



Save the Salt Coalition

www.SaveTheSalt.org

November 7, 2011

Via e-mail: ut_slfo_comments@blm.gov

Ms. Jill Silvey
Field Office Manager
Bureau of Land Management
Salt Lake Field Office
Attn: Cindy Ledbetter
2370 South 2300 West
Salt Lake City, UT 84119

Re: *BLM Environmental Assessment of Intrepid Potash Mine and Reclamation Plan*

Dear Ms. Silvey:

The following comments are submitted on behalf of the "Save the Salt Coalition" regarding the Bureau of Land Management's (BLM) Environmental Assessment [UT-020-2006-002, Sept. 2011] of the Intrepid Potash Mine and Reclamation Plan (Modification). The Coalition is a collective group of organizations and businesses representing racing interests with the shared mission of preserving and protecting the Bonneville Salt Flats (BSF).

The comments will focus on three issues: urging the BLM to adopt "Alternative B," documenting the salt depth of the BSF, and commenting on technical issues raised within the Environmental Assessment (EA).

BLM Should Adopt "Alternative B"

The Coalition was first formed in the 1990s to work with mine operator Reilly Industries, Inc. to establish a prototype salt replenishment program. The program lasted from 1997-2002 and was deemed a qualified success. The Coalition was re-launched in 2010 to work with the current mine owner, Intrepid Potash-Wendover, LLC (Intrepid) and the BLM to implement a permanent program.

Intrepid has developed a comprehensive plan ("Alternative A") for replenishing salt on the BSF. It includes moving a primary evaporation pond, creating a new ditch network, removing excess sodium chloride from the North and South Ripening ponds to be pumped onto the BSF, and pursuing reclamation procedures. Intrepid has proposed making this plan mandatory rather than voluntary, an approach called "Alternative B."

Under Alternative B, Intrepid would be required to return at least the same amount of salt to the BSF as was removed from the federal and state leases north of I-80 during mining, based on a three-year rolling sum. Intrepid would install an ultrasonic flow meter with a data collection device at the number 2 booster pump collection point (where brine exits the federal leases north of I-80). The meter would record volume and chemistry in order to calculate the total tonnage of all salts removed. A similar meter would measure volume and the chemical composition for brine returned to the salt flats. The data would be reported to the BLM on an annual basis and would be used to verify that the three-year average is at least a 1.0 or greater return of salt to the BSF.

Conclusion:

- The Coalition supports Alternative B and urges the BLM to adopt this approach. Alternative B establishes a mandatory replenishment program, subject to measurement and with a one-for-one or greater replacement of salt that has been removed for potash mining.
- The Coalition’s decision not to seek an Environmental Impact Statement (EIS) for the Intrepid Potash Mine and Reclamation Plan (Modification) is conditioned on the BLM’s adoption of Alternative B. The BLM’s draft Finding of No Significant Impact states that Alternative B “*would not result in significant impacts on the human environment. An environmental impact statement (EIS) is not required.*” Although unstated, the draft Finding implies that any other approach would require an EIS.
- While not seeking an EIS, the Coalition’s decision is not a ratification of previous environmental assessments, including the Proposed Pony Express Resource Management Plan (RMP/FEIS) (September 1988) and the 1975 EA (Whitney 1975). The Coalition contends that there has been significant impact to the BSF since the lands were first assigned to the BLM in 1946.

Salt Depth at Bonneville Salt Flats

The following discussion considers the depth of the salt at the BSF, which forms the basis for a replenishment program. Salt depth is pivotal when analyzing whether the replenishment program is sufficient and, historically, what has transpired over decades that would necessitate a replenishment program.

The BLM has helped fund scientific studies during the 1970s, 1990s and in the last decade that seek to fully grasp the salt basin ecosystem. They provide details about geology and water hydrology, and describe multiple aquifers (shallow brine, deep brine, alluvial fan). They fail, however, to state the obvious. The racing area was at least five feet deep when the BLM assumed management responsibilities of the BSF in 1949 with the establishment of the first “Speed Week.” That same area is now only several inches thick.

