAL PROTECTIONS**

**Wednesday, October 31, 2007**

**House of Representatives,**

**Committee on Oversight and**

**Government Reform,**

**Washington, D.C.**

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**Committee Hearings**

**of the**

**U.S. HOUSE OF REPRESENTATIVES**



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3 HEARING ON OIL AND GAS DEVELOPMENT:

4 EXEMPTIONS FROM HEALTH AND

5 ENVIRONMENTAL PROTECTIONS

6 Wednesday, October 31, 2007

7 House of Representatives,

8 Committee on Oversight and

9 Government Reform,

10 Washington, D.C.

11 The committee met, pursuant to call, at 10:05 a.m. in  
12 room 2154, Rayburn House Office Building, the Honorable Henry  
13 A. Waxman [chairman of the committee] presiding.

14 Present: Representatives Waxman, Cummings, Kucinich,  
15 Higgins, Davis of Virginia, Shays, Cannon, Issa, and Sali.

16 Also Present: Representative DeGette.

17 Staff Present: Phil Barnett, Staff Director and Chief  
18 Counsel; Karen Lightfoot, Communications Director and Senior  
19 Policy Advisor; Greg Dotson, Chief Environmental Counsel;  
20 Gilad Wilkenfeld, Professional Staff Member; Teresa Coufal,

21 Deputy Clerk; Caren Auchman, Press Assistant; Ella Hoffman,  
22 Press Assistant; Leneal Scott, Information Systems Manager;  
23 William Ragland, Staff Assistant; Miriam Edelman, Staff  
24 Assistant; Rob Cobbs, Staff Assistant; David Marin, Minority  
25 Staff Director; A. Brooke Bennett, Minority Counsel; Kristina  
26 Husar, Minority Counsel; Larry Brady, Minority Senior  
27 Investigator and Policy Advisor; Patrick Lyden, Minority  
28 parliamentarian and Member Services Coordinator; Brian  
29 McNicoll, Minority Communications Director; Benjamin Chance,  
30 Minority Clerk.

31 Chairman WAXMAN. Today's hearing will examine loopholes  
32 in Federal health and environment protections that are  
33 exploited by the oil and gas industry.

34 As children, we all learned about basic fairness, and we  
35 know that it is just not fair when someone gets to play by  
36 different rules than the rest of us. But as we will learn  
37 today, there is one set of environmental rules for the oil  
38 and gas industry and a different set of rules for the rest of  
39 America.

40 The Safe Drinking Water Act makes it illegal to inject  
41 other toxic chemicals into underground aquifers, but this  
42 prohibition does not apply to the oil and gas industry.  
43 Think about this for a moment. Oil and gas companies can  
44 pump hundreds of thousands of gallons of fluid containing any  
45 number of toxic chemicals into sources of drinking water with  
46 little or no accountability.

47 The Clean Water Act requires companies and even  
48 homeowners to control erosion while a property is under  
49 construction. But even this simple requirement does not  
50 apply to oil and gas production facilities. Even the Clean  
51 Air Act dropped a key pollutant emitted by oil and gas  
52 operations from the list of regulated hazardous air  
53 pollutants, though it did give EPA authority to add the  
54 chemical to the list.

55 This wish list of loopholes is terrific for the oil and

56 | gas industry but terrible for our health and environment. In  
57 | the case of Steve Mobaldi and Susan Wallace-Babb, who will  
58 | testify today, unregulated oil and gas development had a  
59 | disastrous impact on their lives.

60 |         Several of the biggest loopholes were enacted just two  
61 | years ago as part of the Energy Policy Act of 2005. One  
62 | exemption involves a practice known as hydraulic fracturing,  
63 | which has become widely used in recent years in coal bed  
64 | methane gas wells. Hydraulic fracturing involves injecting a  
65 | mixture of water, chemicals, and sand into a well at high  
66 | pressure. This mixture, or fracturing fluid, is put under  
67 | enough force that it cracks the underground rock formation,  
68 | allowing natural gas to escape. These fracturing fluids can  
69 | contain toxic chemicals.

70 |         A Federal Appeals Board ruled in 1997 that this  
71 | practice, which Haliburton pioneered, was subject to  
72 | regulation under the Safe Drinking Water Act, but in 2005  
73 | Congress exempted hydraulic fracturing from regulation.

74 |         I and other Members opposed this special interest  
75 | give-away. We were right on the merits, but lost the key  
76 | votes.

77 |         We did, however, salvage one small victory: a provision  
78 | was inserted into the law that requires the Department of  
79 | Interior to commission a comprehensive National Academy of  
80 | Sciences study of coal bed methane development, including the

81 | impacts of hydraulic fracturing. Yet, even this victory  
82 | proved to be short-lived. As I explained in a letter I am  
83 | releasing today, the Interior Department has essentially  
84 | ignored the study requirement.

85 |         The theory seems to be that the less we know about the  
86 | dangerous practice of hydraulic fracturing, the better. As  
87 | someone who has spent my career working to improve the Safe  
88 | Drinking Water Act, I am deeply disturbed by this approach to  
89 | a serious environmental threat. I would like to ask  
90 | unanimous consent to include my letter in the record.

91 |         Without objection, that will be the order.

92 |         The Bush Administration argues that we need oil and gas  
93 | too desperately to let anything stand in the way, but there  
94 | is no way we can ever drill our way to energy independence.  
95 | We need efficiency and we need alternatives to oil, and we  
96 | have a moral obligation to respect our environment.

97 |         The loopholes we will learn about today affect the water  
98 | we drink, the air we breathe, and the land we live on. I  
99 | hope that with today's hearing we can begin to bring our  
100 | environmental policy back into balance.

101 |         [Prepared statement and letter of Chairman Waxman  
102 | follow:]

103 | \*\*\*\*\* INSERT \*\*\*\*\*

104 Chairman WAXMAN. I want to recognize Mr. Davis, Ranking  
105 Member.

106 Mr. DAVIS OF VIRGINIA. Thank you, Mr. Chairman, for  
107 holding this important hearing. I want to thank our panel  
108 for coming before us today.

109 In considering this Committee's hearings today and next  
110 week, one might think the Committee seeks to look into  
111 regulatory structures of energy exploration and generation,  
112 but a closer look reveals something different. These  
113 hearings appear to be about the impact of the environment of  
114 oil and gas exploration, coal-fired power plants, and  
115 although the background materials for this hearing describe  
116 such environmental impacts as potential, it appears pretty  
117 clear that some people have made up their minds.

118 Environmental conservation and protection is and should  
119 be a top national priority. Certainly, all responsibility  
120 policy-makers can agree on that. But how that priority fits  
121 in with others is where the disagreement often begins. I  
122 think we can all agree the Nation is moving towards an energy  
123 crisis. Oil already costs more than \$90 a barrel, and our  
124 dependence on oil from unstable and often unfriendly nations  
125 continues, really dysfunctional countries. That is what we  
126 are dependent on.

127 Yet, many of my colleagues, as well as interest groups  
128 and others, seem unable or unwilling to move toward the

129 middle and find a solution. Instead, we basically have two  
130 camps: one which argues we can drill or mine our way out of  
131 the problem, and the other which says we should focus on  
132 reducing our demand and mitigating carbon emissions.

133 The reality is we need to do both. We have to find more  
134 sources of energy, we must conserve. And I would add a third  
135 thing: we need to do major, major investments in alternative  
136 energies. We need almost a Marshall plan where we can focus  
137 so that ten years from now we are not dependent on these  
138 dysfunctional nations around the world for our energy supply.

139 The gridlock up here, I will just tell you from one  
140 Member's perspective, is very disillusioning that we can't  
141 come together. This is something all Americans ought to  
142 agree on.

143 Henry and I may have some differences, but sitting  
144 around the table I think we agree that we need some  
145 solutions.

146 I am disappointed that as we go into the 11th month of  
147 this new Congress we continue to move further away from the  
148 energy independence and national security. Our energy bill  
149 not only fails to include any new sources of energy; it takes  
150 some existing sources off the table. It provides no new  
151 measure for addressing climate change or energy dependence.  
152 Meanwhile, some Members seek stringent regulations to provide  
153 Kyoto-like carbon dioxide reductions and place off-limits

154 promising sources of energy within our border. To me, in the  
155 House bill we didn't even have higher CAFE standards,  
156 something I have voted consistently for and has got to be  
157 part of any conservation package.

158         Given the widespread concern for the damaging effect of  
159 excessive carbon dioxide accumulation, a sensible energy  
160 policy should focus on both securing additional sources of  
161 domestic available energy and reducing carbon emissions,  
162 while ensuring regulations designed to protect the  
163 environment are sensible, complete, and enforceable.

164         What we can't do now is take potential sources off the  
165 table. I worry about this in the subtext of the hearing. I  
166 worry again about poking small holes in the bottom of the  
167 boat.

168         I look forward to these hearings as an opportunity to  
169 work together to create solutions, not bigger problems.

170         Again, the Chairman and I disagree on some issues, but I  
171 appreciate him bringing this issue forward and for bringing  
172 this distinguished panel today. Thank you very much.

173         [Prepared statement of Mr. Davis of Virginia follows:]

174         \*\*\*\*\* INSERT \*\*\*\*\*

175 Chairman WAXMAN. Thank you very much, Mr. Davis.

176 We will see after this hearing whether we have some  
177 disagreements on these issues, but I agree with your  
178 sentiment that we need to work together, because that is the  
179 only way we are going to get things done.

180 We have a number of members of the first panel, and I  
181 want to introduce them, but Mr. Issa, would you like to make  
182 an opening statement?

183 Mr. ISSA. I would appreciate it. I will be brief.

184 Chairman WAXMAN. Okay.

185 Mr. ISSA. Thank you, Mr. Chairman, for convening this  
186 hearing.

187 I agree with the Ranking Member, Mr. Davis, that we  
188 should acknowledge and plan for a carbon-constrained world.  
189 That, for me, includes nuclear and other forms of zero  
190 emissions, something that we have not yet begun to look at in  
191 this Congress.

192 Further, the debate is not a question on additional  
193 production or conservation. As Mr. Davis said, we need to do  
194 both, especially at a time in which we see oil prices heading  
195 toward \$100 a barrel, in our home State gasoline heading  
196 towards \$3.30. We cannot simply say that we need to re-look  
197 at issues which, on a bipartisan basis, have been previously  
198 resolved and in the courts have been previously heard and in  
199 the Clinton Administration have been previously resolved as

200 | the panacea for fixing all items.

201 | I appreciate that the Chairman's consistent view toward  
202 | clean water has included, for all practical purposes, and end  
203 | to mining, certainly an end to exploration of natural gas and  
204 | other petroleum products.

205 | From 2000 to 2005, the Democrat Congressional leaders  
206 | worked in the shadows to stall an agreement on the energy  
207 | bill. I believe today we should be fair in saying that there  
208 | were minor changes in the 2005 bill; however, they were  
209 | minor. For all practical purposes, we operate on an energy  
210 | basis under laws which have been codified for decades and  
211 | which the courts and the EPA have reviewed and find  
212 | reasonable.

213 | What we don't need today is to tell the oil and natural  
214 | gas markets that the rules of the road are going to be  
215 | changed, and changed retroactively, as many pieces of  
216 | legislation and some of the views on the dias would do.

217 | I look forward to this hearing. I certainly look  
218 | forward to being clear and concise that this practice does  
219 | not include the use of diesel fuel. That has already been  
220 | eliminated. In fact, what we are talking about is  
221 | pressurizing water in order to let loose minerals that are  
222 | vital to our society. Every drop of oil, every cubic foot of  
223 | natural gas that we take out of American soil is one less  
224 | that we need to take out of unstable regions around the

225 | world.

226 |       With that, I yield back.

227 |       [Prepared statement of Mr. Issa follows:]

228 | \*\*\*\*\* INSERT \*\*\*\*\*

229 Chairman WAXMAN. Thank you very much, Mr. Issa.

230 Without objection, our colleague, Diana DeGette from  
231 Colorado, wishes to sit with our panel, and I would ask  
232 unanimous consent that she be permitted to do so.

233 For the first panel we have Ms. Amy Mall, who is a  
234 Senior Policy Analyst at the Natural Resources Defense  
235 Council working on issues affecting the environment, public  
236 lands, and oil and gas regulation.

237 Mr. Kendrick Neubecker is the Vice President of Colorado  
238 Trout Unlimited. Mr. Neubecker has 25 years experience as a  
239 land surveyor and has worked for the oil and gas industry in  
240 both Colorado and Wyoming.

241 Dr. Theo Colborn is President of the Endocrine  
242 Disruption Exchange. Dr. Colborn has a Ph.D. in zoology,  
243 with distributed minors in epidemiology, toxicology, and  
244 water chemistry. She also has a master's degree in fresh  
245 water ecology.

246 We are pleased to welcome you.

247 Mr. Daniel Teitelbaum is a Medical Toxicologist. He is  
248 an Associate Professor of Preventive Medicine at the  
249 University of Colorado Medical School and Adjunct Professor  
250 of Environmental Sciences at the Colorado School of Mines.  
251 Dr. Teitelbaum works in the field of environmental and  
252 occupational toxicology.

253 Mr. Steve Mobaldi was a resident of Rifle, Colorado,

254 | from 1995 to 2004. Mr. Mobaldi will share the story about  
255 | how his life and the life of his wife Chris changed after oil  
256 | and gas development began near their home.

257 | Ms. Susan Wallace-Babb was a resident of Parachute,  
258 | Colorado, between 1997 and 2006. Ms. Wallace-Babb is here  
259 | today to share her story of how oil and gas development  
260 | affected her life.

261 | And Mr. David Bolin is the Deputy Director of the  
262 | Alabama State Oil and Gas Board. Mr. Bolin has held  
263 | technical and supervisory roles in the State Oil and Gas  
264 | Board since 1982 and has worked for the State of Alabama for  
265 | nearly three decades.

266 | We welcome all of you to our hearing today.

267 | It is the practice of this Committee that all witnesses  
268 | who testify before us testify under oath. I would like to  
269 | ask each of you to please stand and raise your right hand to  
270 | take the oath.

271 | [Witnesses sworn.]

272 | Chairman WAXMAN. The record will reflect that each of  
273 | the witnesses answered in the affirmative.

274 | Your prepared statements will be in the record in full.  
275 | What we would like to ask each of you to do is to limit your  
276 | oral presentation to no more than five minutes so that we can  
277 | have all the witnesses and opportunity for questions from the  
278 | panel.

279 |       There is a little clock in front, and when it is green  
280 | that is fine. Last minute it will be on yellow. That means  
281 | you have a minute to go. And then when it is red it means  
282 | the five minutes is up.

283 |       Ms. Mall, why don't we start with you.

284 STATEMENTS OF AMY MALL, SENIOR POLICY ANALYST, NATURAL  
285 RESOURCES DEFENSE COUNCIL; KENDRICK NEUBECKER, ON BEHALF OF  
286 TROUT UNLIMITED; THEO COLBORN, PRESIDENT, THE ENDOCRINE  
287 DISRUPTION EXCHANGE; DANIEL TEITELBAUM, M.C., P.C., MEDICAL  
288 TOXICOLOGIST, PRESIDENT, MEDICAL TOXICOLOGY AND OCCUPATIONAL  
289 MEDICINE; STEVE MOBALDI, GRAND JUNCTION, COLORADO; SUSAN  
290 WALLACE-BABB, WINNSBORO, TEXAS; DAVID E. BOLIN, DEPUTY  
291 DIRECTOR, STATE OIL AND GAS BOARD, STATE OF ALABAMA

292 STATEMENT OF AMY MALL

293 Ms. MALL. Thank you, Chairman Waxman, Ranking Member  
294 Davis, and members of the Committee. Thank you for the  
295 invitation to appear here today.

296 My name is Amy Mall and I am a Senior Policy Analyst  
297 with the National Resources Defense Council, or NRDC. Today  
298 NRDC is releasing a report entitled, Drilling Down:  
299 Protecting Western Communities from the Health and  
300 Environmental Effects of Oil and Gas Production. You should  
301 each have a copy of the report. It discusses hazardous  
302 materials associated with oil and gas exploration and  
303 production, loopholes in Federal laws that allow industry to  
304 release these contaminants into the environment, technologies  
305 available to control pollution, and stories of the impacts of

306 | contamination reported by individuals in the Rocky Mountain  
307 | region.

308 |         The oil and gas industry is expanding rapidly in the  
309 | United States and coming closer to homes and communities.  
310 | The McCoy Elementary School in Aztec, New Mexico, for  
311 | example, is located less than 400 feet from two wells, and  
312 | the playground is less than 150 feet.

313 |         Among the toxic materials that can be released during  
314 | oil and gas operations are benzene, toluene, xylene,  
315 | radioactive materials, hydrogen sulfide, arsenic, and  
316 | mercury. Their potential health effects range from cancer to  
317 | respiratory problems to eye and skin irritation.

318 |         What are the statutory loopholes for oil and gas  
319 | exploration and production that need to be closed? The Safe  
320 | Drinking Water Act has an exemption for hydraulic fracturing,  
321 | which usually involves the underground injection of toxic  
322 | chemicals. Hydraulic fracturing is a suspect in impaired  
323 | drinking water in Alabama, Colorado, New Mexico, Virginia,  
324 | West Virginia, and Wyoming.

325 |         Additionally, the Safe Drinking Water Act has lower  
326 | daily fines and sets a higher hurdle for regulating certain  
327 | oil or gas operations than for other industries.

328 |         The Clean Water Act has an exemption from stormwater  
329 | permit requirements, expanded by Congress in 2005. The EPA  
330 | has interpreted this new exemption as allowing unlimited

331 discharge of sediment into the Nation's streams, even if it  
332 contributes to a violation of State water quality standards.  
333 In addition, the Clean Water Act definition of pollutant  
334 excludes certain materials injected into an oil or gas well.