The depth is documented along with memos and newspaper clips from 1966-1997 (Attachment A) expressing concern about damage to the BSF from the mine operation’s water pumping activities. Highlights include:

- A Sept. 1966 article in Hot Rod Magazine (“Salt in a Pinch”) which poses the question “Is Bonneville being destroyed?”
- A November 8, 1966 memo from Utah Governor Calvin Rampton requesting an investigation of the “deterioration of the salt pan beneath the speedways of the Bonneville Racing Association...”
- A Nov. 29, 1966 memo by Bruce Kaliser (Geologist at the University of Utah) describing the BSF region. It references, but does not attach, maps of the Bonneville Race Tracks with salt thicknesses plotted, prepared by the State Dept. of Highways District No. 2 in 1960.
- A Jan. 31, 1967 proposal for investigating the BSF hydrology by J.A. Hoagland. Specifically note Fig. 1, which anticipates a salt depth of 5 feet above the gypsum layer in the proposed observation wells.
- A Dec. 22, 1968 Salt Lake Tribune article which quotes State Highway Department regional engineer Harry Wilbert saying, “that as water is drained from the adjacent area, the salt is pulled with it...and that this leaching is responsible for deterioration of the track.” Mr. Wilbert reported that high surface water is necessary to percolate salt upward for reconditioning the track, making it ideal for speed racing.
- The 4-page fact sheet from the “Investigation of Salt Loss from the Bonneville Salt Flats, Northwestern Utah” [James L. Mason and Kenneth L. Kipp, Jr., 1997, <http://pubs.usgs.gov/fs/1997/fs135-97/PDF/FS97-135.pdf>]. The second paragraph (p.1) states, *“A decrease in thickness and extent of the salt crust on the Bonneville Salt Flats has been documented during 1960-88 (S. Brooks, Bureau of Land Management, written commun., 1989). Maximum salt-crust thickness was 7 feet in 1960 and 5.5 feet in 1988. No definitive data are available to identify and quantify the processes that cause salt loss. More than 55 million tons of salt are estimated to have been lost from the salt crust during the 28-year period.”* In the section entitled “Loss of Salt from the Crust by Brine Withdrawal” (p. 4), the study states, *“Model simulations, in which the 1992 rate of withdrawal from the brine-collection ditch east of the salt crust and average climatic conditions were used, indicate that brine withdrawal is a major cause of salt loss from the crust. Other than the cycling of fluid and solute through the playa surface each year, subsurface brine flow and solute transport to the brine-collection ditches east and south of the salt crust are the largest contributors to salt removal from the shallow-brine aquifer. ...On the basis of model simulations, the loss of crystalline salt from the playa surface is estimated to be about 975,000 tons per year. The concurrent subsurface loss of salt in solution was computed to be 850,000 tons per year.”* [emphasis added.]
- An undated photo of a Utah State Highway Commission sign which states “four feet salt depth.”

Decades later, the damage is complete: millions of tons of salt have disappeared from the BSF. Although geology and hydrology can be complex, transferring millions of tons of salt from the north side of Interstate 80 to the south can be easily explained: miles of ditches and water pumping activities associated with the mining operation. For decades, salt brine has been

removed from its underground home, brought to the surface, and exposed to sunlight in solar evaporative ponds. As the water has evaporated, it has been lost forever from the BSF ecosystem.

Intrepid and its predecessor, Reilly Industries, Inc., should be praised for stepping forward to rectify a problem that was identified as early as the 1960s. Rather, the BLM did not seek to work with the mining companies during the 1960s, 1970s, 1980s and early 1990s to create an environmentally neutral operation, despite repeated requests from the racing community. Those companies were Bonneville Ltd., Standard Magnesium (and Chemical) Corporation and Kaiser Aluminum and Chemical Corporation. The damage had been done by the time Reilly instituted a prototype salt replenishment program, in collaboration with the Coalition.

The BLM may still be under a misperception about the depth of the salt deposits on the BSF racing area. The BLM's webpage¹ entitled "How did the Bonneville Salt Flats form?" includes the statement, "*The stratified layers that form the salt flats are almost 5 feet thick near the center and only an inch or two at the outer edges. The Salt Flats are just over 46 square miles in size (30,000 acres) which equates to about 147 million tons, or 99 million cubic yards, of salt!*" These facts are no longer correct.

To further underscore the dire plight of the BSF, the racing community abandoned the 12-mile International Track a number of years ago for lack of salt. In recent years, laying out an 8-mile track has been a challenge.

Conclusion:

- Through these comments, the Coalition seeks the BLM's acknowledgement that the BSF racing area was once at least five feet deep and is now just several inches thick.

Technical comments on EA

The following section provides comments on particular issues raised in the EA, identified by paragraph number. The Coalition is responding to the record on statements and findings contained in the EA. As will be noted in the conclusion, however, the Coalition's only goal is to stabilize and replenish the BSF. The Coalition supports actions taken by Intrepid, such as the proposed Alternative B program, and distinguishes the fact that significant degradation of the BSF began in the 1940s, if not earlier, and was largely unaddressed until Reilly and Intrepid pursued replenishment programs.

Paragraph 1.3: The EA notes that the operator is directed to promote efficient mining operations which encourage maximum recovery of known mineral resources (*See*, 43 C.F.R. Part 3590, Solid Minerals (Other than Coal) Exploration and Mining Operations). However, this may present a potential conflict with the BLM's obligation to protect the BSF under other federal laws and regulations. In fact, the same mining regulation that encourages maximum

¹ http://www.blm.gov/ut/st/en/fo/salt_lake/recreation/bonneville_salt_flats/Bonneville_Salt_Flats_History.html

recovery also establishes protective limits. The EA should note that the definition of “*Ultimate maximum recovery*,” includes a directive to ensure the protection of other resources, in this case the BSF.²

In the last sentence of Paragraph 1.3, the EA states, “*Also, the BLM needs an update of all aspects of Intrepid’s operation including surety calculations and a reclamation plan.*” Despite repeated request by Coalition members, the Coalition does not have copy of the Intrepid mining plan upon which the EA is based and is therefore unable to comment on the sufficiency of the reclamation plan and replenishment program.

Paragraph 1.4[a]: The 1990 Pony Express Resource Management Plan (RMP) provides direction for the management of the subject mining activities and how those activities relate to the BSF. The EA should state that the RMP decision gives highest priority to continuing the BSF “Area of Critical Environmental Concern” (*See*, pg. 51). The RMP notes:

“The unique saline plains of the Bonneville Salt Flats (BSF) have been intensively managed for the past few decades for high speed automobile testing and racing. A Recreation Area Management Plan was completed in 1977 and revised in 1985. In 1985, 30,203 acres of the BSF were also designated as an ACEC to perpetuate and protect the values and resources of the area. This decision is brought forward from the Tooele Management Plan, 1984. Objectives of the plan are to (a) preserve the unique visual, historic and geological resources, (b) minimize and manage mineral uses and other surface disturbing activities to avoid resource damage, (c) coordinate management of the BSF ACEC with other landowners and (d) recognize and manage racing and filming activities on the Salt Flats.

The salt’s potential for land speed racing was recognized in 1986 and has become known as the “world’s fastest mile.” Thousands of records have been set there.

The BSF are a unique area, directed by geophysical processes that are highly sensitive to interruption by human activity. The area is estimated to have once covered 96,000 acres of crystalline salt, but presently covers about 30,000 acres.

Because of their sensitivity and unique character, the BSF are a nationally and internationally significant resource and meet importance and relevance criteria for an ACEC.” [emphasis added.]

The Coalition contends that the BLM has failed in its requirements to manage the BSF as an ACEC by allowing degradation to take place over decades.

² 43 C.F.R. § 3590.0-5(h) *Ultimate maximum recovery* means that all portions of a leased Federal mineral deposit shall be mined, based on standard industry operating practices. The requirement to achieve ultimate maximum recovery does not in any way restrict the authorized officer's authority to ensure the conservative of the mineral resource and protection of the other resources.

Paragraph 1.4[b]: The EA does not reference the BLM's obligations to consider the Plan's impact on a National Historic Place. The Bonneville Salt Flats Race Track (encompassing 36,650 acres of the BSF) is listed on the National Registry of Historic Places. Degradation of the BSF threatens the National Registry listing. As is discussed elsewhere in this document, the racing community contends that the BSF has lost a huge volume of salt and salt crust, with the racing area being reduced from an estimated depth of five feet to several inches. For decades, the racing community has asked the BLM to address the issue and stop the degradation. Section 106 of the National Historic Preservation Act of 1966 requires federal agencies to consider the effects of projects (i.e., mining operations) on historic properties. The BLM is responsible for initiating Section 106 reviews by informing the State Historic Preservation Officer (SHPO) of a project. The SHPO may then provide the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on such projects prior to the federal agency's decision on them. The law also provides the opportunity for "consulting parties" who have a vested interest or expertise to share on a project review. Criteria for determining adverse effects (both direct and indirect) include: *physical destruction or damage; alteration inconsistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties; neglect and deterioration; and transfer, lease, or sale of a historic property out of federal control without adequate preservation restrictions*. It is the Coalition's contention that the BLM has failed for decades to keep the SHPO informed of degradation at the BSF as a consequence of mining operations or sought a letter of project consent from the SHPO.