335 The Resource Conservation and Recovery Act, or RCRA, has  
336 an exemption from most hazardous waste associated with oil  
337 and gas production, including drilling chemicals,  
338 hydrocarbons, and hydraulic fracturing fluids, even if they  
339 contain toxic materials.

340 The Comprehensive Environmental Response, Compensation,  
341 And Liability Act, known as CERCLA, or the Superfund law, has  
342 an exemption for petroleum and natural gas which contain  
343 toxic substances. The Clean Air Act contains exemptions from  
344 the national emission standards for hazardous air pollutants.

345 In addition, hydrogen sulfide, which can be a serious health  
346 threat, is exempt from regulation as a hazardous air  
347 pollutant.

348 Exploration and production are not covered by the toxic  
349 release inventory of the Emergency Planning and Community  
350 Right to Know Act, so that companies can withhold information  
351 about chemicals, even if the information is needed to make  
352 informed decisions about protecting health.

353 Why were these exemptions created? The hydrogen sulfide  
354 exemption was called a core scientific decision by an EPA  
355 official. An EPA study on hydraulic fracturing used to

356 | bolster the Safe Drinking Water Act exemption was declared  
357 | scientifically unsound by an EPA whistleblower.

358 |         Another EPA official stated that the RCRA exemption was  
359 | approved despite a scientific determination of the  
360 | hazardousness of the waste.

361 |         It is time to end these loopholes. There is sufficient  
362 | evidence that toxic materials that can harm human health are  
363 | being released into the environment. The oil and gas  
364 | industry should be required to comply with the same statutory  
365 | provisions as any other industry.

366 |         There are numerous methods available to industry to  
367 | comply with our environmental laws, and in many cases they  
368 | are actually profitable. Devon Energy, for example, spent  
369 | \$15,000 to capture gas emissions from a well instead of  
370 | venting them into the air and sold the methane captured for  
371 | \$35,000. A company representative called it a win/win for  
372 | everybody.

373 |         Regarding hydraulic fracturing, there are nontoxic  
374 | alternatives to harmful chemicals, one of which is water.  
375 | Company studies have found that some gas wells fractured with  
376 | water produce more gas and/or cost considerably less to  
377 | fracture than wells fractured with chemicals.

378 |         For stormwater pollution prevention, there are  
379 | approaches that are quit low-tech, such as installing  
380 | vegetative ground cover, berms, or silt fences.

381 For managing waste, options include closed-loop drilling  
382 fluid systems that studies have found can dramatically lower  
383 the volume of waste, maximize re-use and recycling of  
384 drilling fluids, and create savings in the long run when  
385 compared to open air disposal pits, up to tens of thousands  
386 of dollars per pit.

387 Many environmental improvements such as substituting  
388 less toxic materials, disclosing information to the public,  
389 or improving monitoring and maintenance can be implemented  
390 quickly, without new equipment or great burden. Instead,  
391 industry is sometimes purchasing the homes of people who  
392 voice concerns about their health in return for signed  
393 agreements that the complaints will not be made public.

394 The free pass to pollute given to the oil and gas  
395 industry is a privilege that is unjustifiable when weighed  
396 against the risks to human health. The time for Congress to  
397 take action is long overdue.

398 Thank you.

399 [Prepared statement of Ms. Mall follows:]

400 \*\*\*\*\* INSERT \*\*\*\*\*

401 | Chairman WAXMAN. Thank you very much, Ms. Mall.

402 | Mr. Neubecker?

403 STATEMENT OF KENDRICK NEUBECKER

404 Mr. NEUBECKER. Mr. Chairman and members of the  
405 Committee, thank you for this opportunity to testify. My  
406 name is Ken Neubecker. I live and work in western Colorado  
407 and have been involved in water issues through Trout  
408 Unlimited for many years.

409 Today I am testifying on behalf of Trout Unlimited, the  
410 National Wildlife Federations, including the Colorado,  
411 Montana, and Wyoming Wildlife Federations, and the Back  
412 Country Hunters and Anglers. I am here to testify about our  
413 concerns with the current stormwater discharge exemptions  
414 from the Clean Water Act for the oil and gas industry.

415 TU and our partners urge Congress to take action to  
416 repeal the Clean Water Act exemptions that the oil and gas  
417 industry currently enjoy.

418 I have been in the land development business for nearly  
419 30 years, most of that in western Colorado. I have personal  
420 experience with the damage caused by sediment and  
421 uncontrolled erosion from construction sites, including those  
422 for oil and gas.

423 This damage impacts all of us, whether we are avid  
424 fishermen, farmers and ranchers, or small town water  
425 providers. Nearly all land development in Colorado and the

426 west are required to comply with stormwater discharge  
427 regulations. The fact that the oil and gas industry is not  
428 simply defies logic.

429 Over the past few years, this industry has become the  
430 largest single developer in the west. Well pads, roads,  
431 pipelines, compression and pumping stations, man camps, and  
432 other related infrastructure cover large areas of the  
433 intermountain west like a vast spider web. Thousands of  
434 acres of disturbed land lay open and exposed to runoff. The  
435 land doesn't care who owns the bulldozer or what political  
436 connections they may have; it erodes freely in the face of  
437 any disturbance.

438 Subsequent damage to fish and wildlife habitat also  
439 occurs without regard to the source. Oil and gas activity is  
440 no exception.

441 Sediment in a stream can be extremely damaging to  
442 aquatic and riparian life, wildlife habitat, and to the local  
443 communities. Aquatic insects upon which fish and other  
444 organisms feed are smothered. The gravel bars fish need for  
445 spawning are buried. The eggs and developing fry in the  
446 gravel are lost. Gas development often occurs in the smaller  
447 tributary drainages, some of which are among the last refuges  
448 of cut-throat trout. These fish are particularly vulnerable  
449 to sediment from uncontrolled stormwater runoff.

450 Over 80 percent of the wildlife in Colorado depends on

451 riparian areas for all or part of their lives. For the elk,  
452 in particular, these areas are their nurseries. I have seen  
453 tributaries of the Colorado River choked with sediment from  
454 construction sites, well pads with unstable fill slopes ready  
455 to collapse into a stream, and construction sites with deeply  
456 cut gullies filling large debris fans into the fields and  
457 streams below.

458 Further, this is not just a sportsmen and recreation  
459 issue. Sediment chokes the intakes from municipal water  
460 supplies, irrigation ditches, and damages the irrigated field  
461 where it comes in with the water. Just as the riparian and  
462 wetland areas, layers of mud and silt can wash over a field,  
463 smothering the crops and poisoning the soil. When sediment  
464 buries native vegetation, noxious weeds come in, rendering  
465 the area unusable by wildlife and humans, alike.

466 Any further loss and degradation of streams, riparian  
467 areas, and wetlands in Colorado and the west are a matter of  
468 grave concern for sportsmen and for the bedrock economies and  
469 values of the small communities that dot the area. Hunting  
470 and fishing and a myriad of other recreation-based activities  
471 form the fundamental economy of much of the west. This  
472 brings in billions of dollars each year.

473 The oil and gas boom may go on for another 10 or 20  
474 years, but what then? Without adequate controls and  
475 environmental protection on all types of land development,

476 | including and especially oil and gas, there will be precious  
477 | little left in 20 years to support the wildlife and  
478 | recreation that our economy will then be even more dependent  
479 | on.

480 |       Because of this Federal exemption, individual States  
481 | have been forced to deal with this significant problem as  
482 | best they can. The Colorado Water Quality Control Commission  
483 | ruled twice to make the oil and gas industry comply. Support  
484 | for this mandatory compliance was overwhelming throughout  
485 | western Colorado and included a bipartisan mix of local  
486 | governments, water districts, various organizations, and  
487 | numerous State and Federal legislators.

488 |       In Colorado the industry has agreed to comply fully with  
489 | the stormwater discharge regulations and permitting  
490 | requirements. Despite predictions of higher production costs  
491 | and delayed development, the rush to drill doesn't seem to  
492 | have slowed down at all.

493 |       This success needs to be translated to oil and gas  
494 | construction activity uniformly throughout the west. Water  
495 | is the most precious natural resource we have, not oil and  
496 | gas. Water quality in the west is a vital concern, especially  
497 | given climate change. To continue exempting the oil and gas  
498 | industry from Federal water quality and land use regulations  
499 | is unconscionable.

500 |       Thank you.

501 | [Prepared statement of Mr. Neubecker follows:]

502 | \*\*\*\*\* INSERT \*\*\*\*\*

503 | Chairman WAXMAN. Thank you very much for your testimony.

504 | Dr. Colborn?

505 | STATEMENT OF THEO COLBORN

506 | Ms. COLBORN. Mr. Waxman and members of the Committee,  
507 | good morning. I am Theo Colborn, President of TEDX, a  
508 | nonprofit organization concerned about the adverse health and  
509 | environmental effects of chemicals.

510 | I am here to speak as an environmental health analyst  
511 | and as a resident of western Colorado whose watershed and air  
512 | are being threatened by natural gas production and delivery.

513 | I had no intention of getting involved with natural gas  
514 | development when I began in 2002 to set up my nonprofit in  
515 | Colorado, until someone handed me the formula for the  
516 | fracturing fluid to be used in 17 proposed gas wells on the  
517 | Grand Mesa National Forest, which my family and I consider  
518 | our back yard. When I found out that each fracturing  
519 | incident, commonly called fracking, uses approximately one  
520 | million gallons of fluid, and that each well can be fracked  
521 | as much as ten times or more, that caught my attention.

522 | Soon TEDX became a clearinghouse for any information  
523 | about the products that were being used in natural gas  
524 | operations. To handle the data, we set up computerized  
525 | spreadsheets, searched the peer-reviewed literature, and  
526 | Government and industry documents for the adverse health  
527 | effects of the chemicals on our list. We now have over 1,500

528 citations to back up the Colorado health data.

529       The last time TEDX updated the Colorado spreadsheet,  
530 there were 171 products and 245 chemicals on the list. Of  
531 the products, 92 percent had adverse health effects. The  
532 other 8 percent are products for which there is no  
533 information because it is either proprietary or no health  
534 studies could be found.

535       Most of the products had multiple health effects, with  
536 some having as much as 14. And, much to our surprise, some  
537 of the products are developmental toxicants, as well as  
538 endocrine disruptors; that is, they have the potential for  
539 adverse health effects on the hormone systems that control  
540 the construction of our bodies and how we function.

541       As the list of products grew, a consistent pattern of  
542 health effects kept emerging. From 68 percent to 83 percent  
543 of the volatile chemicals on the list was mild, severe  
544 irritation of the skin, eyes, sinuses, nose, throat, lungs,  
545 and the stomach. And they have neurotoxic effects ranging  
546 from headaches, blackouts, memory loss, confusion, complete  
547 exhaustion, and permanent neuropathies. Many of these  
548 chemicals are called sensitizers because they have a tendency  
549 to cause allergies. Less frequently, but about 55 percent of  
550 the chemicals cause disorders that develop slowly and would  
551 not appear immediately, such as cardiovascular and kidney  
552 damage, with cancer at about 35 percent.

553 Physicians have no way to link health effects like these  
554 with an environmental contaminant.

555 We also found out that drilling muds are not as safe as  
556 industry claims, or the health pattern that matches the  
557 health pattern of our overall analysis. It is not general  
558 knowledge that when methane surfaces it is wet. When this  
559 water is removed, it is called condensate water. In most  
560 instances, it is being stored in open evaporation pits, often  
561 on the well bed, or stored in tanks on the site and then  
562 trucked to huge off-site fluid receiving pits.

563 It takes fleets of trucks to handle the water coming off  
564 the wells around the clock. This condensate water disposal  
565 problem will continue for the life of each well, which could  
566 be as long as 20 years.

567 It is also not general knowledge that when methane  
568 surfaces it brings along with it some very toxic gases called  
569 volatile organic compounds, or VOCs, that are being vented by  
570 the tons each year from each operational unit. And vast  
571 amounts of fugitive methane, itself a VOC and a greenhouse  
572 gas, escapes during numerous stages of production and  
573 delivery.

574 In addition, tons of nitrogen oxide gases are produced  
575 to keep the equipment running, from the combustion of diesel  
576 and natural gas, during drilling, fracturing, trucking the  
577 water, and compressing the gas.

578 In the presence of sunlight, VOCs and nitrogen oxides  
579 produce ground-level ozone that damages lung tissue and  
580 vegetation. Ozone is now an emerging environmental and  
581 health issue that extends beyond the gas fields as the result  
582 of natural gas development.

583 Recently we were sent results of the chemical analysis  
584 of the residues for six waste pits. The 51 chemicals that  
585 were detected in those pits produced a health pattern far  
586 more toxic than anything we found so far.

587 Most important is that 45 of the 51 chemicals detected  
588 in the pits were not on our list of chemicals being used  
589 during natural gas operations. And many of the oil's  
590 chemicals had concentrations well above State and Federal  
591 safety levels. Of the chemicals detected, 72.5 percent are  
592 on the CERCLA Superfund list, which suggest the possibility  
593 that every well pad and waste pit has the potential to become  
594 a Superfund site when it is closed.

595 Findings such as these have raised a number of questions  
596 that only adequately designed testing requirements and  
597 protocols can address, but only after full disclosure.

598 In our conclusion, our data show that the operations  
599 that are involved in natural gas production are releasing  
600 large amounts of volatile toxic substances directly into the  
601 air. They are introducing water soluble and volatile  
602 compounds into the ground, posing long-term, unpredictable

603 hazards to our already marginal water resources, and an  
604 undetermined amount of toxic products are ending up in our  
605 soils, threatening our life support systems, the outcomes of  
606 which have the potential to adversely affect public health  
607 and the quality of our western environment.

608 Thank you.

609 [Prepared statement of Ms. Colborn follows:]

610 \*\*\*\*\* INSERT \*\*\*\*\*

611 | Chairman WAXMAN. Thank you very much, Dr. Colborn.

612 | Dr. Teitelbaum?

613 STATEMENT OF DANIEL TEITELBAUM

614 Dr. TEITELBAUM. Good morning, Chairman Waxman, Mr.  
615 Davis, and members of the Committee. Thank you for allowing  
616 me to express my concerns about the public health  
617 implications of oil and gas development on the western slope  
618 in Colorado and New Mexico.

619 I am Daniel T. Teitelbaum, M.D., a board certified  
620 occupational physician and medical toxicologist from Denver,  
621 Colorado. For more than 40 years I have practiced as an  
622 occupational toxicologist in Denver, and I have evaluated and  
623 treated many patients whose medical problems arose from  
624 within industry and from side effects of industry.

625 There is a web of laws to protect the integrity of the  
626 environment and to prevent some toxic exposures to humans  
627 from industrial activities, but because exemptions have been  
628 granted to the oil and gas industry from some environmental  
629 laws and regulations that require them to identify and  
630 mitigate the impact of their activities on human health  
631 through air, water, and soil contamination, toxic exposures  
632 can take place.

633 Despite the extraction activity underway, the toxic  
634 impact on the human and animal populations, the resource  
635 areas, is unevaluated. There is no public health oversight.

636 | There is no database of those exposed at work or as  
637 | residents, no surveillance of the human impact on the  
638 | activities on worker families and other resident populations  
639 | near the extraction and processing sites is underway or  
640 | planned. No meaningful evaluation of exposure of these  
641 | persons to such toxics as crude oil or its components,  
642 | benzene, toluene, xylene, naphthalene, produced mercury or  
643 | arsenic, of hydrogen sulfide, sour gas, and its co-riders,  
644 | nor of MTBE, barites, or any other drilling chemicals used in  
645 | the industry.

646 |       There have been documented health complaints by  
647 | residents of the area. There are also anecdotal stories of  
648 | medical problems in those exposed. Although it is likely  
649 | that there are completed pathways to residents of the oil and  
650 | gas extraction areas as defined by the Agency for Toxic  
651 | Substances and Disease Registry, no investigation of exposure  
652 | by any route has been called for. Contaminated water  
653 | sources, point emission sources, and soil contamination are  
654 | not identified, nor is mitigation of contaminated sites  
655 | required.

656 |       Use of oil and gas toxics contaminated well water as  
657 | domestic water sources leads to much larger exposure to  
658 | volatile hydrocarbons like benzene through shallow water and  
659 | by other routes than through the drinking water.

660 |       Point source air contamination and soil contamination

661 | with oil and gas and extraction materials can lead to  
662 | respiratory and dermal irritation to respiratory and dermal  
663 | absorption of toxins and carcinogens.

664 |       Some of the natural components of oil and gas and the  
665 | chemicals formulated into extraction materials are allergens,  
666 | respiratory irritants, neurotoxins, developmental and  
667 | reproductive toxins, and carcinogens.

668 |       In past mineral extraction programs, the workers and  
669 | area resident populations have suffered life-threatening and  
670 | even fatal outcomes as the result of fugitive emissions,  
671 | abandoned recovery waste, and air and water pollution. For  
672 | example, mining tremolite asbestos contaminated vermiculite  
673 | in Libby, Montana, impacted the entire town of Libby and  
674 | beyond. Numerous cases of death and illness occurred there.

675 |       Extraction of uranium at the Summitville Mine in  
676 | Colorado and in Uravan, Colorado, has caused serious  
677 | environmental damage that threatens human health. The  
678 | residues of lead, cadmium, and arsenic left behind from  
679 | smelting and refining in the Globeville neighborhood of  
680 | Denver has impacted the area residents, and the cleanup has  
681 | cost huge amounts of money.