Paragraph 1.5: *Id.*, Par. 1.4[b].

Paragraph 1.6: Hydrology/Groundwater: The water in the alluvial fan aquifer is sourced by the snow melt and rain fall runoff from the surrounding mountainous terrain. The water pumped from that aquifer is referred to as "brackish water" and comes from several wells up the hill side from the northwesterly edge of the basin. The location of the alluvial fan aquifer is higher than the shallow brine aquifer and the water content is not 22% salt brine. Water rarely flows uphill and heavy salt content water from the shallow brine aquifer system would not be of value to the salt laydown project in any case.

Paragraph 1.6: Area of Critical Environmental Concern: The EA acknowledges what the racing community has stated since the 1960s: "*Removing mineral from the shallow brine aquifer north of I-80 may be causing the salt layer to thin and retract.*" The EA then goes on to warn that, "*Intrepid's voluntary continuation of the Salt laydown project may not be sufficient to prevent diminishment to the Bonneville Salt Flats (BSF) from drawing off the brine from adjacent areas. Such diminishment would degrade the unique geology and historical relevance of the site and would disrupt the recreational opportunities that have been part of the BSF for over 80 years.*" It is disconcerting that the BLM would make this statement in 2011 when it has largely rebuffed these same concerns as expressed by the racing community since the 1960s. For five decades, the BLM has allowed the BSF to deteriorate and has not required mine owners before Reilly and Intrepid to implement replenishment programs. Furthermore, while making this statement, the BLM has not proposed a supplemental replenishment program that the agency itself would conduct or authorize, above and beyond a program it will impose on Intrepid. The Coalition agrees with the EA's

conclusion that the Alternative B program may not be effective enough to prevent degradation and calls upon the BLM to institute its own supplemental program and allow the Coalition to pursue similar activities.

Paragraph 1.7: The EA asserts that the “*the salt flats seems to be remaining stable.*” What science is this based on? The racing community does not share this conclusion and believes scientific measurements document a dramatic reduction in salt depth, quality and hardness. Race organizers now have a difficult time laying out courses and have had to abandon the 12-mile international track. Anyone who has had to try to race on a thin salt mixed with mud, or to negotiate the “drainage ditch/river” and the bridges that have been placed over the shallow salt surfaces would disagree with the “stable” conclusion. The EA assertion that the salt flats are “stable” also seems to conflict with the assertion made in the previous paragraph, expressing concern that the Intrepid replenishment program may be insufficient to adequately replenish the BSF. The current surface is only several inches thick through most of the racing area rather than five feet, as it was in the 1960s. Assuming the salt flats are not stable, a loss of recreational and commercial activities (racing, filming, tourists, etc.) would have a significant negative economic impact on Wendover and related communities (hotels, restaurants, gas stations, air travel, car rental, etc.).

Paragraph 2.1: Evaporation Pond: The first bullet point notes that Intrepid moved their primary production pond from PP5 to PP6, because the walls of the pond could not hold the brine due to the amount of salt that had been deposited. The large volume of salt should be a candidate for eventually spreading on the BSF. It would be useful to have an estimate on the volume of salt in PP5.

Paragraph 2.1: Salt Laydown: As noted, the mining plan has not been provided to the Coalition, therefore it is difficult to review EA material and understand if it represents a summary of the entire Salt Laydown plan or just highlights. Par. 2.1 seems to indicate that salt is moving from the north side of I-80 to the south [“...it attempts to achieve a mass balance of sodium chloride ions removed from the leases north of I-80.”]. More information is needed on what salt is being moved and how. The Coalition supports the concept of mass-balance and seeks more information on how the BLM will identify which lands the production is coming from, and how that production is measured for both federal and private lands. There is a reference to pumping salt onto the salt flats but there is no description of how or when this is accomplished. Although it is not referenced in the EA, the Coalition would also support other ways of spreading salt on the BSF beyond “pumping.” Given its direct and longstanding interest in the preservation of the BSF – an interest which pre-dates the BLM’s authority to manage the BSF for certain of the Coalition members – the Coalition seeks “interested party” status so as to monitor and assist in implementation of the Salt Laydown plan.