682 |       All of these environmental toxic impacts were ignored  
683 | until well after the activity was underway. In some  
684 | instances, nothing was done until the work had been  
685 | abandoned. Had the hazards been recognized or anticipated

686 | earlier, health and economic outcomes would have been far  
687 | less.

688 |       Prevention of late consequences of oil and gas  
689 | extraction must be undertaken now. The health consequences  
690 | of oil and gas extraction must be identified, assessed, and  
691 | addressed. Measurement of point air exposures using  
692 | saturation monitoring, assessment of local potable water  
693 | supply contaminants, and soil contaminate evaluation should  
694 | begin immediately. A database of those exposed must be  
695 | assembled now so that the ultimate outcome of the exposures  
696 | they have undergone can be followed and secondary prevention  
697 | can be undertaken.

698 |       The ATSDR has undertaken registry activities for  
699 | groundwater contaminant populations in other areas and with  
700 | other toxic chemicals like benzene and trichloroethylene, and  
701 | it follows the exposed populations. The ATSDR should  
702 | immediately be directed to address the issues in the oil and  
703 | gas regions on the western slope. We cannot wait until years  
704 | after the oil and gas extraction have taken a toll like that  
705 | in Libby, in Uravan, or other places.

706 |       We must close the loopholes in toxic exposures to  
707 | residents of the oil and gas extraction areas, and identify  
708 | and quantitate the pathways and extent of toxic exposures.

709 |       The opportunity to do the studies is clear. The fact  
710 | that neither Government nor industry has undertaken these

711 | critical exposure outcomes studies is inexcusable. When the  
712 | bells are tolled for those injured, who will be willing to  
713 | take the blame for these failures in preventive medicine?

714 | Thank you for your attention.

715 | [Prepared statement of Dr. Teitelbaum follows:]

716 | \*\*\*\*\* INSERT \*\*\*\*\*

717 | Chairman WAXMAN. Thank you very much, Dr. Teitelbaum.  
718 | Mr. Mobaldi?

719 STATEMENT OF STEVE MOBALDI

720 Mr. MOBALDI. Good morning, Chairman Waxman, Mr. Davis,  
721 ladies and gentlemen. My name is Steve Mobaldi. My wife,  
722 Elizabeth, and I moved to Rifle, Colorado, in June of 1995 to  
723 a ten-acre ranch. Soon after, the oil and gas industry moved  
724 in. They began drilling on a property about 3,000 feet to  
725 the west. Within a few weeks of the drilling, Chris and I  
726 began to experience burning eyes and nosebleeds. Later,  
727 Chris began to experience fatigue, headaches, hand numbness,  
728 bloody stools, rashes, and welts on her skin. When she  
729 showered, she would turn red. Tiny blisters covered her  
730 entire body. The blisters would weep, then her skin would  
731 peel.

732 This happened several times. Canker-type sores appeared  
733 in her mouth and down her throat, and they would disappear  
734 the next day.

735 She explained the feeling on her skin was like little  
736 wheels of needles turning. The racking pain was unbearable.

737 She saw her doctor and was given lotions and told she  
738 was going through menopause, prescribed pain medication, and  
739 then sent home. The blisters continued for weeks. She would  
740 turn with complaints of pain many times, given different pain  
741 medications. Nothing worked.

742           Soon after she was diagnosed with chemical exposure, but  
743 the doctor was unaware of what the chemicals were that were  
744 causing her symptoms. We were baffled and sought another  
745 doctor, who diagnosed the same. Chris' joints began swelling  
746 and large bumps started appearing on her elbows and hands.  
747 Months had gone by, and the pain continued. I began to  
748 experience rectal bleeding, and two of our dogs developed  
749 tumors. Our neighbor's dogs also had a tumor.

750           We planted trees on the property that year, and they all  
751 died.

752           We noticed several dead birds at different times in our  
753 yard through the next few years. Existing trees on the  
754 property were dying.

755           In 1997, employees from the oil and gas company were on  
756 our property when we arrived home. We were informed a  
757 natural gas well was being placed across the street and  
758 drilling was going to go under our property. They operated  
759 for months about 300 feet from our house. There was an open  
760 online pit closer than the road, and they began flaring. It  
761 shook the house day and night for weeks.

762           Chris lost her voice. We had headaches, burning eyes,  
763 and odor. The gas well was finished in 1998 and, already  
764 having problems with her health, the neighbor's water well  
765 had exploded and fracking fluid spewed, causing them to  
766 evacuate their home.

767           The next day, oil and gas employees came to our door and  
768 told us to stop drinking our water. They said water would be  
769 provided. This went on for about four months, and the same  
770 employees told us the water was tested safe for drinking.  
771 Although the water would fizz like soda with small bubbles,  
772 we were told the water was safe.

773           Sand began to accumulate in our water. If we set a  
774 glass of water out overnight, an oily, thin film would float  
775 on top. We stopped drinking it.

776           In 2000, Chris began saying words that sounded like  
777 foreign accent. A few words in a sentence. Months later,  
778 more. Now Chris has a severe speech disorder which  
779 continues.

780           In March of 2001, she developed a pituitary tumor. In  
781 2001 our water well pump had to be reinstalled ten feet  
782 higher because the sand was filling the water well shaft.

783           In 2000 we started raising llamas, and we had our first  
784 baby, which died about eight months later of respiratory  
785 problems. Our llama became pregnant again, and that baby  
786 died.

787           In March of 2003 she had another pituitary tumor. In  
788 2003 our house was sided with a high-quality siding. In 2004  
789 the paint began peeling on the siding. The siding company  
790 wouldn't warrant the chemical damage. The insurance company  
791 wouldn't honor the claim from industrial pollution.

792 |        Later, in 2005 Chris' gallbladder had to be removed. It  
793 | was the size of a small pineapple with excessive adhesions in  
794 | it and a tail growing from it.

795 |        In 2006 she was diagnosed with severe chemical  
796 | sensitivity from exposure by an environmental specialist and  
797 | is being treated. So at times Chris said, Something is  
798 | killing me living in this house, so we packed up and  
799 | abandoned the house after trying to sell it for years. We  
800 | now believe the oil and gas industry is to blame for the  
801 | unexplained illnesses. We now have learned by many of our  
802 | old neighbors that animals and they are still suffering from  
803 | exposures.

804 |        If they were required to produce the information on the  
805 | chemicals used, less people would suffer.

806 |        Thank you.

807 |        [Prepared statement of Mr. Mobaldi follows:]

808 | \*\*\*\*\* INSERT \*\*\*\*\*

809 | Chairman WAXMAN. Thank you for your testimony. I am  
810 | sorry to hear what you have all gone through, you and your  
811 | wife.

812 | Ms. Wallace-Babb?

813 STATEMENT OF SUSAN WALLACE-BABB

814 Ms. WALLACE-BABB. Thank you, Mr. Waxman and Mr. Davis,  
815 for hearing me today.

816 In January, 1997, I purchased my property in Morrisania  
817 Mesa above the town of Parachute, Colorado. Its residents  
818 enjoy 360-degree views of varied geological formations,  
819 wildlife, irrigation water, and mostly excellent neighbors,  
820 the kind who still know one another and come to help when you  
821 need it.

822 I had seven irrigated acres for pastures for my horse  
823 and hay fields, where I grew my own hay. I had a barn,  
824 outbuildings for the equipment used for haying and organic  
825 gardening. I could ride my horse from my property onto the  
826 BLM lands that surrounded me. It was my life's dream come  
827 true.

828 But it was all ending as the oil and gas industry moved  
829 in to foul the water, air, land, and lives. My personal  
830 experience with the oil and gas industry led me narrowly to  
831 avoid death. I now live a very different life from the one I  
832 was living seconds before I became chemically damaged.

833 I knew about the wells at the end of my rural road that  
834 were fractured in 2003 or 2004. I wasn't concerned, because  
835 I believed this industry was regulated to prevent damage,

836 that human lives would be deemed worth protecting. In late  
837 March, 2005, I began working near the wells as an irrigator.  
838 I was unknowingly exposed to fugitive gases coming from the  
839 two wells and open condensate tanks less than 100 feet from  
840 the water headgate. Within ten minutes of being at the  
841 headgate, I experienced a pounding heart rate, weakness,  
842 burning sinuses, eyes, and skin, coughing, ringing in my  
843 ears, and blurred vision, but the symptoms gradually abated  
844 at home. I didn't suspect the wells.

845 On April 4th and April 11th, 2005, I went to my family  
846 doctor and an ENT because my sinuses were so raw and painful.  
847 I was given two rounds of antibiotics, resulting in no  
848 improvement. My symptoms worsened.

849 During May, 2005, I was near the wells on a daily basis,  
850 sometimes twice a day. The original symptoms were greatly  
851 intensified. I had shooting pain in the nerves of my legs  
852 and bottoms of my feet, making walking nearly impossible.

853 Being home, away from the wells, reduced the symptoms.

854 On June 7th and June 15th, 2005, I was back at the ENT's  
855 getting more antibiotics and medicines to reduce respiratory  
856 inflammation and breathing difficulties. Had I made the  
857 connection between my symptoms and my increasing time near  
858 the wells, I would not be writing this. But I didn't.

859 At 9:00 p.m. on June 24, 2005, arriving at work, I  
860 stepped out of my truck into a cloud of gas from the

861 condensate tanks. With one leg out on the ground, I turned  
862 to reach the charcoal mask I had taken to wearing while I  
863 worked at the headgate. Suddenly, a crushing headache  
864 overcame me and I began to collapse. As I was falling, I  
865 grabbed the top of my truck door and clung there as my  
866 consciousness faded. I don't know how long I was there.

867 As clarity returned, I dove into my truck, grabbed my  
868 mask, and sat there until I could think.

869 From home I called the sheriff to report something going  
870 on at the wells. I called the fire department and the  
871 Williams Production representative to the site. They were  
872 still down there at 1:00 a.m. when I finally fell asleep,  
873 despite extreme nausea, body pain, and a crippling headache.

874 The next morning I awakened to the meaning of being  
875 chemically sensitized: all the original symptoms plus  
876 vomiting, explosive diarrhea, bloody mucus from nose and  
877 lungs, headaches, tiny ulcers, mental foginess, and  
878 neurological problems.

879 On July 4th I called the Colorado Oil and Gas  
880 Conservation Commission, COGCC. I heard nothing until I told  
881 my story in front of a full audience during a COGCC meeting  
882 in Rifle, Colorado, on July 11, 2005.

883 I finally was given a report that said one of the  
884 condensate tanks created the gas cloud. The report said this  
885 off-gassing was a common event.

886 Williams Production's solution was to place a top on the  
887 tank. No one was concerned about the damages I received.  
888 One of the two regulators for hundreds of wells in Garfield  
889 County came to my house during July or August, along with the  
890 Williams Production representative, promising to help me in  
891 any way possible. When I called the Williams representative  
892 asking what chemicals I was exposed to for my doctor's  
893 information, I was told no one in that company knew what  
894 chemicals were in condensate and no records were kept of such  
895 incidents.

896 The next I heard from Williams was by letter from their  
897 senior attorney in Oklahoma. She assured me Garfield County  
898 had everything under control and there were no chemicals  
899 involved with oil and gas production that were harmful to  
900 people. Since I no longer could expose myself to the air  
901 inside or outside my house without triggering all the  
902 symptoms, I put little faith in her words.

903 My family doctor diagnosed me as chemically sensitized  
904 by the event, and said I wouldn't be able to tolerate the  
905 environment that had been healthy for me for nearly ten  
906 years.

907 I must avoid the air until I could sell my house and  
908 find some environment I could tolerate. I purchased three  
909 powerful air cleaners, closed my house up tight, and wore a  
910 full-face respirator with gas-neutralizing cartridges each

911 | time I went outside to do minimal chores.

912 |       The approaching winter showed me my natural gas heating  
913 | used for nine previous winters now triggered all my symptoms,  
914 | plus hives. With four electric space heaters, I maintained a  
915 | 58-degree temperature inside and was a prisoner inside my  
916 | house.

917 |       Through intense research online and conversations with  
918 | scientists, doctors, and EPA toxicologists in Denver, it  
919 | became apparent that one of the chemicals that had damaged me  
920 | was hydrogen sulfide. Each scientist I spoke with told me I  
921 | was lucky to be alive, because I had been exposed to high  
922 | levels of hydrogen sulfide that caused my collapse and loss  
923 | of consciousness. The fact I was able to cling to the truck  
924 | door avoided me hitting the higher levels of gas.

925 |       It took nine months to find a place where I could  
926 | breathe the air without triggering symptoms. I have spent  
927 | thousands of dollars being evaluated and treated by  
928 | environmental doctors. I still don't know the full extent of  
929 | the physical damage. I am hopeful the resultant neurological  
930 | problems will stabilize.

931 |       So has the oil and gas industry changed my life? Yes.  
932 | It has caused me to lose my home, my friends, my way of life,  
933 | my health, and my belief in my Government. I once believed  
934 | Governmental agencies like the EPA protected its citizens. I  
935 | now know the EPA has been stripped of its power to do its

936 | defined job.

937 |       All of the activities related to exploration for and  
938 | recovery of oil and gas are exempt from the laws made to  
939 | protect our environment and citizens. The oil and gas  
940 | industry in Colorado is regulated by those who benefit from  
941 | irresponsible actions. In a situation where the fox guards  
942 | the hen house, it is deadly being a hen.

943 |       Thank you.

944 |       [Prepared statement of Ms. Wallace-Babb follows:]

945 | \*\*\*\*\* INSERT \*\*\*\*\*

946 Chairman WAXMAN. Thank you very much for your testimony.  
947 That was very moving to hear what you have gone through, and  
948 I want to extend my sympathies to you.  
949 Dr. Bolin?

950 STATEMENT OF DAVID E. BOLIN

951 Mr. BOLIN. Good morning, Chairman Waxman, Ranking Member  
952 Davis, and members of the Committee. My name is David Bolin,  
953 and I am the Deputy Director of the State Oil and Gas Board  
954 of Alabama. I am representing the Board, the State of  
955 Alabama, and other member States of the Interstate Oil and  
956 Gas Compact Commission, or IOGCC.

957 I am here today to address the proposition that two  
958 provisions of the Energy Policy Act of 2005--that being  
959 section 327 concerning hydraulic fracturing, and section 328  
960 regarding stormwater--have resulted in harm to drinking water  
961 resources in the United States.

962 The evidence would strongly suggest otherwise. These  
963 two provisions simply removed unnecessary administrative  
964 burdens on the production of oil and natural gas in the  
965 United States.

966 Let me first begin by addressing the hydraulic  
967 fracturing issue. I am a groundwater hydrologist and a  
968 petroleum engineer by training and I have served in technical  
969 and supervisor roles with the Board since 1982. My first  
970 responsibility with the Board was to develop and implement  
971 the State's class two UIC program, which was approved by EPA  
972 in August of 1982. Prior to that time, the Board had

973 | actively implemented groundwater protection programs to  
974 | include the regulation of hydraulic fracturing operations.  
975 | Protecting drinking water resources is part and parcel of  
976 | every State's conservation statute, which proceeded the  
977 | establishment of the Safe Drinking Water Act.

978 |         In the LEAF v. EPA legal proceedings, the 11th Circuit  
979 | Court of Appeals ruled in favor of LEAF, holding that  
980 | hydraulic fracturing constitutes underground injection, and  
981 | therefore must be regulated as such under the Safe Drinking  
982 | Water Act. The Court did not reach any finding of actual  
983 | harm to drinking water, deciding the matter strictly on the  
984 | definitional issue.

985 |         The State of Alabama was then required to revise its  
986 | class two UIC program. The end result has been higher  
987 | operating costs for the producers and significantly higher  
988 | administrative costs for the State.

989 |         In June of 2004 EPA published a final report summarizing  
990 | a study to evaluate the impacts of underground sources of  
991 | drinking water by hydraulic fracturing of coal-bed methane  
992 | reservoirs. In that report, EPA found no confirmed drinking  
993 | water well contamination cases linked to hydraulic  
994 | fracturing. National surveys conducted by the Groundwater  
995 | Protection Council and IOGCC support the conclusions reached  
996 | by EPA.

997 |         State regulatory agencies have a proven track record

998 | with regulations that are in place now. These regulations  
999 | have proven sufficient to adequately protect public health  
1000 | and the environment from hydraulic fracturing operations.

1001 |         Stormwater discharge management became an issue when it  
1002 | was determined that EPA's proposed rule could have a  
1003 | significant cost impact on the oil and gas industry, even  
1004 | though the industry was not the focus of the rule-making, and  
1005 | even though there was no indication of inadequate regulation  
1006 | during construction related to oil and natural gas  
1007 | activities.

1008 |         In response, the States, through IOGCC, and the industry  
1009 | engaged working groups to examine the matter. The State's  
1010 | working group found that it was not feasible to develop a  
1011 | single standard to fit the diverse requirements for  
1012 | appropriate stormwater discharge management throughout the  
1013 | United States. It concluded that States had been managing  
1014 | discharges at large sites and that there was no indication of  
1015 | a significant threat to the environment from stormwater  
1016 | discharges by small exploration and production site  
1017 | activities.

1018 |         The industry effort resulted in the creation of a  
1019 | document entitled, Reasonable and Prudent Practices for  
1020 | Stabilization, or RAPPS, as an effective voluntary tool for  
1021 | reducing pollutants in stormwater discharges.

1022 |         Based on the conclusions of the IOGCC study, the States

1023 are already adequately regulating this activity, supplemented  
1024 by improved industry practices based on RAPPS, the conclusion  
1025 can be drawn that there has been no adverse environmental  
1026 impact as a result of the passage of section 328 of the  
1027 Energy Policy Act.

1028       Elimination of sections 327 and 328 would not make  
1029 production of oil and natural gas in the United States any  
1030 safer, but could substantially increase domestic oil and  
1031 natural gas production costs, thereby decreasing domestic  
1032 supply.

1033       In conclusion, I would say that the sections 327 and 328  
1034 have not resulted in harm to drinking water resources in the  
1035 United States and does not need to be eliminated. Instead,  
1036 the regulations at the Federal and State level should focus  
1037 on that which will, in fact, further protect public health  
1038 and the environment.

1039       Thank you for the opportunity to appear here today. If  
1040 we can provide any additional information, please do not  
1041 hesitate to ask.

1042       [Prepared statement of Mr. Bolin follows:]

1043 \*\*\*\*\* INSERT \*\*\*\*\*

1044 Chairman WAXMAN. Thank you very much, Dr. Bolin.

1045 We are now going to proceed to five minutes for each  
1046 Member to ask questions or make comments. I am going to  
1047 recognize myself first.

1048 It is easy to get lost in the jargon of the oil and gas  
1049 industry, so I would like to briefly clarify one of the  
1050 issues we are discussing today, that is hydraulic fracturing.

1051 Ms. Mall, hydraulic fracturing is the practice of  
1052 injecting hundreds of thousands of gallons of a chemical  
1053 solution into the ground at high pressure in order to  
1054 fracture underground formations and enhance natural gas  
1055 production; is that correct?

1056 Ms. MALL. Yes, sir.

1057 Chairman WAXMAN. And EPA has found that hydraulic  
1058 fracturing is routinely conducted on formations within  
1059 underground sources of drinking water; is that correct?

1060 Ms. MALL. Yes.

1061 Chairman WAXMAN. And, Dr. Colborn, how easy is it to  
1062 learn what the chemicals are that are being injected into  
1063 these sources of drinking water?

1064 Ms. COLBORN. It has been very difficult. Thank goodness  
1065 for the Oil and Gas Accountability Project, who has lawyers  
1066 who are able to get us some of this information. We have  
1067 never been able to get the full disclosure of what is being  
1068 shipped into and used into western Colorado, and then when we

1069 do get a product, if you look at the name of the product and  
1070 then try to find out anything about it, you will find that  
1071 you may get 1 to 2 percent of the content, 50 percent of the  
1072 content, but you never know what the full amount of chemicals  
1073 are in this particular product.

1074 Even if you look at an MSGS sheet, they may list one or  
1075 two chemicals--

1076 Chairman WAXMAN. What is MSGS?

1077 Ms. COLBORN. Material Safety Data Sheet, which must  
1078 accompany anything that might be harmful on immediate use,  
1079 and it is there for the use of the handlers who are using it  
1080 directly or in case of accidents or spills, so it is there  
1081 for the emergency cleanup people, as well.

1082 Very, very seldom do you get the full content of what is  
1083 in the product.

1084 Actually, I should have brought one with me. We just  
1085 found one yesterday that came in where the name of the  
1086 product and then everything in it was proprietary. So we  
1087 keep running into the word proprietary.

1088 Chairman WAXMAN. Why wouldn't the companies just  
1089 disclose information as to what chemicals are in the  
1090 fracturing fluid?

1091 Ms. COLBORN. Well, I have asked the companies about  
1092 that, and basically when they make a product that they think  
1093 is going to facilitate releasing gas or making drilling

1094 | easier, there are companies now in competition doing this.  
1095 | Haliburton makes products, Encada makes products under the  
1096 | name of CalFrac.

1097 | Chairman WAXMAN. So it is proprietary?

1098 | Ms. COLBORN. So they claim it is proprietary and they  
1099 | don't want others to know.

1100 | Chairman WAXMAN. Okay. Is there evidence to suggest  
1101 | that we should have concern about these chemicals being in  
1102 | our drinking water?

1103 | Ms. COLBORN. Yes.

1104 | Chairman WAXMAN. Your research shows that they commonly  
1105 | contain toxic substances that are known to cause adverse  
1106 | health effects.

1107 | Ms. COLBORN. Yes.

1108 | Chairman WAXMAN. Is that the concern?

1109 | Ms. COLBORN. Yes. As I said, 91 percent of the products  
1110 | had one or more effect. That was in Colorado. We are  
1111 | breaking them out by State and trying to keep the States  
1112 | separate.

1113 | Chairman WAXMAN. Mr. Mobaldi, I want to thank you again  
1114 | for testifying today. I know it must be hard to discuss the  
1115 | situation you and your wife have endured.

1116 | Did you have any symptoms before the drilling activities  
1117 | began near your home?

1118 | Mr. MOBALDI. None at all.

1119 Chairman WAXMAN. And did any of the symptoms go away  
1120 after you moved away from the drilling activities?

1121 Mr. MOBALDI. Some of them, but it seems that detoxing  
1122 takes quite a while.

1123 Chairman WAXMAN. Dr. Teitelbaum, I know you can't make a  
1124 diagnosis. I am not asking you to do that. But these kinds  
1125 of situations are awfully hard to deal with in hindsight when  
1126 we don't have adequate information. In this case, we have  
1127 oil and gas activities near the Mobaldi's residence, oily  
1128 films appeared in their drinking water, they got sick, and  
1129 all of this is occurring in the context of an unregulated  
1130 activity in which undisclosed chemicals are being widely used  
1131 in sources of drinking water.

1132 As a medical toxicologist, what insights can you give us  
1133 into this situation?

1134 Dr. TEITELBAUM. Mr. Chairman, the problem we have is  
1135 that none of us have adequate information. I helped to work  
1136 on the hazard communication standard, the OSHA hazard  
1137 communication standard, which requires that material safety  
1138 data sheets give this type of information and, in fact, that  
1139 those data sheets be made available to a treating physician  
1140 who, with that in his hand or her hand, might be able to put  
1141 together the symptom complex described, the physical  
1142 findings, and the materials to which the individual is  
1143 exposed.

1144           However, because of the proprietary exemption in those,  
1145 most of the active chemicals don't appear on the material  
1146 safety data sheet.

1147           Chairman WAXMAN. Yes.

1148           Dr. TEITELBAUM. And it is extremely difficult, although  
1149 theoretically possible, to get that information by a  
1150 physician, but it is terribly difficult at any given time.

1151           Chairman WAXMAN. Would it be prudent for the companies  
1152 to at least disclose the chemicals that they are injecting  
1153 into the drinking water?

1154           Dr. TEITELBAUM. Absolutely. I think the reality is  
1155 there should be a community right to know provision so that  
1156 the community, itself, is provided with that information.  
1157 The physicians then have it available and it is an open  
1158 process.

1159           Chairman WAXMAN. Thank you very much for your testimony.

1160           Dr. TEITELBAUM. Thank you, Mr. Chairman.

1161           Chairman WAXMAN. Mr. Davis?

1162           Mr. DAVIS OF VIRGINIA. Let me just pick up on that. Dr.  
1163 Bolin, let me just ask you, from the regulatory side, would  
1164 there be any problem with disclosing what they are putting in  
1165 the wells?

1166           Mr. BOLIN. I don't think so. I think it is more of a  
1167 competitive type situation that they claim proprietary  
1168 information. I will say that in the years since we have

1169 revised our UIC program to implement our program to do  
1170 hydraulic fracturing, we have required the operators to  
1171 comply, basically to provide affidavits as to what those  
1172 components are, and they have done that for us.

1173 Mr. DAVIS OF VIRGINIA. That seems pretty common sense.

1174 It is a fact that when diesel is utilized in this, that  
1175 does have some very dangerous components; isn't that a fact?

1176 Mr. BOLIN. Yes, sir. That is true.

1177 Mr. DAVIS OF VIRGINIA. And is diesel utilized much  
1178 today?

1179 Mr. BOLIN. It is not used at all in Alabama in regard to  
1180 hydraulic fracturing.

1181 Mr. DAVIS OF VIRGINIA. But it is not illegal anywhere?

1182 Mr. BOLIN. I do know that the EPA executed a memorandum  
1183 of agreement with the major service companies that handle  
1184 about 95 percent of fracking operations in which they agreed  
1185 not to use diesel in fracking operations.

1186 Mr. DAVIS OF VIRGINIA. That is good for the 95.

1187 Mr. Chairman, I have just a couple of letters that were  
1188 submitted to us in the record. One is from the American  
1189 Petroleum Council and the other from the Groundwater  
1190 Protection Council, if we could put these in the record.

1191 Chairman WAXMAN. Without objection, that will be the  
1192 order.

1193 [The referenced information follows:]

1194

\*\*\*\*\* COMMITTEE INSERT \*\*\*\*\*

1195 Mr. DAVIS OF VIRGINIA. Let me ask Mr. Mobaldi. What a  
1196 terrible story, and I appreciate your being here to share  
1197 this today. I was just looking over the records from the  
1198 State of Colorado and their Oil and Gas Conservation  
1199 Commission. I know they tried to come and looked at the  
1200 wells and the property and inspected. According to their  
1201 letter, you wouldn't let them on. That was your attorney's  
1202 advice?

1203 Mr. MOBALDI. Yes.

1204 Mr. DAVIS OF VIRGINIA. So they never really had a chance  
1205 to come on and do the comparison so that they could take a  
1206 look at what the components were; is that right? Or did  
1207 anybody?

1208 Mr. MOBALDI. They eventually did come on the property  
1209 and do some testing, but we were unable to get the results  
1210 because Encana had to approve it.

1211 Mr. DAVIS OF VIRGINIA. Okay. So there are some results  
1212 somewhere, is what you are telling me?

1213 Mr. MOBALDI. I think so.

1214 Mr. DAVIS OF VIRGINIA. Okay. I think really having that  
1215 linkage would be very, very important for the record. That  
1216 may be something, Mr. Chairman, we could have the Committee  
1217 look at, if there are some results from that. That could  
1218 help tie this down a little bit more.

1219 Let me ask Dr. Colborn, Our Stolen Future, your book,

1220 | was mentioned at a hearing we did last year on the fish in  
1221 | the Potomac River, where we found endocrine disruption, that  
1222 | common contaminants can interfere with the natural signals  
1223 | controlling development of the fetus, and we are finding  
1224 | males with eggs and premature with eggs and that kind of  
1225 | thing.

1226 |         Ms. COLBORN. Yes.

1227 |         Mr. DAVIS OF VIRGINIA. What is your read on it? Can you  
1228 | elaborate on that a little bit more in terms of what  
1229 | ecological problems you can have interfering with the  
1230 | endocrine system? Does this create dangers for human  
1231 | consumption and the like, or are we just not sure where this  
1232 | all goes?

1233 |         Ms. COLBORN. Right now we are at the stage where we are  
1234 | beginning to look at maybe 10 to 15 years of new studies not  
1235 | done using toxicological approaches but using different kinds  
1236 | of assays to test chemicals at very low doses. The old  
1237 | testing protocols used high dose looking for obvious changes  
1238 | and cancer. The new testing protocols that are not being  
1239 | done by the Government but are in academic laboratories  
1240 | around the world now, we have a vast number of studies that  
1241 | support that many chemicals can interfere from the moment of  
1242 | fertilization until an individual is born that alters how  
1243 | that individual is structured and how they behave later.

1244 |         Mr. DAVIS OF VIRGINIA. Yes.

1245 Ms. COLBORN. The obvious one, which we discovered way  
1246 back in the 1970s, were the bisexual fish in the Great Lakes.  
1247 There are still fish there. I mean, we stock the Great Lakes  
1248 to get the fish that they want there for the commercial  
1249 recreational purposes, but we now know that some of these  
1250 chemicals actually that are endocrine disruptors, some of the  
1251 surfactants are being used and injected underground. So they  
1252 are on the list.

1253 Mr. DAVIS OF VIRGINIA. Are we not doing enough research  
1254 in this area? I mean, we are seeing it everywhere. This is  
1255 not a phenomenon just on the Potomac River. As you noted, it  
1256 is in the Great Lakes and everywhere else. If it is  
1257 underground, who knows what else. Are we not doing enough  
1258 basic research into this area?

1259 Ms. COLBORN. We are not. I would like to talk to you  
1260 about that. Look at the front page of USA Today. There are  
1261 three pages devoted to just two chemicals that have been  
1262 overlooked, and there has been a tremendous amount of  
1263 suppression on using.

1264 I have sat on EPA study groups, you know, the committees  
1265 trying to design these studies to develop these assays, and  
1266 EPA would not give up using the old toxicological approach.  
1267 Until we switch over and start using this new approach, the  
1268 young people and the new people who are coming along doing  
1269 endocrine research, starting with low doses, looking at

1270 embryonic development, we are not going to get these  
1271 chemicals out of our environment. They are slipping through  
1272 our safety net, truly.

1273 Mr. DAVIS OF VIRGINIA. Thank you very much.

1274 Ms. COLBORN. Thank you.

1275 Mr. HIGGINS. [Presiding] Thank you, Mr. Davis.

1276 On the issue of injecting diesel fuel, in 2002 it was  
1277 publicly revealed that gas and oil companies were using  
1278 diesel fuel as a hydraulic fracturing fluid. That meant that  
1279 oil and gas companies were injecting diesel fuel directly  
1280 into underground sources of drinking water in order to  
1281 enhance oil and gas production.

1282 In 2003, the Environmental Protection Agency entered  
1283 into a voluntary agreement with Haliburton and two other  
1284 companies to discontinue the practice of injecting diesel  
1285 fuel directly into sources of drinking water. Unfortunately,  
1286 the agreement was in no way mandatory or binding. The EPA  
1287 was concerned that using diesel fuel for hydraulic fracturing  
1288 could introduce BTX chemicals into drinking water.

1289 Dr. Teitelbaum, could you tell us what BTX chemicals are  
1290 and why exposure to them would be of concern?

1291 Dr. TEITELBAUM. The BTX chemicals are benzene, toluene,  
1292 and xylene. Benzene is a class one human carcinogen,  
1293 probably one of the best-studied chemicals in industrial use.  
1294 Its presence is extremely threatening, not only as a

1295 | carcinogen, but also as a liver toxin, developmental toxin,  
1296 | and so on.

1297 |       Toluene and xylene are at the moment not considered to  
1298 | be carcinogenic as class one as benzene is listed; however,  
1299 | they are both highly toxic. They are neurotoxins. They are  
1300 | developmental toxins. When they are present in potable  
1301 | water--let's not say drinking water just for the moment, but  
1302 | potable water used for all sources of domestic water  
1303 | supply--it is common that people shower with that water. The  
1304 | dose delivered of these volatile organic chemicals through  
1305 | showering is far greater than the dose delivered through  
1306 | drinking water.

1307 |       Mr. HIGGINS. Right.

1308 |       Dr. TEITELBAUM. And in many situations people have  
1309 | substitute drinking water supplies but continue to use their  
1310 | well water as the source of general domestic water, and the  
1311 | dose simply stays very high, even though they believe,  
1312 | because they are drinking a different source, their dose of  
1313 | BTX chemicals has gone down.

1314 |       Mr. HIGGINS. Another question. By eliminating diesel  
1315 | fuel from hydraulic fracturing fluids, do we completely  
1316 | eliminate any chance of introducing BTX chemicals to  
1317 | underground sources of drinking water? Or can BTX chemicals  
1318 | be found in other substances, as well?

1319 |       Dr. TEITELBAUM. Well, they are naturally present in

1320 crude oil, Mr. Higgins. They are also present in the  
1321 condensate, and so there is every reason to believe that, as  
1322 the gas is extracted from the ground, there is contamination  
1323 by the BTXes carried in the fugitive gas and the crude oil  
1324 being extracted, and so on.

1325         What has happened with the industry is the fractionation  
1326 fluids are using different molecular weight oils, higher  
1327 molecular weight, where you never really eliminate the low  
1328 molecular weight chemicals, even if you go to a different  
1329 compound or a different mix, something not called diesel  
1330 fuel. You still have BTX from that, as well.

1331         Mr. HIGGINS. I see.

1332         So if diesel fuel is actually eliminated from use, can  
1333 we be confident that BTX chemicals will be completely  
1334 eliminated from hydraulic fracturing fluids?

1335         Dr. TEITELBAUM. On the contrary. I think we would be  
1336 certain that they were still present, although perhaps in  
1337 lower concentration.

1338         Mr. HIGGINS. Well, the EPA tells us that they were  
1339 worried about BTX chemicals being injected into the  
1340 underground sources of drinking water, so they seek a  
1341 voluntary commitment from oil and gas companies to not use  
1342 diesel fuel in fracturing fluids; however, BTX chemicals are  
1343 found in other petroleum products in addition to diesel fuel,  
1344 and there is no limitation on their use of these petroleum

1345 products.

1346 My question is: wouldn't it make more sense to simply  
1347 prohibit BTX chemicals from being used in hydraulic  
1348 fracturing fluids?

1349 Dr. TEITELBAUM. That would certainly be reasonable to do  
1350 that. We would still not eliminate the problem. We would  
1351 have to monitor the drinking water because of the other  
1352 sources.

1353 Mr. HIGGINS. Okay.

1354 Mr. Shays?

1355 Mr. SHAYS. I appreciate the majority having a hearing on  
1356 this issue, and I am sorry I wasn't here for all of our  
1357 witnesses' testimony. This is a hugely difficult issue  
1358 because we want energy independence, we want a quality of  
1359 life that improves, doesn't put us in jeopardy, we want a  
1360 clean environment, and we want to deal with global warming.  
1361 I will tell you, as a Member of Congress, sometimes you feel  
1362 like you are punched in the stomach because everything is  
1363 moving so quickly and you begin to wonder if we have the  
1364 capability to deal with it. We do if we are going to be  
1365 honest with each other.