Paragraph 2.1: Reclamation: It is unclear if the fifth bullet point is the entire reclamation plan or just a summary. More specificity is needed.

Paragraph 2.2: While the Coalition supports Alternative B (Par. 2.2), many of the elements of Alternative A (Par. 2.1) upon which it is based are vague. It remains unclear how the EA relates

to a more comprehensive mining plan. Reference is made to removing salt from the federal and state leases north of I-80. The Coalition seeks more information on the nature of the removal. There is reference to the Intrepid mining plan (2008, Dwg. 5.6). As noted, the Coalition has not been provided a copy of the plan despite repeated requests. The Coalition seeks clarification on the year (2018) for repeating the 2003 salt-crust thickness study. Alternative B provides for a 1.0 or greater return of salt based on a three-year average. It is not stated in the EA but the Coalition understands that there is then another two years to rectify any difference. If this is correct, the 2018 study would then take place in year six, following the five years to average and rectify. The Coalition contends that it would be better to undertake the study in 2016, as the three-average period is ending, if not sooner. Given the current condition of the BSF, the Coalition believes it is important to reevaluate how the program is being implemented in a timely fashion so as to effectuate any program changes rather than waiting for 2023 lease renewals and allowing multiple years of potential salt decreases. The Coalition is not suggesting additional burdens be placed on Intrepid. It is suggesting that the study would confirm if the approach was successful (ex: pumping) and, if not, whether other approaches should be employed (ex: direct laydown).

The Coalition recommends that the second paragraph of 2.2 be modified to add the highlighted words, below. The purpose is to clarify that there is brine flowing back and forth underground via the shallow bring aquifer system which is not being measured. If no brine were to flow through the surface ditches, brine would still be removed from the BSF via the underground aquifer, from the north side of the highway to the south, through wells.

The mining plan (Intrepid, 2008, Dwg. 5.6) shows that Intrepid Wendover would install an ultrasonic flow meter with a data collection device at the number 2 booster pump collection point. This is the location where the surface pumped brine exits the federal leases north of I-80. The meter would measure the total volume of brine and the plan calls for a sample port to analyze the chemical component of the brine, both pieces of data are required to calculate the total tonnage of all salts removed via surface ditch pumping. A similar meter would measure volume and the chemical composition of the brine returned to the salt flats. Intrepid would report to the BLM on an annual basis the salt tonnages removed from north of I-80 and deposited on the BSF via surface ditch pumping.

The last paragraph of 2.2 includes the sentence “*If data indicates that the salt volume is decreasing, terms and conditions would be devised to add to the Federal leases when they are renewed in 2023.*” While the Coalition is concerned and committed to preserving the total volume of BSF salt, the thickness of the salt crust is of special concern for racing activities. The Coalition contends that the salt thickness is unacceptable today, as it was in 2003 and 1998. The Coalition advocates for more frequent measurements that focus on salt crust thickness. The Coalition suggests that the final paragraph be reworded as follows:

Monitoring and Adaptive Management.

By the end of 2013, Intrepid will repeat the BLM’s 2003 salt-crust thickness study on the BSF. If data indicates that the salt ~~volume~~ crust is decreasing, terms and conditions would be devised to add to the Federal leases when they are renewed in 2023, as well as appropriate interim revisions to this EA upon discovery of loss of salt crust.

In Paragraph 2.4 (Alternatives Considered but Eliminated from Further Analysis), the EA argues that PP6 has too much unharvested potash and therefore including it in the replenishment

program at this time would result in economic harm. The Coalition is not seeking salt from which the potash has not yet been removed. In fact, the Coalition believes there are alternative approaches beyond pumping that should be considered. These might include limited physical trucking of salt to bad spots in the net surface areas, revised methods of an aerating spray return, berming selected areas of return, pumping in dry months, and other means of maintaining the surface crust overall quality. Toward the goal of reviewing replenishment options on a periodic basis, the Coalition recommends that the following section be added at the end of Paragraph 2.2 (Alternative B):

Mitigation Methodology and Schedule.

On an annual basis, BLM, the Mining Company, and the user community will meet to consider process improvements, modifications, additions and revisions to this mitigation methodology which might include schedule revisions, geographic modifications, salt return procedures and other potentially helpful revisions.

Paragraph 2.4: The Coalition presumes that pumping during the winter months remains a viable option and that the discussion in Par. 2.4 is limited to the economic viability of using PP6 as the resource since, according to Intrepid, PP6 still contains a significant amount of potash to be harvested. The Coalition is focused on a successful replenishment program rather than a particular source of salt, and economic viability should be a component of such a program. The Coalition would also note that the 1997-2002 program included pumping during the winter months (November-April).