1366 One of the challenges becomes that we all seem to be  
1367 asked to be politically correct, so when I ask questions,  
1368 then people evaluate my questions as if somehow I have got my  
1369 mind made up or I am insensitive. I don't mean to be

1370 insensitive on these issues. I tend not to like trial  
1371 lawyers, and lawyers can keep you out of jail, but they make  
1372 you look guilty as hell.

1373 Mr. Mobaldi, I want to first say to you I am very moved  
1374 by your testimony. I believe it is very sincere, and I  
1375 happen to believe that we totally underestimate chemical  
1376 exposure. This committee that I was chairman of was really  
1377 working on the issue of chemical exposure to our soldiers and  
1378 our military personnel in the Gulf War, but for me it is  
1379 difficult to understand why the lawyers should have anything  
1380 to do with whether or not your well is tested. If your well  
1381 is not healthy, test the well and know. The only implication  
1382 I can concur is that your lawyers didn't want the well to be  
1383 tested because there may not be anything wrong with your  
1384 well. Why would they not want your well tested?

1385 Mr. MOBALDI. They wanted to be present when it was  
1386 tested.

1387 Mr. SHAYS. That is fair. And why wouldn't you have it  
1388 tested?

1389 Mr. MOBALDI. I don't know what coincided with the  
1390 testing people and the lawyers.

1391 Mr. SHAYS. I mean no disrespect at all, because I really  
1392 believe that you have a very serious problem and I believe  
1393 there was chemical exposure. That is intuitively what I  
1394 believe. There would be more credibility if you eagerly

1395 | wanted the well tested, all parties there. You tested it  
1396 | yourself with the other parties there, and let's find out.

1397 |         Mr. MOBALDI. I tried to get it tested on my own and I  
1398 | couldn't get anyone to do it.

1399 |         Mr. SHAYS. Okay. Well, bottom line is: let them test  
1400 | it, but let your people be there, and let's get it done.

1401 |         Mr. MOBALDI. Right. Well, we no longer own the  
1402 | property.

1403 |         Mr. SHAYS. Okay. That is a significant factor.

1404 |         What I think has to be at the very top of all our  
1405 | concerns is the water table, more than anything else. I am  
1406 | stunned that people keep moving to parts of the southwest  
1407 | oblivious to a huge challenge that we are going to have in  
1408 | the future, and we in Government don't seem to want to deal  
1409 | with that issue because there are so many issues on our  
1410 | plate. But I would like someone to tell me if they think  
1411 | there is anything more important than the water quality and  
1412 | the water table. What would be more important than that  
1413 | issue? Dr. Colborn?

1414 |         Ms. COLBORN. May I just add something here? I was  
1415 | amazed how that came across. It is the stuff that is coming  
1416 | off right immediately. It is the air pollution that is  
1417 | contributing to the problem.

1418 |         Mr. SHAYS. Okay.

1419 |         Ms. COLBORN. It is the air that the people are

1420 breathing, apparently. This is what I didn't understand.  
1421 What we are looking at is the immediate exposure during the  
1422 activity of these development of the well, the action of the  
1423 well, the equipment that is running. They are producing  
1424 volatile compounds, and it is the volatile compounds that  
1425 seem to be affecting these people early on.

1426 Mr. SHAYS. So you mean more than the quality of the  
1427 water it is the air?

1428 Ms. COLBORN. It is the air, as well. And believe me--

1429 Mr. SHAYS. Let me ask you, once the water is  
1430 contaminated, it becomes a much more difficult long-term  
1431 problem to resolve, doesn't it?

1432 Ms. COLBORN. That is right. One of the products that  
1433 got me involved in this is a problem called 2BE,  
1434 tubutoxyethanol. It is odorless, it is colorless, and  
1435 tasteless, and it mixes with water. It evaporates at room  
1436 temperature. I began thinking about that being injected  
1437 underground, if it came up into someone's home in the water  
1438 it would evaporate.

1439 Mr. SHAYS. Let me ask--

1440 Ms. COLBORN. And they would be breathing it, just as Dr.  
1441 Teitelbaum mentioned.

1442 Mr. SHAYS. Ms. Mall, how do you come down on this issue  
1443 between water quality and the quality of the air? They are  
1444 both important, but which becomes the more difficult issue to

1445 deal with?

1446 Ms. MALL. Well, ultimately I would really hate to have  
1447 to make a choice. One of the issues that we are dealing  
1448 with--

1449 Mr. SHAYS. They are both bad.

1450 Ms. MALL. Right.

1451 Mr. SHAYS. Which is the more difficult issue to deal  
1452 with in the long run? Isn't it true that it is easier to  
1453 clean up our air than it would be to clean up the water table  
1454 if the water table becomes contaminated?

1455 Ms. MALL. Once the water is contaminated, actually,  
1456 there is a GAO report from 1989 that says it can take up to  
1457 250 years for a natural underground aquifer to start cleaning  
1458 itself, because the water migrates so slowly.

1459 Mr. SHAYS. And my argument, if I can just make this last  
1460 point, my argument would be people are going to see the air,  
1461 they are going to feel it, they are going to demand it be  
1462 cleaned up, and the long-term damage, there is clear damage,  
1463 but the long-term damage is not as great as it will be. Once  
1464 the water table is contaminated, it seems to me we have an  
1465 unbelievable problem.

1466 Now, would the argument be that is the water table would  
1467 only be contained in a small area, or would it continue to  
1468 expand if nothing is done to clean it up? That is my last  
1469 question.

1470 Ms. MALL. Well, the water can migrate, and part of the  
1471 problem when you are dealing with underground is we don't  
1472 really know where it goes or where it is going to come up.

1473 One of the things the GAO report looked at were  
1474 abandoned wells that were never plugged properly. Lots of  
1475 the new wells are near abandoned wells, for example, and the  
1476 water can migrate not only underground but through the wells  
1477 that were never plugged properly.

1478 There are examples in Colorado and in Wyoming of places  
1479 where chemicals originally from wells have migrated.

1480 One of the issues we are dealing with, these laws where  
1481 there is a range of loopholes for air or water or ground  
1482 contamination, and some of these chemicals can be found in  
1483 all of these places. For example, hydraulic fracturing,  
1484 there might be chemicals left underground. Research shows  
1485 that up to 30 percent of the chemicals may be left  
1486 underground in a hydraulic fracturing operation. They may  
1487 contaminate groundwater. Those chemicals, when they come up  
1488 to the air, may evaporate and contaminate our air. And they  
1489 may be left in a disposal pit that could be breached, for  
1490 example, and contaminate the ground.

1491 One of the things we are talking about today, I know you  
1492 talk about a trade-off. NRDC does have a very detailed  
1493 proposal for energy security, relies on efficiency and  
1494 renewables. I don't have the details of that today, but we

1495 | don't think that cleaning up oil and gas exploration  
1496 | production is inconsistent with energy security. I think  
1497 | that is a really important point.

1498 |         Mr. Davis talked about solutions, and really we are  
1499 | talking about solutions today. The fact is that there is  
1500 | information from State and Federal agencies and other  
1501 | researchers about solutions for all of these types of  
1502 | pollution. They are available. They are affordable. In  
1503 | many cases they are profitable for industry.

1504 |         I quoted in my spoken testimony an industry official in  
1505 | a newspaper article who said it was a win/win situation, and  
1506 | it really can be.

1507 |         Mr. SHAYS. Thank you.

1508 |         Chairman WAXMAN. [Presiding] Mr. Cannon?

1509 |         Mr. CANNON. Thank you, Mr. Chairman.

1510 |         I am a little confused. I thought, Dr. Bolin, you might  
1511 | be able to answer my question. I apologize for not being  
1512 | here, but I have been up in my office watching. What I  
1513 | picked up, I think, from your testimony is you have been a  
1514 | regulator for about 25 years?

1515 |         Mr. BOLIN. Yes, sir, that is correct.

1516 |         Mr. CANNON. So you are not bought by industry?

1517 |         Mr. BOLIN. No, sir, not at all.

1518 |         Mr. CANNON. Great. That is so good to hear, because I  
1519 | have heard from several people asking questions here the

1520 | characterization that we are injecting these chemicals into  
1521 | drinking water, into potable water. Is that happening? That  
1522 | was done in connection with coal-bed methane, which I think  
1523 | you are particularly the expert in, but as a practical  
1524 | matter, when we are doing fracking with gas, that is at a  
1525 | much, much deeper level, and so I am quite confident that is  
1526 | not the issue here.

1527 |         Are we, in the relatively more shallow environment of  
1528 | coal-bed fracking, injecting these chemicals into drinking  
1529 | water?

1530 |         Mr. BOLIN. Well, I can tell you what our situation is  
1531 | and our experience has been in Alabama. We have coal beds  
1532 | that do exist at shallower depths than most conventional oil  
1533 | and gas resources, and they are within what is defined by EPA  
1534 | as underground sources of drinking water, which is defined as  
1535 | anything less than 10,000 milligrams per liter of chlorides.  
1536 | It does not mean that that is being used as drinking water.

1537 |         In our program, we evaluate each fracturing operation  
1538 | and we find and we review all of the groundwater wells that  
1539 | are in the area, and typically we obtain our drinking water  
1540 | from wells, they are in the depths of typically 50 to 200  
1541 | feet.

1542 |         In our circumstances, most coal beds that are being  
1543 | produced are greater than 1,000 feet in depth, and we will  
1544 | review each frack to ascertain and to ensure that these

1545 | fracking operations would not reach the shallower depths and  
1546 | have a possibility of compromising anyone's water supply  
1547 | wells.

1548 |         I would also say that we receive affidavits, sworn  
1549 | statements from the operators and from the service companies  
1550 | after reviewing their information that they provide on the  
1551 | components of the hydraulic fracking fluids where they aver  
1552 | that the applicable parts of the Safe Drinking Water Act, as  
1553 | it relates to drinking water standards, are complied with,  
1554 | and State staff people, technical people, review those and  
1555 | verify that that is, in fact, the case.

1556 |         Mr. CANNON. Could we focus just for a moment on the  
1557 | verification?

1558 |         Mr. BOLIN. Yes.

1559 |         Mr. CANNON. There are ways to verify things that these  
1560 | companies, these for-profit--I think somebody actually made a  
1561 | big point out of the for-profit nature of these companies.  
1562 | There is a great deal about this process that can be  
1563 | verified?

1564 |         Mr. BOLIN. Yes, sir. Yes, sir, our current revised UIC  
1565 | program that includes hydraulic fracking, we do that in  
1566 | Alabama, and we do receive that information.

1567 |         Mr. CANNON. Let me just ask another question, because my  
1568 | time is up. Dr. Teitelbaum talked about these compounds as  
1569 | being naturally occurring. There is a current commercial--I

1570 think it is Geico maybe--where Jeb of the Beverly Hillbillies  
1571 shoots into the ground and oil comes out, and then it says  
1572 buy insurance or something. But, of course, that was a great  
1573 show when it was a current show. We do have these compounds  
1574 occurring close enough to the surface in some cases where  
1575 maybe a shotgun could create an oil well? I don't know. But  
1576 they are at various levels.

1577 We have a problem with these kinds of compounds. Is  
1578 there, Dr. Bolin, a clear connection anywhere that you are  
1579 aware of between fracking and the pollution of people's  
1580 groundwater wells or the potable aquifer that we tap?

1581 Mr. BOLIN. No, sir. And, as I alluded to in my  
1582 testimony, there has been surveys and studies done where we  
1583 have obtained information from the various State regulatory  
1584 agencies. As I indicated, there have been no confirmed  
1585 groundwater well contaminations that have resulted from  
1586 hydraulic fracturing in studies that were done by EPA and  
1587 national organizations such as the Groundwater Protection  
1588 Council and the Interstate Oil and Gas Compact Commission.

1589 Mr. CANNON. Mr. Chairman, I recognize my time has  
1590 expired. Let me just add that we have cases of individuals  
1591 who are hurt here, and I appreciate those cases. The  
1592 problems are complex, and I hope that, as we develop policy,  
1593 we will do it in the context of science.

1594 Thank you. I yield back.

1595 Chairman WAXMAN. Thank you very much.

1596 Mr. Sali?

1597 Mr. SALI. Thank you, Mr. Chairman.

1598 Dr. Bolin, I guess I am kind of confused, because I hear  
1599 you saying on the one hand that there has been a study that  
1600 there has been no contamination of water resources from  
1601 fracturing, from the study that you referred to; is that  
1602 correct?

1603 Mr. BOLIN. That is correct.

1604 Mr. SALI. Well, I am not sure who to direct this  
1605 question to. Maybe Ms. Mall. Are you suggesting that there  
1606 is something that is not measured, or that somehow the report  
1607 is faulty? I mean, Dr. Bolin is saying there is no  
1608 indication that there has been any pollution. Are you saying  
1609 there is pollution? And if so, what is it and how is it we  
1610 missed it?

1611 Ms. MALL. Certainly the testing is an issue. If the  
1612 public doesn't understand what chemicals might be involved,  
1613 doesn't have that information, and doesn't know what to test  
1614 for, it can be easy not to find something if you are not  
1615 actually looking for it. That is a really important issue.

1616 The EPA study from 2004 found that, in some cases,  
1617 hydraulic fraction fluids are injected directly into  
1618 underground sources of drinking water.

1619 Mr. SALI. Let me ask you this. Are you saying there are

1620 | things that are in the water from fracturing that we are not  
1621 | measuring?

1622 |         Ms. MALL. I think in some cases that has definitely been  
1623 | the case. Yes.

1624 |         Mr. SALI. So you are saying there is some kind of  
1625 | pollution going on that we don't know about and that we are  
1626 | not measuring?

1627 |         Ms. MALL. That is my understanding. That is one of the  
1628 | issues in Alabama in the LEAF case that not all chemicals  
1629 | that could have been involved in the hydraulic fracturing  
1630 | were tested for.

1631 |         Mr. SALI. But we could find those if we did additional  
1632 | testing?

1633 |         Ms. MALL. It may be. Dr. Colborn's research--and she  
1634 | can speak more to this than I can--has shown that there is a  
1635 | universe of chemicals that may be used in hydraulic  
1636 | fracturing.

1637 |         Mr. SALI. Okay. Dr. Colborn, let me I guess direct this  
1638 | to you then. Is this just a matter of additional testing?

1639 |         Ms. COLBORN. This is a matter of additional testing, and  
1640 | if we had access to what is being used we would know what to  
1641 | look for.

1642 |         There was an incident in Garfield County right near--

1643 |         Mr. SALI. Let me stop you right there.

1644 |         Ms. COLBORN. Okay.

1645 Mr. SALI. Are you saying that there is no way to do  
1646 sufficient testing of water today without somebody telling  
1647 you what to look for?

1648 Ms. COLBORN. That is right. Yes, because there is such  
1649 a broad expanse of chemicals of different classes, and so it  
1650 is very expensive to do this analysis to begin with, to know  
1651 even what to look for, just to start looking for the BTX and  
1652 the methane and--

1653 Mr. SALI. Okay. Thank you.

1654 Dr. Bolin, do you agree with that, that there is no way  
1655 to know what to look for unless somebody tells you what to  
1656 look for? There is no way to find what is in the water  
1657 unless somebody tells you what to look for?

1658 Mr. BOLIN. From our standpoint as State regulators, we  
1659 do everything and base all of our decisions on sound,  
1660 technical data, and we try to obtain sufficient technical  
1661 data to--

1662 Mr. SALI. Let me ask the question a different way.

1663 Mr. BOLIN. Okay.

1664 Mr. SALI. Do you ever find things that you haven't been  
1665 told look for this but you find it anyway in testing?

1666 Mr. BOLIN. No, sir.

1667 Mr. SALI. So it is just a matter of knowing what to look  
1668 for? That is the whole issue here?

1669 Ms. COLBORN. That is why I am here to ask for full

1670 disclosure. Yes.

1671 Mr. SALI. Okay. And is your point, Dr. Colborn, that  
1672 somehow the Federal Government has got to be involved and  
1673 that this isn't something that the States can do?

1674 Ms. COLBORN. Definitely, because this chemical testing  
1675 is expensive. States don't have the money. Colorado hasn't  
1676 had the money to do the testing. People like Steve Mobaldi  
1677 and Susan had no place to send their water. I was lucky. I  
1678 was working with a lab in Texas. I was able to send  
1679 something away, but they did it for me out of kindness of  
1680 their heart.

1681 Mr. SALI. Dr. Bolin, do you agree with that, that  
1682 somehow the Federal Government can do something efficiently  
1683 that the States can't do?

1684 Ms. COLBORN. Yes.

1685 Mr. SALI. I am asking Dr. Bolin.

1686 Mr. BOLIN. Well, I would say that our experience has  
1687 been that the States can do things more efficiently, and have  
1688 the expertise to do it if they have the resources to do that.  
1689 Quite often, resources may be at issue in terms of the extent  
1690 of the testing and that type of thing. But LEAF and Alabama  
1691 have been able to conduct the tests that we need to determine  
1692 the constituents in hydraulic fracturing operations.

1693 Mr. SALI. Mr. Mobaldi, you don't own your place any  
1694 more? When did you sell that?

1695 Mr. MOBALDI. We abandoned it.

1696 Mr. SALI. I thought you said earlier it belongs to  
1697 someone else.

1698 Mr. MOBALDI. It does now. Somebody has moved into it.

1699 Mr. SALI. And as a part of that sale did you disclose  
1700 the issues that you had been having?

1701 Mr. MOBALDI. I had nothing to do with the sale.

1702 Mr. SALI. You weren't the owner?

1703 Mr. MOBALDI. Well, my wife and I, we just walked away  
1704 from the property. It was foreclosed on. The disclosure  
1705 went to the mortgage company, I believe. It went to the real  
1706 estate company when we tried to sell it.

1707 Mr. SALI. Do you know if the current occupants are  
1708 having the same kind of problems that you had?

1709 Mr. MOBALDI. I don't know. I have no idea.

1710 Mr. SALI. Thank you, Mr. Chairman.

1711 Chairman WAXMAN. Thank you, Mr. Sali.

1712 Mr. Kucinich?

1713 Mr. KUCINICH. Thank you, Mr. Chairman.

1714 Mr. Neubecker, your organization is committed to  
1715 protecting trout habitat across the Country. What do you see  
1716 as the biggest threat to maintaining healthy watersheds for  
1717 trout population? It is my understanding that there are some  
1718 pretty standard mitigation practices to help deal with the  
1719 stormwater runoff problem associated with construction sites.

1720 It is also my understanding that these mitigation measures  
1721 are fairly universally applied to construction sites and  
1722 other industries besides oil and gas, so I would like your  
1723 comment on that.

1724 Mr. NEUBECKER. Well, I would think that at the national  
1725 level development and encroachment on habitat, both of  
1726 aquatic species and for wildlife, is the biggest single  
1727 threat right now, Especially in the stream ecosystems,  
1728 sedimentation is probably by far and away universally the  
1729 biggest single threat. It is in the west. It is the biggest  
1730 problem we have.

1731 All other development activity does have to comply with  
1732 stormwater discharge regulations in construction, and not  
1733 just during the construction phase but also during the entire  
1734 time that ground is exposed to the elements.

1735 Mr. KUCINICH. What about the mitigation practices? Are  
1736 there some that are pretty standard?

1737 Mr. NEUBECKER. There are some pretty standard mitigation  
1738 practices.

1739 Mr. KUCINICH. Can you describe them?

1740 Mr. NEUBECKER. Things like silt fencing, contouring,  
1741 revegetation.

1742 Mr. KUCINICH. Sediment fence, hay bales? Are those  
1743 standard?

1744 Mr. NEUBECKER. Things like that, yes, and also detention

1745 ponds that can catch larger events where the water can clear  
1746 up.

1747 Mr. KUCINICH. Now, is it true that even a person  
1748 building a home, for example, has to take steps to protect  
1749 against stormwater runoff?

1750 Mr. NEUBECKER. In many places, yes. I had to do that  
1751 when I built my house in Needle.

1752 Mr. KUCINICH. In 2005 the Energy Policy Act exempted  
1753 construction of oil and gas production facilities from the  
1754 Clean Water Act stormwater rules, didn't it, Mr. Neubecker?

1755 Mr. NEUBECKER. Yes, it did.

1756 Mr. KUCINICH. And it doesn't make sense to me that  
1757 everyone is required to take common sense efforts to prevent  
1758 sediment runoff except the oil and gas industry. Does that  
1759 make sense to you?

1760 Mr. NEUBECKER. It doesn't make sense that they should be  
1761 exempted from it.

1762 Mr. KUCINICH. Right.

1763 Mr. NEUBECKER. It doesn't make sense to me at all.

1764 Mr. KUCINICH. Now, Colorado has State regulations that  
1765 go beyond the Federal stormwater runoff regulations.  
1766 According to your testimony, you were very engaged in putting  
1767 these regulations in place; is that right?

1768 Mr. NEUBECKER. Yes, sir.

1769 Mr. KUCINICH. And, Mr. Neubecker, would you say that the

1770 oil and gas industry is suffering a great deal because they  
1771 have to comply with the stormwater runoff regulations in  
1772 Colorado?

1773 Mr. NEUBECKER. Not in Colorado, no, they are not  
1774 suffering at all.

1775 Mr. KUCINICH. So why is it important that the Federal  
1776 Government regulate stormwater runoff when your State has  
1777 already done so?

1778 Mr. NEUBECKER. I would say because it is an exemption at  
1779 the Federal level, Federal law that requires this. Plus the  
1780 fact that we need to have a uniform standard across the  
1781 Country for this type of activity.

1782 Mr. KUCINICH. Do all States have the ability to regulate  
1783 stormwater?

1784 Mr. NEUBECKER. Not all of them, to my knowledge. I know  
1785 New Mexico is one State that does not have that ability to go  
1786 beyond what the Federal Government has done. Colorado does.  
1787 I am not sure. I am not a lawyer, so I am not sure how many  
1788 States do.

1789 Mr. KUCINICH. Thank you very much, Mr. Neubecker.

1790 Thank you, Mr. Chairman. I yield back.

1791 Chairman WAXMAN. Thank you, Mr. Kucinich.

1792 Mr. Cummings?

1793 Mr. CUMMINGS. Yes. Thank you, Mr. Chairman.

1794 One claim that we have heard today is that there is no

1795 confirmed cases of hydraulic fracturing fluid contaminating  
1796 drinking water wells, which is very interesting.

1797 Dr. Colborn, your testimony included a description of a  
1798 woman you met in Garfield County with a rare adrenal tumor.  
1799 You stated that hydraulic fracturing fluid used near her home  
1800 contained a chemical that has been shown to cause adrenal  
1801 tumors; is that correct?

1802 Ms. COLBORN. Yes.

1803 Mr. CUMMINGS. Was there sufficient testing to be able to  
1804 determine if the hydraulic fracturing fluids occurred in her  
1805 drinking water?

1806 Ms. COLBORN. No.

1807 Mr. CUMMINGS. How long did it take for the company to  
1808 actually test for the chemical of concern in her drinking  
1809 water?

1810 Ms. COLBORN. Three to three and a half years after the  
1811 eruption.

1812 Mr. CUMMINGS. Would you think it would be hard to find  
1813 these chemicals if you waited for years to sample them?

1814 Ms. COLBORN. Definitely. Yes.

1815 Mr. CUMMINGS. Do you know why it takes so long to do the  
1816 testing?

1817 Ms. COLBORN. Because this isn't what you traditionally  
1818 test for. I know they came in and did test her water, told  
1819 her her water was safe, as I said earlier, and delivered some

1820 water to her home for her to use, but she was breast feeding  
1821 a baby during this period after this happened for another  
1822 eighteen months. She breast fed her baby until she was two  
1823 years old, and they were using the water that was being  
1824 hauled, but also the water in their home and the water that  
1825 was coming into their house, they used it for tubs, toilets,  
1826 dish washing, and that sort of thing.

1827 But they didn't look for 2BE and they don't look for 2BE  
1828 today, or any of a number of the chemicals that are on our  
1829 list that we find that they are using.

1830 Mr. CUMMINGS. Are you aware, going back to the case that  
1831 we just mentioned, whether there was a settlement in that  
1832 case?

1833 Ms. COLBORN. Yes.

1834 Mr. CUMMINGS. So this lady was paid some money in the  
1835 settlement, to your knowledge?

1836 Ms. COLBORN. Yes. She was able to pack up with her  
1837 family and purchase another place and move away.

1838 Mr. CUMMINGS. Dr. Colborn, the Committee actually  
1839 contacted the woman you are referring to, and we had hoped to  
1840 have her testify today. Unfortunately, we learned that as a  
1841 part of her settlement the oil and gas company required her  
1842 to agree to never, never publicly discuss her experience. I  
1843 can't blame her for accepting the settlement for what she  
1844 went through, but it does make it harder for policy-makers to

1845 understand the scope of the problem.

1846 I would like to introduce into the record a letter from  
1847 Lance Astrella, Mr. Chairman, an attorney in Denver,  
1848 Colorado. Mr. Astrella represents individuals who are  
1849 adversely impacted by oil and gas production. He confirms  
1850 that these settlements are, indeed, a problem.

1851 According to Mr. Astrella, and I quote from that letter,  
1852 ``Claims that are asserted are often settled under  
1853 confidentiality agreements, thereby limiting access to  
1854 information which would be helpful in assessing risks  
1855 associated with oil and gas operations.''

1856 Mr. Astrella also notes that there has been very little  
1857 effort on the part of Federal or State governments to study  
1858 the potential adverse health impacts associated with oil and  
1859 gas production. This lack of scientific study acts to shield  
1860 the industry from change.

1861 One of the interesting things, too, you know, I often  
1862 sit in these hearings and I think about whether Members of  
1863 Congress would allow their families to drink this water,  
1864 whether we would allow our families to go through this.  
1865 Sometimes I do believe that there is a disconnect, because  
1866 the Bible says do unto others as you would have them do unto  
1867 you. I just wonder about that sometimes. I guess the answer  
1868 is clear. They wouldn't.

1869 With that, I will yield back, Mr. Chairman.

1870 Chairman WAXMAN. Thank you very much. The letter you  
1871 talked about will be put in the record without objection.

1872 [The referenced information follows:]

1873 \*\*\*\*\* COMMITTEE INSERT \*\*\*\*\*

1874 Chairman WAXMAN. I want to thank each of you for your  
1875 testimony today. There may be additional questions that  
1876 Members will want to have you respond to in writing for the  
1877 record, and we would very much welcome that.

1878 Dr. Teitelbaum, there is a Washington lobbyist by the  
1879 name of Michael Berman who wants me to ask you questions for  
1880 the record that you may or may not want to respond to.

1881 Dr. TEITELBAUM. I would be very happy to respond to Mr.  
1882 Berman's questions.

1883 Chairman WAXMAN. I told him he should talk to you  
1884 directly.

1885 Thank you all very much. We are going to break now.

1886 Mr. Issa, do you want the panel to come back to answer  
1887 your questions, because we have a vote and I was just  
1888 dismissing the first panel.

1889 We do have authorization to submit questions in writing  
1890 and have them respond for the record, if that would be  
1891 acceptable to you. If you want to ask questions for the  
1892 record we can do that; otherwise, we are going to have to  
1893 make them stay here while we vote.

1894 Mr. ISSA. I would be glad to come back and ask  
1895 questions. I apologize. I thought I was coming back just in  
1896 time to ask questions.

1897 Chairman WAXMAN. I thanked you all too prematurely. If  
1898 you don't mind, we have to respond to some votes. We should

1899 | be back. Let's reconvene at 12:15.

1900 | [Recess.]

1901 | Chairman WAXMAN. The Committee will come back to order.

1902 | We are pleased now for our second panel to have Mr.

1903 | Robert Anderson, Deputy Assistant Director for Minerals,

1904 | Realty, and Resource Protection in the Bureau of Land

1905 | Management, and The Honorable Benjamin H. Grumbles, who was

1906 | confirmed as the Assistant Administrator for Water for the

1907 | Environmental Protection Agency in November of 2004. Prior

1908 | to this appointment, Mr. Grumbles was a Deputy Assistant

1909 | Administrator for Water and Acting Associate Administrator

1910 | for Congressional Affairs and Intergovernmental Relations.

1911 | We are pleased to have both of you here today.

1912 | It is the practice of this Committee to ask all

1913 | witnesses to take an oath.

1914 | [Witnesses sworn.]

1915 | Chairman WAXMAN. The record will indicate that the

1916 | witnesses responded in the affirmative.

1917 | Mr. Grumbles, why don't we start with you. Your whole

1918 | statement will be part of the record. We would like to ask

1919 | you to try to keep it in five minutes.

1920 | STATEMENTS OF BENJAMIN H. GRUMBLES, ASSISTANT ADMINISTRATOR  
1921 | FOR WATER, U.S. ENVIRONMENTAL PROTECTION AGENCY; ROBERT  
1922 | ANDERSON, DEPUTY ASSISTANT DIRECTOR FOR MINERALS, REALTY AND  
1923 | RESOURCE PROTECTION, BUREAU OF LAND MANAGEMENT, U.S.  
1924 | DEPARTMENT OF THE INTERIOR

1925 | STATEMENT OF BENJAMIN H. GRUMBLES

1926 |           Mr. GRUMBLES. Thank you very much, Mr. Chairman. Thank  
1927 | you Congressman Shays and other members of the Committee.

1928 |           I am Benjamin Grumbles, Assistant Administrator for  
1929 | Water at EPA. It is a pleasure to be here before the  
1930 | Committee to testify on the public health and environmental  
1931 | protection activities of the Agency, particularly as they  
1932 | relate to oil and gas sector.

1933 |           The President charged the Administrator with  
1934 | accelerating the pace of environmental protection while  
1935 | maintaining the Country's economic competitiveness and, Mr.  
1936 | Chairman, a key part of that is to foster innovative  
1937 | technologies and to improve the coordination of permitting to  
1938 | advance and promote the clean development of energy  
1939 | resources.

1940 |           When it comes to ensuring environmental protection and  
1941 | the protection of public health, there are a variety of tools

1942 | and statutory authorities, as you are very familiar with.  
1943 | Many of those that the Agency uses relate to the review of  
1944 | possible projects and project activities such as through our  
1945 | NEPA authorities.

1946 |         Mr. Chairman, we are experiencing a marked increase in  
1947 | the review of proposed oil and gas projects, in part because  
1948 | of America's push for energy security. The Agency is fully  
1949 | committed to carrying out those authorities, reviewing  
1950 | potential projects for the many different types of  
1951 | environmental impacts and associated transportation-related  
1952 | infrastructure impacts of potential projects.

1953 |         We use every tool available to do our job. I am going  
1954 | to focus in particular on some of the tools and authorities  
1955 | we have under the Clean Water Act and the Safe Drinking Water  
1956 | Act, which has been the key part of this discussion.

1957 |         Mr. Chairman, I listened to the testimony of the first  
1958 | panel. I would say there are a couple of lessons. One is  
1959 | compassion towards all who have public health problems.  
1960 | Another is the importance of pollution prevention and using  
1961 | the tools that we have and working with Congress to implement  
1962 | those statutory programs, and also work with Congress to  
1963 | revise or establish new provisions or programs or approaches.

1964 |         When it comes to the Clean Water Act, we are in the  
1965 | midst, Mr. Chairman, of conducting a national detailed study  
1966 | of the coal-bed methane industry. In December of 2006 we

1967 released a plan for effluent guidelines under the Clean Water  
1968 Act. Environmental Protection Agency experts have just  
1969 completed a national tour of seven States, looking  
1970 specifically at the coal-bed methane industry to help inform  
1971 us, to then carry out an information collection request. And  
1972 so in the next couple of years we will be in a position to  
1973 determine whether to issue a new subcategory of effluent  
1974 guidelines specifically for the coal-bed methane industry.

1975 Under the Clean Water Act, as you know, and the Energy  
1976 Policy Act of 2005 there was a provision included that  
1977 clarified and specified that stormwater runoff from  
1978 field-related work, specifically construction-related aspects  
1979 of oil and gas facilities, was exempt from Clean Water Act  
1980 stormwater permitting. We are faithfully implementing the  
1981 provisions in that statute. We also issued a rule. We are  
1982 in the midst of litigation over that rule, but what the rule  
1983 did, Mr. Chairman, was state that, as it relates to sediment  
1984 from construction activities, that our interpretation of the  
1985 provision is that that still does not trigger a Clean Water  
1986 Act permitting requirement.

1987 However, we made clear that States should be carrying  
1988 out best management practices, and States are free to use  
1989 additional authorities should they decide to require  
1990 permitting under the Clean Water Act.

1991 The other aspect which has received considerable

1992 attention and understandably is the practice of hydraulic  
1993 fracturing and the Safe Drinking Water Act provisions and  
1994 programs that may relate to hydraulic fracturing. In 2004 we  
1995 issued a report, Mr. Chairman. I know you are aware of it.  
1996 We spent many years working on it. We did have a technical  
1997 expert peer review of that report, and the report concluded  
1998 essentially that hydraulic fracturing did not present a  
1999 significant risk to underground sources of drinking water.  
2000 However, we did note and were concerned about the potential  
2001 for problems with diesel fluids as the fluid for hydraulic  
2002 fracturing.

2003 In December of 2003 we entered into a memorandum of  
2004 agreement with the major providers for a voluntary commitment  
2005 to cease the use of diesel fluids, and we have been  
2006 monitoring that over the last several years and are pleased  
2007 that they seem to be living up to that commitment not to use  
2008 diesel fluids.

2009 As you know, the Congress enacted in the 2005 Energy  
2010 Policy Act a provision that prohibits EPA from regulating the  
2011 practice of hydraulic fracturing, except if it is diesel  
2012 fluids that are being used.

2013 Mr. Chairman, we are committed to using the tools we  
2014 have under the various authorities, including not just the  
2015 Clean Water Act and the Safe Drinking Water Act, but NEPA and  
2016 the various programs to meet the Administrator's challenge to

2017 | all of us in the Agency, and that is to promote the clean  
2018 | development of energy resources through innovative  
2019 | technologies and using our current authorities to protect  
2020 | public health.

2021 | I would be happy to answer questions at the appropriate  
2022 | time, Mr. Chairman.

2023 | [Prepared statement of Mr. Grumbles follows:]

2024 | \*\*\*\*\* INSERT \*\*\*\*\*

2025 | Chairman WAXMAN. Thank you very much, Mr. Grumbles.

2026 | Mr. Anderson?

2027 STATEMENT OF ROBERT ANDERSON

2028 Mr. ANDERSON. Mr. Chairman and members of the Committee,  
2029 thank you for the opportunity to appear here today to discuss  
2030 the applicability of Federal requirements that protect public  
2031 health and the environment in the context of oil and gas  
2032 development.

2033 My testimony will focus on the on-shore Federal mineral  
2034 estate entrusted to the BLM.

2035 Thank you for including my entire submitted statement in  
2036 the record.

2037 The BLM manages 258 million acres of public land, as  
2038 well as 700 million acres of mineral estate. Under the  
2039 Mineral Leasing Act, the BLM is responsible for managing oil  
2040 and gas leasing on BLM, National Forest, and other Federal  
2041 lands, as well as private lands where the mineral rights have  
2042 been retained by the Federal Government.