Paragraph 3.2: Salt Crust and Laydown (p. 12): It would be useful to provide context on salt depth. During the 1960s, the Coalition contends the racing area was at least 5 feet deep. It was inches thick by 1998. The focus of attention should not be on the consistency of the 1998-2003 measurements, except to note that a modest increase was expected due to the laydown project. While this did not occur, the viability of the shallow aquifer increased along with the hardness of the surface.

Paragraph 3.3.2: ACEC/Recreation/Cultural Values (p. 15): The EA notes that, “*The Bonneville Salt Flats Race Track was also listed in the National Registry of Historic Places in 1975.*” As was discussed in Paragraph 1.4[b] above, the listing triggers obligations to (1) consult the State Historic Preservation Officer (SHPO) and (2) provide an opportunity for the Advisory Council on Historic Preservation a reasonable opportunity to comment on project(s) potentially impacting the BSF listing. The Coalition is unaware of the SHPO or Advisory Council ever having reviewed and approved mining operation plans since the BSF Race Track was listed in 1975. There is no reference in the EA with respect to the current project and, to our knowledge, the SHPO has never issued a consent letter since 1975. For a number of years, members of the Save the Salt Coalition have sought consulting party status with respect to the mining plans and EA, only to be denied such status by the BLM. The Coalition contends that the protections afforded the Bonneville Salt Flats under Section 106 of the National Historic Preservation Act should have triggered a review of mining activities by the SHPO and Advisory Council. As a result, the Coalition members could have secured the consulting party status denied for years by the BLM. The Coalition contends that this remains an option.

Paragraph 4.3.1.1: In the Salt Laydown section, it is unclear whether the EA suggests that the brine will be returned to the aquifer naturally or through a pumping program. The statement acknowledges that the brine is drawn off the salt flats. The stated premise is that the concentration of minerals is decreasing as a result of the fresh water from the rain permeating the salt crust. If there is concern about the concentration of the potash, this would be correct -- the concentration will be reduced over time. It is also correct that as long as the brine is removed, *“this could result in the leaching of more salt from the salt crust into the aquifer and reducing the size and thickness of the crust.”* (The statement supports the Coalition’s longstanding contention that mining has impacted the BSF.) It would then follow that the salt replenishment program would be considered essential in neutralizing the removal of the minerals. With respect to the Reclamation plan, the EA is not specific on details and the Coalition has not been provided a copy of the referenced mining plan, therefore it is difficult to speculate on the meaning of the phrase *“cessation of mining and filling in the ditches.”* Additionally, if the activity is limited in size, the EA should not speculate that this would *“return the aquifer ... back to its original condition.”* Such a statement seems over-generous. It also seems to indicate that the BLM has concluded that mining operations have reduced the thickness and size of the crust.

Paragraph 4.3.1.2: Shallow Brine Aquifer – Salt Laydown: The EA states that mass-ion balance would be maintained. This suggests that the salt brine from the north areas is the source of the salt brine and the program would neutralize the loss. Again, there is a lack of specificity with respect to the laydown project.

Paragraph 4.3.2: The EA cites several studies which analyzed the results of the 1997-2002 replenishment program. The studies concluded that the shallow bring aquifer was strengthened even though the predicted 2+ inches of salt crust thickness did not occur. The EA acknowledges that the salt program can replenish the minerals which have been removed. Importantly, the studies estimate that the aquifer has the capacity to accept 17 to 25 million tons of salt, about three to four times the 6.2 million tons delivered during the five year replenishment program. (During that same time, 4.2 million tons were removed through production ditches, leaving a net gain for the aquifer of 2 million tons.) The studies imply that the salt brine first goes to replenishing the aquifer but that if the pumping were increased, it would eventually build up the crust. The 2002 White study notes that *“Consequently, the lay down brine helped minimize salt-crust dissolution which maintaining the mass balance of total dissolved salts in the shallow-brine aquifer.”* The 2006 White and Terrazas study concludes that the total ion mass north of the interstate is decreased by some finite amount that would need to be replaced to maintain the ion mass balance. *“Consequently, if this withdrawal were to continue for decades without replenishment, one could reasonably conclude that the salt-crust mass north of I-80 could eventually be affected and show some level of impact.”* The Coalition contends that a failure to replenish the BSF for nearly 100 years has resulted in dramatic degradation. The majority of the degradation has occurred since the BLM began actively managing the site in 1949. The Coalition contends that the BLM has a responsibility to help restore the BSF above and beyond the Alternative B obligations imposed on Intrepid. The Coalition stands ready to assist in this process. The program proposed under Alternative B will likely only stabilize the area. The EA’s assertion that *“the ACEC area would be reclaimed”* [p. 25] is spurious unless the BLM allows and pursues supplemental replenishment activities.