2043 Resource protection is considered throughout the land  
2044 use planning process and when applications for permit to  
2045 drill are processed.

2046 The BLM is required to review proposals to develop and  
2047 produce oil and gas wells on Federal land. We also ensure  
2048 adherence to numerous laws, including the National  
2049 Environmental Policy Act, the Federal Land Policy and

2050 Management Act, the Endangered Species Act, the Clean Water  
2051 Act, and other statutes and regulations. Compliance with  
2052 NEPA can range from developing an environmental impact  
2053 statement to application of a categorical exclusion.

2054 Categorical exclusions are categories of actions which  
2055 do not have a significant effect on human environment.

2056 In addition, the BLM has policy guidance to ensure  
2057 present of the environment and public health. Onshore Order  
2058 No. 1 addresses water quality by restricting operations in  
2059 riparian areas and lake shores unless otherwise approved.

2060 Regarding groundwater, Order No. 1 requires operators to  
2061 identify zones potentially containing usable water and their  
2062 plans for protecting such water resources. This plan  
2063 typically requires isolating usable water zones to avoid  
2064 potential cross-contamination with other geologic formations.

2065 The BLM also inspects oil and gas operations to ensure  
2066 compliance with statutes, regulations, and permits  
2067 stipulations that serve to protect the environment, human  
2068 health, and safety.

2069 In conclusion, Mr. Chairman, thank you for the  
2070 opportunity to discuss the application of Federal statutes,  
2071 regulations, and policy guidance that work to protect public  
2072 health and the environment during oil and gas development and  
2073 operations on Federal lands. The BLM is committed to  
2074 ensuring that energy production on public land is achieved in

2075 | an environmentally sound manner.

2076 |       Thank you. I will be happy to address questions.

2077 |       [Prepared statement of Mr. Anderson follows:]

2078 | \*\*\*\*\* INSERT \*\*\*\*\*

2079 Chairman WAXMAN. Thank you very much, Mr. Anderson.

2080 I will start off the questions.

2081 I want to start off with Mr. Grumbles. In EPA's June  
2082 2004 report on hydraulic fracturing, EPA expressed concern  
2083 about the use of diesel fuels in hydraulic fracturing fluids.  
2084 EPA determined that the use of diesel fuel could introduce  
2085 BTX compounds into underground sources of drinking water.  
2086 Those BTX chemicals, which include benzene and toluene, are  
2087 toxic chemicals that people should not be drinking.

2088 EPA has entered into a voluntary agreement with  
2089 Haliburton and two other companies to not use diesel fuel in  
2090 fracturing fluids, and you mentioned that in your testimony.

2091 Mr. GRUMBLES. Yes.

2092 Chairman WAXMAN. But this agreement is completely  
2093 voluntary, with no enforcement mechanism.

2094 Mr. Grumbles, during the last panel we learned that BTX  
2095 chemicals can be constituents of other petroleum products in  
2096 addition to diesel fuel. Does EPA maintain a list of  
2097 fracturing fluids that are injected into underground sources  
2098 of drinking water?

2099 Mr. GRUMBLES. Mr. Chairman, I am going to need to  
2100 provide two answers. One of them is I need to get back to  
2101 you on the specifics of what the national water program staff  
2102 have with respect to the different types of constituents or  
2103 hazardous constituents of hydraulic fluids.

2104 [The information follows:]

2105 \*\*\*\*\* COMMITTEE INSERT \*\*\*\*\*

2106 Mr. GRUMBLES. The other immediate answer is when we  
2107 entered into that memorandum of agreement we knew full well  
2108 that it was a voluntary agreement. We felt it was important  
2109 to be proactive, to also work and provide technical  
2110 assistance to Congress. Congressional committees were  
2111 looking at the subject. And we were also committed to, on an  
2112 annual basis, monitoring to see if the three signatories were  
2113 living up to that agreement.

2114 I know, Mr. Chairman, that if--

2115 Chairman WAXMAN. If they weren't living up to the  
2116 agreement, what would you do?

2117 Mr. GRUMBLES. What I would do is I would talk to two  
2118 offices in the Agency. One would be the General Counsel's  
2119 office to see what other mechanisms we might have under our  
2120 existing authorities and tools to continue to take steps to  
2121 ensure that diesel fluids were not used. The other office I  
2122 would work with would be the Research and Development Office  
2123 to see what research, what information we have, along with  
2124 the Environmental Information Office.

2125 Chairman WAXMAN. Let me ask and see if I can get a  
2126 response to my question, because you say you are going to get  
2127 back to me, but do you know whether you maintain a list of  
2128 fracturing fluids that are injected into underground water  
2129 sources?

2130 Mr. GRUMBLES. I know that we have information on what

2131 | constituents may be included. I don't know if it is a  
2132 | complete list or not, Mr. Chairman. During the hearing I  
2133 | have been asking staff, as well, to get a good sense.

2134 | Chairman WAXMAN. We will look forward to getting your  
2135 | response.

2136 | Mr. GRUMBLES. Yes, sir.

2137 | Chairman WAXMAN. But my understanding is that the Agency  
2138 | does not maintain such a list. Can you assure us that there  
2139 | are no other hydraulic fracturing fluids that are used that  
2140 | contain BTX chemicals?

2141 | Mr. GRUMBLES. I can assure you that, based on the  
2142 | information from this hearing, we are going to be looking to  
2143 | see. We are going to coordinate with the Groundwater  
2144 | Protection Council, with the Interstate Oil and Gas Compact  
2145 | Commission, and with State drinking water agencies to ask  
2146 | exactly that question: what other constituents are out there  
2147 | besides BTX that we view--

2148 | Chairman WAXMAN. You are going to ask the questions, and  
2149 | I think it is appropriate, although I wish you had been able  
2150 | to answer this question now, but how can EPA guarantee that  
2151 | no fluids containing the BTX compounds are injected into  
2152 | sources of drinking water? How can you assure us that you  
2153 | are going to be on top of that?

2154 | Mr. GRUMBLES. Well, I don't think we can absolutely  
2155 | guarantee it, but what it tells me is that we need to do

2156 additional information gathering, not just on the BTX but to  
2157 see what other constituents might be in the hydraulic fluids,  
2158 recognizing though--

2159 Chairman WAXMAN. I don't think you can give us that  
2160 assurance. That is what I think is the response to my  
2161 question. You may want to do more in this area. Today you  
2162 discovered that you want to learn more about this area.

2163 Mr. GRUMBLES. Right.

2164 Chairman WAXMAN. But I don't think you can give us any  
2165 assurances. Given this situation and EPA's concerns about  
2166 protecting drinking water, would the Administration support  
2167 removing the hydraulic fracturing exemption from the Safe  
2168 Drinking Water Act?

2169 Mr. GRUMBLES. I can't answer that question right there,  
2170 Mr. Chairman, because I would need to coordinate with others  
2171 in the Agency and in the Administration. I can tell you that  
2172 as the language was being developed, while the Agency did not  
2173 have an official position on that legislation in 2005, I can  
2174 tell you that we were providing technical input and we were  
2175 very concerned about not having a broader savings clause.

2176 Chairman WAXMAN. Let me ask, Mr. Anderson, the other  
2177 part of what we did in the Energy Policy Act, we took away  
2178 EPA's authority to regulate, but we also said that the  
2179 Secretary of Interior would enter into an agreement with the  
2180 National Academy of Sciences to conduct a comprehensive study

2181 | on the effects of coal-bed natural gas production on surface  
2182 | and groundwater resources in the western United States. The  
2183 | law requests recommendations from the National Academy on  
2184 | necessary changes to Federal law.

2185 |         This report was to have been completed by NAS in August  
2186 | of 2006. It is no November of 2007. No such study has been  
2187 | initiated.

2188 |         I wrote, Mr. Anderson, to the Department of Interior on  
2189 | September 5, 2007, to find out why the Department had not  
2190 | completed the study as required by Congress. The response I  
2191 | received from the Department of Interior revealed that the  
2192 | Administration had not complied with the law and is not  
2193 | intending to. Instead of conducting a full NAS study with  
2194 | recommendations as required by law, the Administration is  
2195 | planning to convene a single policy public meeting with the  
2196 | National Academy, which wouldn't even produce a written  
2197 | document.

2198 |         Mr. Anderson, the National Academy doesn't only think  
2199 | this falls short of what the law requires; they tell us that  
2200 | it will be inappropriate to even refer to this effort as a  
2201 | study.

2202 |         Can you explain how the Administration's plan for a  
2203 | single meeting will comply with the statutory language of the  
2204 | Energy Policy Act?

2205 |         Mr. ANDERSON. Yes, Mr. Chairman. Well, let me first say

2206 | coming up this morning I thought that there may be great  
2207 | expectations, and I know that we had great expectations in  
2208 | reading and following up with this section of the act, and I  
2209 | know certainly you do, too.

2210 |         Let me just say that there are 11 sections in EPAC, the  
2211 | Energy Policy Act.

2212 |         Chairman WAXMAN. Before you get into other sections, how  
2213 | can the Administration plan a single meeting and then say  
2214 | that fits not the expectations, as great as they may be, that  
2215 | some might have, the expectations of the statute which called  
2216 | for you all to do the study, to get the NAS to do a study  
2217 | with recommendations? They don't think that this is a real  
2218 | study, and I don't think that it is a real study.

2219 |         Mr. ANDERSON. The single meeting that you are talking  
2220 | about to be held this spring is to have the EPA, the National  
2221 | Academy of Science, and BLM get together, along with other  
2222 | experts, authors of previous papers on coal-bed methane water  
2223 | production and impacts. From that meeting, we hope to  
2224 | determine as a group where we need to go from there.

2225 |         What I wanted to say just a few minutes ago, there are  
2226 | 11 other sections in EPAC that direct us to do something,  
2227 | reports to Congress or studies. One is 833, and that is the  
2228 | renewable resources study by the National Renewable Energy  
2229 | Lab. And none of these sections, by the way, were funded by  
2230 | Congress. We funded that one to the tune of \$50,000.

2231 | However, in looking at the one in 1811, you know, I have been  
2232 | around for a long time, and the last study that the Academy  
2233 | did was 1999 on--

2234 |       Chairman WAXMAN. I have limited time, which I have  
2235 | already exceeded. I don't understand your answer. You do  
2236 | not have enough funds for it? Have you asked for funds from  
2237 | Congress to do the study? Congress passed a law asking you  
2238 | to do a study. If you don't have funds, why don't you tell  
2239 | us?

2240 |       Mr. ANDERSON. Well, when the--

2241 |       Chairman WAXMAN. I mean, to convene a meeting and say  
2242 | where do we go from here is not complying with the law.

2243 |       Given everything we heard this morning, why wouldn't the  
2244 | BLM want the benefit of an analysis of the National Academy  
2245 | of Sciences? It seems to me--

2246 |       Mr. ANDERSON. Absolutely, and we plan to go there, Mr.  
2247 | Chairman, but first I think it is fiscally responsible on our  
2248 | part to determine what studies have been done so that the  
2249 | National Academy can accurately portray what kind of cost it  
2250 | is going to be for us to complete further studies if further  
2251 | studies need to be done.

2252 |       Chairman WAXMAN. If you asked them to do the study and  
2253 | you entered into an agreement, as Congress directed you to  
2254 | do, wouldn't they be able to figure that out?

2255 |       Mr. ANDERSON. Yes. They will be. But first I think we

2256 | need to determine, along with the Academy and EPA, what  
2257 | studies have been done and do they answer the questions that  
2258 | the Congress wanted us to answer. And if not, then we know  
2259 | that the magnitude of the study will be much more than we  
2260 | think it is right now.

2261 | Chairman WAXMAN. Well, I do think that the study being  
2262 | delayed is resulting in ignorance, which is doing a great  
2263 | deal of harm. I wrote to Secretary Kempthorne this morning  
2264 | asking him to abandon this ridiculous approach of calling a  
2265 | meeting to then decide whether you are going to do a study  
2266 | that Congress didn't ask you if you wanted to do but told you  
2267 | to do. When we tell you to do something, it is not just a  
2268 | request that at your leisure or if you approve of the  
2269 | request, it is a law.

2270 | Mr. ANDERSON. I totally agree.

2271 | Chairman WAXMAN. Mr. Issa?

2272 | Mr. ISSA. Thank you, Mr. Chairman.

2273 | Mr. Grumbles, I will give Mr. Anderson a break here for  
2274 | a minute. Wes Wilson, he is characterized by the first panel  
2275 | and by the Committee as a whistleblower. Does he fit your  
2276 | definition of a whistleblower?

2277 | Mr. GRUMBLES. Mr. Chairman, I guess the definition--I  
2278 | don't know if there is a textbook definition.

2279 | Mr. ISSA. Let's assume for a moment that a whistleblower  
2280 | is somebody who has previously undisclosed information and

2281 | then brings it to our attention around the chain of command,  
2282 | around those who would want to keep it as a secret. That is  
2283 | at least this Member's understanding of what a whistleblower  
2284 | is.

2285 |         Isn't it true that Wes Wilson essentially wasn't part of  
2286 | it, looked at the information, and disagreed with it, and  
2287 | that is how we ended up with a ''whistleblower'' in this  
2288 | case?

2289 |         Mr. GRUMBLES. That is correct, Congressman. He was not  
2290 | involved. He was not viewed as a technical expert and was  
2291 | not involved in the issue in the underground injection  
2292 | control program, but was more involved in the NEPA process.  
2293 | The headquarters, as we were working on the report, the first  
2294 | time we learned of his concerns was when he released his  
2295 | report.

2296 |         We respect the right of employees to express their  
2297 | personal views and opinions, but I think it would be  
2298 | difficult to view him as a whistleblower, and I think the  
2299 | Inspector General's office of EPA, when asked to look into  
2300 | this matter, had a similar conclusion.

2301 |         Mr. ISSA. I appreciate that. I think when Jim Hanson  
2302 | came here and said that global warming was settled science, I  
2303 | wanted to respect the fact that he thought global warming was  
2304 | truly happening, and happening at the speeds he calculated.  
2305 | I also hope he will respect those who think it is happening

2306 faster or slower. And I certainly would hope that EPA has a  
2307 similar attitude that nothing is ever settled science,  
2308 because settled science had the earth flat, the human body  
2309 not to ever be cut into for an autopsy because you couldn't  
2310 do it, and people were excommunicated for doing things that  
2311 today save lives every day. So hopefully there is no such  
2312 thing as settled science in our Government.

2313 Let me ask you a question though. The question of clean  
2314 water relative to areas which have entrapped methane,  
2315 entrapped oil, including all of its various byproducts,  
2316 benzene, all the things that were mentioned by the earlier  
2317 panel as poisons and toxins. They are all in there. Isn't  
2318 it true that, whether you inject in the fracturing process or  
2319 not, that seepage and water activities and so on, this goes  
2320 on naturally anyway.

2321 I am from California, Santa Barbara. The Indians used  
2322 to harvest--and this is a well-known story in Los Angeles,  
2323 where the chairman is from, and up the coast--they used to  
2324 harvest the tar-like oil that came ashore and they burned it.  
2325 So to a certain extent, not belittling the effects of putting  
2326 in compressed water to hydraulically fracture, isn't it, in  
2327 fact, a naturally occurring event?

2328 Mr. GRUMBLES. I believe it is. There are naturally  
2329 occurring substances. I would also say, Congressman, that  
2330 some of the naturally occurring substances get a considerable

2331 amount of attention from us and with our regulatory tools.

2332 Arsenic is a naturally occurring substance.

2333 Mr. ISSA. I am glad you brought that up.

2334 Mr. GRUMBLES. And we are committed to implementing the  
2335 ten parts per billion standard in the arsenic drinking water  
2336 rule and working with States and communities on compliance  
2337 assistance and using cost-effective technologies to meet that  
2338 standard.

2339 Mr. ISSA. And let me follow up on that. Because we  
2340 mandated that during my relatively short tenure--the Chairman  
2341 has been here for the Clean Water Act and beyond for many  
2342 years.

2343 Chairman WAXMAN. Yes, sir.

2344 Mr. ISSA. But I watched the arsenic debate, the high  
2345 cost, the predictions that, in fact, it was going to take  
2346 years and cost a very large fortune, that it was going to  
2347 shut down small municipalities or at least cost them huge  
2348 amounts of money. As you compare arsenic, a poison that is  
2349 in the water, to the possibility that in some cases some  
2350 amount will be in a local area from this type of mining,  
2351 which has gone on for many years, how do you weigh those if  
2352 you only had one basket of dollars and only enough to do,  
2353 let's say, half of one of them? Where would you put the  
2354 money and why?

2355 Mr. GRUMBLES. Well, the first thing we need to do as an

2356 | Agency that reports to Congress and implements the laws that  
2357 | Congress writes is to look to see what are our authorities  
2358 | and what flexibilities we have. A preference is always to  
2359 | pursue a risk-based approach, and therefore that requires  
2360 | sound science and looking at what are the greatest risks and  
2361 | helping State drinking water administrators and local health  
2362 | officials make the best decisions on how to reduce the most  
2363 | significant risks.

2364 |         Mr. ISSA. But let me characterize it, because the time  
2365 | is short. Realistically, if you only had a limited amount of  
2366 | money, dramatically reducing, as Congress told you, the  
2367 | amount of arsenic to what would be considered to be a safe  
2368 | level from what Congress felt was an unsafe level is clearly  
2369 | a mandate on which the science has been settled under  
2370 | Christine Todd Whitman's time that we have said, for better  
2371 | or worse, that we want you to do this regardless of any  
2372 | other. We have settled the science by saying you shall do  
2373 | that. Is that correct? And thus that is where you know your  
2374 | dollars will lead to something which we have mandated, rather  
2375 | than a study of something which somebody says on a panel  
2376 | affected their life and they didn't report it for nine years?