Paragraph 4.3.2.3: If there is no action, then the reference to intermittent salt laydown efforts is confusing (assuming there is no requirement for such). If there is no laydown efforts, then the Coalition disagrees with the EA conclusion that there will be no impacts to the ACEC since salt brine will migrate from the BSF without being replaced. The Coalition reinforces its conclusion that a one-for-one salt laydown should stabilize the BSF but that recovery requires more than a one-for-one laydown.

Paragraphs 4.4.1.2/4.4.1.3/4.4.2.2/4.4.2.3: Statements such as “*There are no known past or present actions other than the Intrepid operation that would affect the aquifers*” and “*The only reasonably foreseeable actions that may affect the aquifers are short or long term climatic conditions*” do not acknowledge the dramatic reduction in volume of the BSF and shallow brine aquifer while the BLM has managed the site. Although there have been yearly climatic changes, other than the highways and railroad tracks, the only other significant activity that could be directly associated with the degradation is mining.

Paragraph 5.2: The EA states that the “*Project design has excluded these cultural properties from areas to be treated. A finding of “No Historic Properties Effected” under NHPA will be forwarded to the SHPO under the notification clause during the next quarterly Protocol submission.*” The BLM seems to have reached the finding of “no historic properties effected” on its own, without consulting the SHPO as is required under the National Historic Preservation Act. Paragraph 1.4[b] and Paragraph 3.3.2 above discuss this issue in detail. If it is the BLM’s contention that the mining plan and EA do not directly include the Bonneville Salt Flats Race Track Historic Place listing, it is incumbent that the SHPO reach that same conclusion since protection of the 36,650 listed acres falls within its jurisdiction. As is stated throughout these comments, the Coalition does not believe it is possible to have a dramatic reduction in salt surface at the BSF over a period of decades – a reduction that threatens its Historic Place listing – without concluding that activities on and surrounding the BSF are affecting the Historic Property. Under the law, it is the SHPO that makes a determination about projects that may affect historic sites and issues a letter of finding, not the BLM. Through this process, the SHPO may seek advice from the Advisory Council on Historic Preservation and other interested parties such as the Coalition.

Conclusion

The Coalition takes this opportunity to provide context to its technical comments on the Environmental Assessment and articulate its ultimate goal. The Coalition recognizes that the degradation of the BSF has been incremental, over an extended period of time. It also acknowledges that attempting to define specific cause-and-effect issues is a challenge when factoring-in variables such as geologic formations and weather conditions. The Coalition also recognizes the various constraints faced by the BLM, including budget and staffing, and the fact that it is managing lands subject to private ownership and leasing arrangements.

The Coalition’s sole goal has been preservation of the BSF, in perpetuity. This would include replenishing the salt so that the international track can one again be 12, 13 or 15 miles – and be the ultimate site for the fastest of all land speed records. Over the years, the racing community has sought to work with the mine operators and the BLM to pursue replenishment programs.

Although the Coalition has concluded that the BSF degradation is a direct result of decades of mining, the Coalition's goal has been to include replenishment as part of the mining operation and to pursue supplemental programs. The Coalition seeks to work cooperatively with Intrepid and the BLM towards that goal.

As the Coalition has consistently sought "interested party" status, it recognizes that this means assuming responsibilities to assist in the replenishment program, both financially and physically. The Coalition stands ready to assume this duty and seeks the opportunity to work in partnership with Intrepid and the BLM.

The Coalition appreciates the opportunity to comment on the Environmental Assessment. Thank you for your consideration and feel free to contact us if you have any questions.

Sincerely,

Save the Salt Coalition

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LandSpeed Productions

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Lessman Racing, Inc.

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Motorcycle Industry Council (MIC)

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Off-Road Business Association (ORBA)

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Save the Salt Foundation

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Specialty Equipment Market Association

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Speed Demon

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Utah Salt Flats Racing Association (USFRA)

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