2377 |         Mr. GRUMBLES. Congressman, we have a mandate under the  
2378 | Safe Drinking Water Act to use the best available science.  
2379 | With arsenic, we were convinced that the best available  
2380 | science and the risks led us to affirm the ten part per

2381 billion standard, and so now we have focused on  
2382 implementation tools and compliance assistance.

2383         However, Congressman, the science always evolves, and in  
2384 the spirit of always looking for what is the best available  
2385 science, we have looked to the Science Advisory Board and  
2386 others to continue to look at the science of arsenic and the  
2387 risks associated with it. But the agency is committed to  
2388 going with the best science, the ten part per billion,  
2389 particularly given the effective dates under the regulation.

2390         Mr. ISSA. I appreciate that. A final question for Mr.  
2391 Anderson.

2392         In your written testimony you said there were 48,000  
2393 off-shore oil and gas leases, of which 23,000 are producing.  
2394 I just want to clarify. You also said that there were nearly  
2395 \$12 billion in royalties between 2001 and 2006, and that is  
2396 over and above the taxes paid. Are you also aware of the  
2397 status of the \$9 billion plus that was not paid based on the  
2398 Clinton Administration era failure and the Bush  
2399 Administration's continued failure to make sure the contracts  
2400 were consistent with the law? Are you familiar with that?  
2401 And how much has been agreed to by the oil companies?

2402         Mr. ANDERSON. You mentioned off-shore. It is actually  
2403 on-shore wells.

2404         Mr. ISSA. I am terribly sorry. On-shore. I apologize.

2405         Mr. ANDERSON. I was thinking ahead to the second part.

2406 Mr. ISSA. On-shore, but are you familiar also with the  
2407 off-shore?

2408 Mr. ANDERSON. Yes, I am familiar, mostly newspaper  
2409 articles and the like. That is a Minerals Management Service  
2410 issue.

2411 Mr. ISSA. Well, I am thrilled with the \$12 billion you  
2412 got, but as long as I have got anyone here on a Committee  
2413 that did considerable oversight in the last Congress on this,  
2414 I wondered whether either you have knowledge or could have  
2415 your organization respond for the record on what has been  
2416 done, item-by-item, company-by-company, because that was a  
2417 major part of this Committee's work in the last Congress.

2418 I never forget about accounts receivable, no matter how  
2419 small, even if it is just a few billion.

2420 Mr. ANDERSON. Absolutely. I can tell you that the  
2421 Secretary has appointed a special subcommittee for the  
2422 Faka-chartered royalty policy committee that is held a couple  
2423 of times a year through the Minerals Management Service  
2424 hosting of it, and that subcommittee is doing some work on  
2425 that issue.

2426 I also know that the GAO is also investigating  
2427 production accountability and verification as we speak.

2428 Mr. ISSA. Thank you.

2429 Thank you for your indulgence, Mr. Chairman.

2430 Chairman WAXMAN. You are welcome, Mr. Issa.

2431 Mr. Shays?

2432 Mr. SHAYS. Thank you, Mr. Chairman. Again, thank you  
2433 for having this hearing.

2434 I believe that there are a few issues that obviously are  
2435 intertwined, and I think others, do, as well. One is energy  
2436 security, or what I would call energy independence, which I  
2437 don't think is pie in the sky over the long term, intertwined  
2438 with the environmental concerned and health care concerns.

2439 I believe that one of the ways that we are going to deal  
2440 with these concerns is conservation, I mean, just getting  
2441 better use, conservation and greater efficiencies.

2442 We obviously have coal and we are going to use it. We  
2443 have oil and we are going to use it. We have gas, which is a  
2444 cleaner, more efficient fossil fuel, but it is still a fossil  
2445 fuel dealing with global warming. We are going to get back  
2446 into nuclear power. And we are obviously going to deal with  
2447 the whole issue of renewables.

2448 What interests me, I want to not overstate where the  
2449 problems are, or understate them, so when we talk about our  
2450 effort to get gas in Colorado and elsewhere, methane, and so  
2451 on, and fracturing, I want to be clear. When we are going  
2452 after gas, does that impact the water table and the quality  
2453 of the water?

2454 Mr. GRUMBLES. I would be happy to respond first.

2455 Mr. SHAYS. I want to ask both of you to. We will start

2456 with you.

2457 Mr. GRUMBLES. It does have the potential to impact the  
2458 water table, and, as we have learned over the last decade, it  
2459 has the potential to impact surface water. One of our  
2460 priority actions in the national water program right now, in  
2461 promoting the clean development of energy resources,  
2462 including natural gas and, in particular, coal-bed methane,  
2463 we will use our tools and authorities under the Clean Water  
2464 Act--

2465 Mr. SHAYS. Okay. You answered my question. So it does.

2466 Mr. Anderson?

2467 Mr. ANDERSON. Yes. If I could, before the hearing when  
2468 I found out that I was coming today I had somebody ask one of  
2469 our field officers, in fact in Buffalo, Wyoming--

2470 Mr. SHAYS. Give me the answer and then give me the  
2471 details. I mean, the answer is yes, it does, or no, it  
2472 doesn't.

2473 Mr. ANDERSON. It has potential, but I am not the expert  
2474 in that area.

2475 Mr. SHAYS. Okay. So the answer is it has the potential,  
2476 and now you want to tell me what?

2477 Mr. ANDERSON. Well, I want to tell you that the BLM, in  
2478 addition to what is required under the Clean Water Act, we  
2479 have our own requirements when we issue approval for a  
2480 drilling permit. I just wanted perhaps to read a couple of

2481 stipulations to give you an idea of what kind of protection  
2482 we do.

2483 Mr. SHAYS. No. I will just accept that you have  
2484 protections, okay?

2485 Mr. ANDERSON. Okay.

2486 Mr. SHAYS. So the next question I wanted to know, when  
2487 we go after methane coal--correct?

2488 Mr. ANDERSON. Yes.

2489 Mr. GRUMBLES. Yes.

2490 Mr. SHAYS. And we use this for also oil and gas, which  
2491 tends to be the greater concern? Is the gas further down,  
2492 and therefore not as big a concern? In other words, can we  
2493 get under the water table and not impact? So tell me which  
2494 of the fossil fuels represents the bigger concern, or maybe  
2495 they don't. Maybe they are all equal. We will start with  
2496 you.

2497 Mr. ANDERSON. Well, sometimes you get oil and gas in the  
2498 same formation, and sometimes you just get gas. Sometimes  
2499 you get a little bit of condensate, which is the light end of  
2500 the oil.

2501 Mr. SHAYS. So is the depth, the further down we do the  
2502 less likely the water table becomes an issue, or--

2503 Mr. ANDERSON. Yes. Absolutely.

2504 Mr. SHAYS. Okay. And which of these do we tend to find  
2505 is further down? Oil? Gas?

2506 Mr. ANDERSON. Both. It just depends where it is.

2507 Mr. SHAYS. Do you agree? Does EPA agree?

2508 Mr. GRUMBLES. I would defer. I don't disagree. I would  
2509 just defer to expertise on that. We don't typically--in  
2510 fact, we are prohibited under the Safe Drinking Water Act  
2511 from regulating the practice of mining. Where we get  
2512 involved is on the injection of fluids through the UIC  
2513 program, and also our NEPA authorities looking at potential  
2514 impacts, depletion of aquifers, the comments we make to other  
2515 agencies when we are a commenting agency.

2516 And the Clean Water Act, which is another critical part  
2517 of this whole discussion, ensuring that when mining practices  
2518 occur, such as coal-bed methane mining, that State water  
2519 quality standards are complied with, and that the best  
2520 technologies are used.

2521 Mr. SHAYS. See, the problem I have, though, some States  
2522 can be concerned, but if the spill-over is into another  
2523 State, I mean, this Administration sincerely has taken the  
2524 position that the market ultimately will deal with these  
2525 issues, but my view is it only does it if the market  
2526 represents a market that considers all cost. But if there is  
2527 a spill-over cost, then the market fails to operate. We knew  
2528 that when Mr. Waxman and others were dealing with this issue  
2529 before I was even here.

2530 When I went to Gary, Indiana, and I saw the whole

2531 community looked red, or I went through Pittsburgh in the  
2532 1950s and they spilled over to other communities, the fact is  
2533 the market wasn't working because they didn't have to deal  
2534 with all the costs.

2535 Mr. GRUMBLES. Congressman, I can tell you the U.S. EPA  
2536 very much agrees with you that there are needs, there are  
2537 important situations where interstate, in particular, where  
2538 we should be involved, and on this precise issue we were  
2539 asked and we are participating heavily in facilitating  
2540 discussions between an upstream State and a downstream State  
2541 over coal-bed methane and the management of produced waters  
2542 which may be very salty and have an adverse impact in some  
2543 situations on the plants and the wildlife.

2544 Mr. SHAYS. Right. Thank you.

2545 Thank you, sir.

2546 Mr. ISSA. [Presiding] The gentleman from Utah, Mr.  
2547 Cannon, for five minutes.

2548 Mr. CANNON. Thank you, Mr. Issa. I approve of your  
2549 positioning on the panel today. Short-term, unfortunately,  
2550 but maybe not different long-term.

2551 I want to thank the chairman in his absence for holding  
2552 the hearing. I think it has been informative. Certainly we  
2553 have had some victims here today that have had some very  
2554 serious problems, and we are concerned about those things,  
2555 but never in the history of the world have so many people

2556 | lived so well and avoided the brutal effects of nature as we  
2557 | have in America today. The really nice thing about where we  
2558 | are and why this hearing is so important is that if we do it  
2559 | right here, everybody else gets the benefit. If we solve a  
2560 | disease in America, we can solve that disease for people  
2561 | worldwide at a very, very low cost. So nothing pollutes like  
2562 | poverty, and what we are doing here I think is remarkably  
2563 | important.

2564 |         In fact, I would like to associate myself with Mr.  
2565 | Shays' comments. We talked about balancing and being  
2566 | self-sufficient in energy, and his views about new technology  
2567 | and efficiency and alternative resources, these are all very  
2568 | important things that we have to decide as a group. We can't  
2569 | do that on the basis of victims. That is very important that  
2570 | we identify the problem based on victims. How we solve those  
2571 | problems I think are exceedingly important.

2572 |         In that context, I have a few questions I would like to  
2573 | ask Mr. Grumbles.

2574 |         You mentioned that environmental groups have challenged  
2575 | EPA's rule regarding stormwater. Is there any group who has  
2576 | testified at the hearing today that is involved in  
2577 | litigation?

2578 |         Mr. GRUMBLES. I believe so.

2579 |         Mr. CANNON. Do you know which groups?

2580 |         Mr. GRUMBLES. I believe NRDC has challenged the July

2581 | 2006 rule that we issued interpreting the Energy Policy Act  
2582 | of 2005.

2583 |         Mr. CANNON. So is this hearing a way to advance their  
2584 | discovery process?

2585 |         Mr. GRUMBLES. It certainly advances the issue, and the  
2586 | issue is whether some are supportive or opposed to the  
2587 | language in the statute and how EPA has interpreted it.

2588 |         Mr. CANNON. Thank you. We actually have used this. In  
2589 | fact, we had a hearing of this Committee that was directed  
2590 | they plaintiffs' attorneys in another matter, and I suspect  
2591 | that that actually distorts our processes here.

2592 |         Your testimony on page eight regarding stormwater  
2593 | permits, you refer to EPA's concern for sediment and erosion  
2594 | control, and that you encourage oil and gas operators, in the  
2595 | absence of requiring permits, to use best management  
2596 | practices to minimize these impacts; is that accurate?

2597 |         Mr. GRUMBLES. That is accurate.

2598 |         Mr. CANNON. Could you describe why for us?

2599 |         Mr. GRUMBLES. Well, we think that it is very important  
2600 | to recognize that there can be adverse environmental impacts.  
2601 | We know that there can be adverse environmental impacts when  
2602 | sediment and erosion are not controlled at construction  
2603 | sites, and so we have been working with our State partners  
2604 | and with oil and gas industry to advance their RAPPS, their  
2605 | reasonable and prudent measures. And after Congress acted

2606 | and took away the regulatory tool under the Clean Water Act  
2607 | for construction runoff at oil and gas facilities, we felt it  
2608 | important to faithfully implement that provision, but also to  
2609 | encourage the continued development of best management  
2610 | practices, even if it is not under a Federal Clean Water Act  
2611 | permitting program.

2612 |         And we also made clear, Congressman--I hope we made  
2613 | clear--that if States choose to use authorities--for  
2614 | instance, Colorado, which was very interested in regulating  
2615 | and requiring permits for construction site runoff--that our  
2616 | July 2006 rule would not preempt them from doing that; that  
2617 | they could do that.

2618 |         But the key is best management practices and taking  
2619 | steps to reduce the sediment and erosion.

2620 |         Mr. CANNON. And underlying all of this I think is the  
2621 | recognition of a distinction between what happens on a large  
2622 | construction site like a sub-development or subdivision being  
2623 | put in, and what happens on a relatively small site when a  
2624 | company drills.

2625 |         Mr. GRUMBLES. Yes, sir.

2626 |         Mr. CANNON. That yes, sir means there is a huge  
2627 | difference, a vast, huge difference?

2628 |         Mr. GRUMBLES. It is an excellent question to point out  
2629 | that a one-size-fits-all approach is not the most sustainable  
2630 | and effective way to get environmental results.

2631 Mr. CANNON. Thank you.

2632 Mr. Anderson, has it been your experience that groups  
2633 who oppose the expansion of oil and gas recovery have used  
2634 NEPA review processes to hold up or stall BLM  
2635 decision-making?

2636 Mr. ANDERSON. Repeat that again, please?

2637 Mr. CANNON. Sometimes I speak too fast. I apologize.

2638 Have people who oppose oil and gas recovery used NEPA to  
2639 stall the BLM processes, slow it down?

2640 Mr. ANDERSON. We have quarterly sales where we issue  
2641 leases, and quite frequently, especially in Utah, we have  
2642 protests.

2643 Mr. CANNON. I feel that pain in Utah particularly.

2644 Mr. ANDERSON. We do have protests appealing our  
2645 decisions to lease, and even protests about issuing our  
2646 applications to drill once they come in. So yes, we do. We  
2647 do have quite a few protests.

2648 Mr. CANNON. Time, of course, is money. These delay  
2649 tactics, are they significant or influential in decisions by  
2650 drillers as they decide where to invest their drilling  
2651 capital?

2652 Mr. ANDERSON. I would say yes. They are significant.

2653 Mr. CANNON. I'm sorry. That was like an obvious  
2654 question, but the point I think ought to be well taken that a  
2655 lot of what is going on here is about dissuading people from

2656 | developing oil and gas. Of course, that would mean that we  
2657 | like people living in poverty and without the basic energy  
2658 | needs that make our lives so good, but that is my comment and  
2659 | not yours. Thank you very much for that.

2660 |         How long does it take for your Agency to perform a  
2661 | traditional NEPA analysis before moving forward on an  
2662 | application for permit to drill, an APD?

2663 |         Mr. ANDERSON. It is varied. The Energy Policy Act  
2664 | thought we could do the job in 30 days. That is assuming  
2665 | that NEPA has already been taken care of. However, that is  
2666 | not the case. We do NEPA on our applications to drill. I  
2667 | think our average is up somewhere around 150 days.

2668 |         Mr. CANNON. Has the categorical exemption under the 2005  
2669 | EPAC regarding redundant NEPA analysis saved your  
2670 | organization time and resources?

2671 |         Mr. ANDERSON. Yes.

2672 |         Mr. CANNON. Has it meant more drilling?

2673 |         Mr. ANDERSON. Yes.

2674 |         Mr. CANNON. Good. I don't want my predispositions to be  
2675 | disguised here.

2676 |         Just one final question. What kinds of activities are  
2677 | BLM employees able to undertake now, since being freed up  
2678 | from conducting these redundant NEPA analyses?

2679 |         Mr. ANDERSON. We are able to do more inspections out on  
2680 | the land. We have responsibility to inspect our applications

2681 | or our drilling permits that have been approved, so we have  
2682 | natural resource specialists out on the ground more  
2683 | frequently. We can address more of the demand placed on us  
2684 | for more APDs, or applications for permit to drill.

2685 |         Mr. CANNON. So you get to do your job better? People  
2686 | often call these America's lands. I actually think of them  
2687 | as Utah's or Colorado's lands, and I think that is the  
2688 | obligation that the law puts on us.

2689 |         Mr. SHAYS. Objection.

2690 |         Mr. CANNON. Good friends can disagree. But we do agree  
2691 | on the fact that currently they are public and that we have  
2692 | responsibility for their good stewardship and management.

2693 |         My mother-in-law lives on the edge of the fires in  
2694 | southern California. My wife went down to help out after the  
2695 | fires. These are terrible problems that we need to minimize  
2696 | through appropriate management of our public lands. I  
2697 | appreciate the fact that you are able to do that better.

2698 |         I think my time expired some time ago, Mr. Chairman.  
2699 | Thank you for your indulgence. I yield back.

2700 |         Mr. ISSA. Thank you. I thought it was only fair that I  
2701 | give you the benefit of the doubt.

2702 |         The Chair seeing no more questions, I would ask  
2703 | unanimous consent that those who are not here be allowed to  
2704 | submit questions for the record.

2705 |         Would you both agree to answer those questions for the

2706 | record? They would come within five legislative days.

2707 | Mr. ANDERSON. Yes.

2708 | Mr. GRUMBLES. Yes.

2709 | Mr. ISSA. Okay. Seeing no one else, we stand adjourned.

2710 | I thank you.

2711 | [Whereupon, at 1:00 p.m., the Committee was adjourned.]

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